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Wydawnictwo UWM

ul. Jana Heweliusza 14, 10-718 Olsztyn
tel.: (0-89) 523 36 61, fax (0-89) 523 34 38
www.uwm.edu.pl/wydawnictwo/
e-mail: wydawca@uwm.edu.pl

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CHOSEN PROBLEMS OF THE EURO ZONE ENLARGEMENT*

Adam P. Balcerzak¹, Dorota Górecka², Elżbieta Rogalska³

¹ Department of Microeconomics

University of Warmia and Mazury in Olsztyn

² Department of Econometrics and Statistics

Nicolaus Copernicus University in Toruń

³ Department of Economics

Nicolaus Copernicus University in Toruń

Key words: European Union, Economic and Monetary Union, convergence criteria, new Member States.

Abstract

An article investigates a problem of the euro introduction by new members of the European Union. It presents some potential benefits and costs of entry to European Monetary Union in the context of its present and future functioning. Then it discusses some advantages and disadvantages of postponing joining the euro-zone. Besides, potential meaning and consequences of giving a target date of introduction of the euro by a country and possible scenarios that can be taken at this way are presented in the paper.

Since the 1st January 2007 Euroland comprises 13 countries. The finance ministers of EU member states have approved of Slovenia's admission to the euro area. The application of Lithuania was rejected – European Commission and European Central Bank have judged that it has not fulfilled the inflation convergence criterion. With regard to this event, the article touches an issue of the need for reconsidering the Maastricht criteria which presently seem to be a source of many content-related and interpretation doubts. It also investigates the requirement for adjusting the convergence criteria to the fact that the euro-zone has already been in existence.

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WYBRANE PROBLEMY ROZSZERZENIA STREFY EURO***Adam P. Balcerzak¹, Dorota Górecka², Elżbieta Rogalska³***¹ Department of Microeconomics

University of Warmia and Mazury in Olsztyn

² Department of Econometrics and Statistics

Nicolaus Copernicus University in Toruń

³ Department of Economics

Nicolaus Copernicus University in Toruń

Słowa kluczowe: Unia Europejska, Unia Gospodarczo-Walutowa, kryteria konwergencji, nowe państwa członkowskie.

A b s t r a k t

Artykuł podejmuje problem wprowadzenia euro przez nowe państwa członkowskie Unii Europejskiej. Jest próbą odpowiedzi na pytanie, czy nowi członkowie Unii są gotowi na przyjęcie wspólnej waluty zarówno pod względem gospodarczym, jak i społeczno-politycznym. Przedstawia także potencjalne korzyści i koszty przystąpienia do Unii Gospodarczo-Walutowej w kontekście jej dotychczasowego i przyszłego funkcjonowania oraz wady i zalety spowolnionego dochodzenia do euro przez kraje pozostające poza Unią Walutową.

Od 1 stycznia 2007 roku strefę euro tworzy 13 krajów, gdyż ministrowie finansów państw UE zatwierdzili przystąpienie do tego grona Słowenii. Wniosek aplikacyjny Litwy został odrzucony – Komisja Europejska i Europejski Bank Centralny uznały, że nie spełnia ona inflacyjnego kryterium konwergencji. W nawiązaniu do tego wydarzenia referat podnosi kwestię potrzeby ponownego przeanalizowania budzących wątpliwości merytoryczne i interpretacyjne kryteriów z Maastricht i dostosowania ich do faktu, że obszar euro już istnieje. Artykuł prezentuje także znaczenie i konsekwencje, jakie może spełniać podanie przez dany kraj konkretnego terminu wejścia do strefy euro oraz możliwe scenariusze tego wydarzenia.

Introduction

1st January 2002 was a great day for a political and economical integration of Europe. That was the first day of a physical existence of the euro currency which would be an important factor helping to renew an economic position of EU in a global competition of XXI century. That was the point of view of euro enthusiasts. On the other hand the skeptics saw it more as a political endeavor than economical one¹. Even though the euro had existed in bank and financial accounting since 1st January 1999, the euro area was still far away from fulfilling the conditions of optimum currency area (OCA)². Consequently in

¹ Before the beginning of stage three of EMU creation M. Obstfeld argued that European institutions were not ready for a single currency. A good preparation for EMU would have meant much deeper economical and political unification (see OBSTFELD 1998, pp. 1-32).

spite of the fact that it has been almost seven years since the birth of the euro, the discussion concerning its effectiveness and future is still under way.

However, Polish decision-makers cannot ask whether Poland should become a part of the Euroland. When Poland joined the EU, it had also agreed to implement single European currency³. As a result keeping its national currency is politically impossible. On the other hand the EU countries make more than 70% of Polish international trade. This means that staying out of European Monetary Union (EMU) is economically irrational in the long run. The situation seems obvious: Poland has no other possibility than becoming part of the euro-zone. However, Polish decision-makers can ask other question: when should Poland adopt the euro? This paper is a voice in the discussion that results from this last question.

The paper consists of a succinct presentation of advantages and disadvantages of joining EMU. Then the potential meaning of giving a target date of introduction of the euro by a country and its functions are presented. The third part of the paper deals with the consequences of postponing adaptation of the euro. In the end the article touches the problem of controversies concerning the Maastricht criteria that have risen recently.

Advantages and disadvantages of entering the EMU

Thousands of pages have been already written about potential benefits and costs of creating a single European currency. In this article this issue will be presented succinctly mainly from the point of view of the new member countries.

The first and the most obvious benefit of the euro is a possibility of using it in every day international transactions. This is especially important for enterprises that do not have to bear costs of currency exchange in foreign trade and for citizens who travel a lot⁴. On the other hand this makes serious costs

² According to the theory of optimal currency areas (OCA) a country that joins the monetary union should be the part of OCA. It is characterized by wage and price flexibility, high labor mobility or possibility of broad budget reallocation of resources. Otherwise the country can bear very high costs in case of asymmetric shocks as it cannot utilize devaluation as an asymmetric shock absorber in order to improve its international competitiveness (MUNDELL 1961, pp. 657-665A). However, there are some skeptics of this theory who argue that a country can usually fulfill the criteria only after some period in monetary union. Beside, losing a possibility of devaluation is not a big loss from the perspective of a long run growth as the availability of this tool creates a greater temptation for moral hazard behavior. It can result in postponing painful reforms that are necessary to improve an international competitiveness of a country. Latin America was an example of this (ORĘZIAK 2004, p. 24).

³ It also applies to other new member countries that joined the EU in May 2004.

⁴ This savings are matching up to 0,5% GDP in case of the European Union countries that have already adopted euro (ORĘZIAK 2004, p. 47).

for financial sector as banks and some other financial institutions lose an important source of revenue. From the macroeconomic perspective the new EU member countries can become real part of a big common European market. Adopting the euro enables to lower transaction costs of international cooperation. The disappearance of exchange currency costs makes foreign trade cheaper and it enables easier comparison of price levels between new and old countries of the EU. This may be especially advantageous for enterprises from Central Europe as they still often have to use price competition to obtain a place on the EU market. In the long run these factors will increase the competitive intensity and make an incentive for faster restructuring of the economy.

The second crucial factor that can seriously improve the position of Poland on the common European market is the disappearance of currency exchange rate risk. This makes an economical calculation much more appropriate as it is difficult to estimate profitability of international contracts with volatile exchange rates. The exchange rates risk increases the transaction costs of foreign trade and can make it artificially less competitive (OREZIAK 2004, p. 47). These factors are especially important for small and medium sized enterprises from Central Europe. They usually do not have the financial resources or knowledge to reduce the exchange risk through transactions on the market of derivatives that are usually available for even relatively small companies in EMU countries.

In spite of a great inflow of foreign direct investments Central European countries still suffer from lack of capital and relative underdevelopment of financial markets. Adopting the euro will remove one of the last barriers to big integrated and liquid financial markets of the EU (see JAKUBISZYN 2003, pp. 12-16, MARSKI 2003, p. 51). Currently the access to the EU financial markets is mainly used by the biggest enterprises from Poland. Implementing the euro will probably give this possibility for much smaller companies. Firstly it will reduce the transaction costs. It is also expected that it will create knowledge spillover effects and improves the process of learning to take advantage from international financial markets. Low costs of access to relatively big European financial market will be also very important for insurance companies and especially pension funds from Central Europe. These financial institutions need many investment possibilities that cannot be provided on local financial markets. This is especially important as Central European societies have started the process of getting older.

The skeptics of EMU are mostly reluctant to giving away the control over national's monetary policy. Most of all they are not in favor of losing the possibility of devaluation in case of asymmetric shock⁵. Even though the last few years have proved that these concerns were a little exaggerated in case of

present members of EMU, the skeptics often argue that the loss of that tool can be more disadvantageous in case of less developed countries with less matured economies that are usually more vulnerable to asymmetric shocks.

On the other hand EMU enthusiasts argue that the disappearance of control over national monetary policy reduces the possibility of short term discretionary actions that lead to political business cycles which usually reduces the long term growth potential. This is especially important in case of Central Europe that can be still characterized by significant underdevelopment of civil society in combination with a low quality of general economic education and underdevelopment of social institutions that are essential for stable monetary policy. However, it is worth remembering that even the existence of common monetary policy conducted by the European Central Bank (ECB) is not able to ensure the full political independence of monetary policy. It can move the political influence from national to the international level⁶. The full independence of the ECB in isolation from institutional background can also lead to a situation when the euro, instead of the lack of necessary and painful reforms, is publicly pointed as the main cause for economic stagnation. This has already happened on political markets of Italy and – paradoxically – Germany (*Italy's Northern*. 2005, *The European Union...* 2005).

The new members of the EU have recently become concerned about possible taking over of common monetary policy by the biggest economies of EMU⁷. When these countries lose the national control over monetary policy, they can be afraid that the short-term interests of the dominant EMU participants will mostly influence the decisions of the ECB. That would result in monetary policy commensurate with political interests of the biggest countries that can threaten the long-term stability of whole monetary union⁸.

⁵ The argument is shortly presented in footnote no 3.

⁶ It could be already seen when the first president of the ECB was appointed. French president was opting for his candidate Jean-Claude Trichet, whereas the remaining countries preferred Wim Duisenberg. That resulted in a serious political crisis. In the end a peculiar consensus was reached – the Dutch candidate of majority was appointed the president of the ECB but only on half of his tenure. After four years he was supposed to resign and the French candidate was going to take over his position.

⁷ In order to reduce this risk when the ECB was created, the smaller countries of EMU were granted an excessive weight in the system. Austria, Belgium, Finland, Ireland, Luxemburg, Netherlands and Portugal were controlling 9 of 17 voices in the Governing Council of the ECB when the Germany had only 2 voices. However, the GDP of single Germany was twice as big as the GDP of all these seven countries.

⁸ The first signal that would suggest this threat was an augmentation of Theo Waigel's proposal of Stability Pact that was done under the pressure of France. According to the original proposition a country that broke the rules of financial responsibility would be automatically punished with a financial penalty. In the final Stability and Growth Pact this penalty is optional. The next strong impulse to increase these concerns, especially among the new members of the EU, was the way these rules were applied to Germany, France and Greece (see *The death of*. 2003, *Replacing the defunct*. 2003). Even though the rules were broken notoriously by these states, the financial punishment was

Consequences of setting the target date

Setting the target date for the introduction of the euro fulfils at least two functions. Firstly it constitutes the factor that creates, mobilises and justifies the economic policy. It promises stable macroeconomic policy and structural reforms and therefore it is the important signal for financial markets. Secondly it can be considered as an indicator concerning the place that a given state wants to take up in the European integration. Nowadays belonging to the euro-zone means willingness to participate fully and affect the decision making process in the EU whereas remaining outside the Euroland indicates the caution and anxiety about further integration, which is regarded among other things as a loss of national sovereignty for the sake of carrying out monetary policy deprivation. If, as seems probable the members of the euro area come to the conclusion that for both political and economic reasons the better functioning of the single European currency requires a further pooling of their national independence then it can mean the marginalisation of other members remaining outside the “core” (*Flexibility and the Future of the European Union* 2005).

Considering the situation of member countries that are obliged to join the euro-zone there are three possible scenarios of giving the tentative target deadline for the adoption of the single European currency: setting the nearest possible date, setting the distant date and having no official target date. While the first scenario evidences the single-minded determination to get on with economic reforms, the second and the third ones diminish credibility of such declaration. They both introduce uncertainty concerning the reorganisation of public sector finance and the reforms aiming to increase competitiveness, decrease the differences in development levels and solve the demographic problems. Consequently, even if their objective is solely painstaking preparation for fulfilment of convergence criteria, in the extreme cases they can code the coming true prognosis of unstable and inconsistent economic policy. Furthermore, if the reason of the last scenario is merely dislike and fear of undertaking the commitments, it must be said that it is the excessive caution as the target date can be postponed without any legal-international consequences for the sake of difficulties in achievement a high degree of durable convergence. The loss of reputation connected with this kind of event should not bring about greater damages than the continuous uncertainty in regard to economic policy of a given country.

not applied to them. It was mainly a result of their political interests, not a reliable economic analysis and caring about long term stability of the euro-zone.

Consequences of postponing adaptation of the Euro in case of Poland

The decision of postponing adaptation of the euro means that a country cannot fully utilize the benefits described in the first part of this paper. Additionally staying out of EMU can lead to higher interest rates, which increases the costs of capital. For example, it is estimated that Denmark has to keep interest rates 0,4 percentage point higher than the ones that would be obtained if it was a member of EMU (OREŹIAK 2004, p. 48). However, in case of Central European countries this number may be higher in the long run, which means higher costs of financing, thus losing some international competitive advantages of Central European enterprises.

The postponing adaptation of the euro is not a factor that is conducive to macroeconomic credibility of a country on the international financial markets. The necessity of obtaining convergence criteria helps to stabilize the inflation expectations, which is necessary for keeping inflation on a reasonable level. Thus it is a condition of reducing interest rates which is crucial for lowering the cost of public debt (see SOKOŁOWSKA 2005, p. 6). In case of Poland it can be especially significant as the financial market has been accustomed to the idea of fast adaptation of the euro.

The skeptics of the euro implementation argue that when the new EU members postpone its implementation, their economies can have more time for structural changes that make them part of the euro optimal currency area. In their opinion it is too early to lose the possibility of devaluation in case of asymmetric shocks⁹. However, the optimists point that there are at least three important weaknesses of this argument.

Firstly in case of Europe most asymmetric shocks have not only national level. They usually influence group of countries. In that case devaluation is not effective (SOKOŁOWSKA 2005, p. 7). In some cases it can even bring the results similar to a currency exchange rate war which is usually disastrous for an international trade in the long run¹⁰.

Secondly Poland has been an active participant in European trade and financial markets for last few years. It has contributed to a serious restriction of independent national monetary policy. Nowadays Poland cannot afford

⁹ See footnote no 3.

¹⁰ There were many examples for this in XX century. The last one happened in the years 1992-1995 when French franc was appreciating 9% in relation to 25 main currencies of the world and German mark about 10%. In the same time Italian, Spanish and British currencies were depreciating by 25%, 16%, 11% respectively. As a result many branches in Germany and France suffered a serious recession, even though the global demand for their products in whole Europe was growing 15% every year. It was the background for growing pressure of German and French societies on reestablishing trade barriers that had been already removed many years ago (OREŹIAK 2004, p. 47).

a short term monetary policy that would result in higher inflationary pressure and loss of credibility on the financial markets¹¹. Thus Poland has not utilized the possibility of currency exchange rate manipulation for last few years (OREŹIAK 2004, p. 153). As a result it made a strong incentive for Polish companies to implement a demanding restructuring process which helped to build a real foundation of their international competitiveness. The results of research conducted by J. Crespo-Cauresma and C. Wójcik show that Polish economy is quite well integrated with EU from the perspective of monetary policy. There is a significant correlation between real interest rates in Poland and Germany, which is the dominant EMU economy (CRESPO-CUARESMA, WOJCIK 2004, pp. 4-13).

Last but not least Poland has to conduct all the necessary reforms that lead to obtaining convergence criteria and are necessary for adopting the euro, regardless of whether it joins EMU or not. Sound macroeconomic policy, healthy public finances are the basic condition of keeping international competitiveness' especially in case of a relatively small open economy (see SOKOŁOWSKA 2005, p. 7).

Controversial convergence criteria

Since the 1st January 2007 Euroland comprises 13 countries as the finance ministers of the EU Member States have approved of Slovenia's admission to the euro area. The application of Lithuania was rejected – European Commission and the ECB concluded that there should not be any change in the status of this country as a Member State with derogation. This unfavourable appraisal has brought about a political crisis in Vilnius and triggered off a lively discussion about the convergence criteria.

Lithuania has met all Maastricht criteria except one. Lithuanian budget deficit in 2005 amounted to 0.5% of GDP, well below the reference ratio of 3%. The ratio of government debt to GDP was equal to 18.7%, far below the 60% reference value. Average level of long-term interest rates of 3.7% was well below the reference value of 5.9% (*Raport o konwergencji*. 2006, pp. 7-8). As far as the exchange rate criterion is considered Lithuania has also fulfilled it as the country joined ERM II with its existing currency board regime (see TYMOCZKO 2004, pp. 91-93) and since that the Lithuanian litas has remained at its central parity. The only criterion that has not been met was the one on price stability as a 12-month average rate of HICP inflation of 2.7% was just above the reference value of 2.63% (*Raport o konwergencji*. 2006, p. 7).

¹¹ The abuse of devaluation policy can seriously increase that risk.

The comparison of the approach to Lithuania, that was refused access to the euro-zone on the grounds that it missed the inflation criterion only by 0.07 percentage point, and to the Old Member States leads to the suspicion that different standards are applied to different countries. As a matter of fact majority of the Member States qualified for the single European currency adoption in 1999 had not fulfilled at least one convergence condition. It is worth mentioning that in Italy the debt-to-GDP ratio in 1997 was 121.6% and in Belgium it was even higher and amounted to 122.2%. Moreover the periods of membership in ERM for the Finnish markka and the Italian lira were shorter than the requisite 2 years (*European Monetary Institute* 1998, pp. 5-10). It can be assumed that making exceptions in case of some economies on the stage of creating the common currency caused a bigger danger for its stability than Lithuania's minimal exceeding of the inflation criterion.

The suspicion of adopting double standards can be also justified by the experiences of the euro-zone. Namely France, Germany and Greece have broken the 3% deficit ceiling repeatedly and no sanctions have been applied against them¹². In turn Greece, Ireland and Spain time after time exceeded the reference value of inflation rate. Then if the Maastricht treaty is to be obeyed rigidly, there should be no doubts that equal standards are applied to all Member States.

Besides above-mentioned allegations there are also interpretative problems concerning the definition of price stability and the calculation of the reference value. The European Parliament holds an opinion that the reference value based on the arithmetic average of inflation rates from three EU countries with the lowest rates seems unfounded in the light of the relevant provisions of the treaty. Instead, it should be rather calculated as an average inflation rate in the three best performing Member States in terms of price stability which is defined as an inflation rate that is below but close to 2%¹³ (*European Parliament resolution on the*. 2006). Assuming the second interpretation the reference value would be equal to 3.4% and Lithuania would fulfil it easily. In turn European Commission takes the stand that concept of "price stability" appears in Maastricht treaty in two different contexts and each one reflects a particular and precise aim. In one case the point is the inflation performance

¹² See footnote no 9.

¹³ Maastricht treaty does not state that the reference value should be calculated as the average rate from the countries with the lowest inflation rates. Article 121 (I) of the treaty requires of the candidate countries to achieve a "high degree of price stability" defined as "the rate of inflation which is close to that of, at most, the three best performing member states in terms of price stability". An identical formulation exists in the protocol on the nominal convergence criteria attached to the Maastricht treaty. Article 105a (I) states that "the primary objective of the European System of Central Banks shall be to maintain price stability" and ECB has defined "price stability" since May 2003 as an inflation rate that is "below, but close to, 2%".

of the euro-zone while in the second the focus is on the assessment of the candidate country's preparations for the euro introduction. Convergence inflation reference value based on "an inflation rate close to but below 2%" would mean significant loosening of the criteria and imply unequal treatment of Member States. In commissioners' opinion such a change would be indeed disadvantageous from the economic point of view (*Inflation criterion there*. 2006). This contradiction between European Commission and European Parliament has to be clarified as the transparent and uncontroversial application of the Maastricht treaty provisions by EU institutions is required.

As far as the convergence criterion on price stability is considered there is also another concern if it is reasonable and proper to calculate the reference value allowing for countries remaining outside the euro area¹⁴. From the economic point of view there is no reason of such proceedings (*Report from the Commission*. 2000, p. 53). On the other hand the question can be asked if it is sensible to take into account only the states that belong to the Euroland as they do not carry out their own independent monetary policy any more and the differences in their inflation rates reflect structural factors rather than varied macro-economic policy. Besides, according to the European Parliament the so-called Balassa – Samuelson effect¹⁵ should be taken into consideration in case of new Member States (*European Parliament resolution on the*. 2006). All these doubts show that the Maastricht criteria need reconsidering and adjusting to the fact that the euro-zone has already been in existence.

Conclusions

The enlargement of the euro-zone can bring a lot of benefits to new EMU participants and the whole European economy as well. Though, there are still a few questions concerning this process that are worth a serious discussion. In case of Central European countries it seems that the economical advantages of fast adaptation of the euro will exceed the potential costs. However, some profound empirical studies of this matter are still needed. Furthermore when a country wants to become a part of EMU it is better to set a near tentative target date of the euro adaptation. Lately the new the EU member states have been exposed to a serious suspicion concerning the double standards of convergence criteria application: separate for old member countries and the new ones which is politically, economically and socially unacceptable.

¹⁴ For instance during the last assessment among the reference states were Sweden, Finland and Poland with the inflation rates 0.9%, 1.0% and 1.5% respectively.

¹⁵ The hypothesis that growing productivity in tradable sector leads to higher relative non-traded goods' prices and an increase of country's inflation rate (see ORIOWSKI 2001, pp. 2-4).

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REMUNERATION LEVELS AND FINANCIAL RESULTS IN THE LEADING COMPANIES IN POLAND

Hanna Karaszewska¹, Marek Zarębski²

¹ Department of Human Resource Management

² Department of Agribusiness

University of Mikołaj Kopernik in Toruń

Key words: remuneration, salary, financial results.

Abstract

The decreasing number of companies who reveal their remuneration data proves that companies tend to be more and more secretive about those issues. The data concerning salaries published by the Polish Central Statistical Office (GUS) are not presented according to the size of companies. This makes the salary rankings more interesting because they allow us to monitor changes in salary levels according to the size of companies. The article analyzes changes in salary levels in companies included in the *TOP 500* ranking according to different criteria. It points to a worryingly low level of correlation between the level of salaries and financial results of companies.

KONDYCJA PŁACOWA GIGANTÓW GOSPODARKI A ICH WYNIKI EKONOMICZNE

Hanna Karaszewska¹, Marek Zarębski²

¹ Katedra Gospodarowania Zasobami Pracy

² Katedra Marketingu i Zarządzania Agrobiznesem

Uniwersytet Mikołaja Kopernika w Toruniu

Słowa kluczowe: wynagrodzenia, wyniki ekonomiczne.

Abstract

Sklonność polskich przedsiębiorstw do ujawniania swoich danych o płacach jest coraz mniejsza. Dowodzi tego coraz mniej liczna zbiorowość największych polskich firm podających takie dane. GUS w prezentacji płac nie wykorzystuje ich przekroju według wielkości przedsiębiorstw. Tym bardziej interesujące są wyniki rankingów płacowych, które pozwalają na obserwowanie zmian w płacach z uwzględnieniem tego kryterium różnicowania przedsiębiorstw. Artykuł zawiera prezentację zmian w wynagrodzeniach w ich różnych przekrojach przedsiębiorstw Listy 500. Wskazuje na niepokojący fakt słabości związków płac z wynikami gospodarowania.

Introduction

It is very difficult to analyze remuneration levels in real terms, and the results of such an analysis present only an approximate picture of reality. National statistical data use categories with a high level of aggregation and do not include money transfers in the unofficial sector of the economy. They are also influenced by imperfections of statistics concerning labour costs and remuneration levels in companies. To make matters worse, the methodology used in research concerning remuneration is subject to frequent changes, and it is this changeability that makes it very difficult to identify long-term trends in remuneration levels. The above mentioned limitations also apply to international statistical sources. For example, the EUROSTAT, whose statistical data concerning remuneration are very scarce, changes the data format almost every year.

Given those difficulties in research on remuneration the data from consulting companies obtained through market surveys of remuneration levels serve as a valuable, complementary source of information. These surveys present a picture of reality in a much less aggregated form. However, these data are still random and cannot serve as a basis for generalization. In this situation, enterprise rankings (against different criteria) serve as an invaluable source of information on issues related to remuneration. Although they are also marred in that they show only a fragment of reality, they enable us to monitor changes in remuneration levels under particular circumstances, and analyze their correlation with other aspects of economic activity such as labour efficiency and financial results of companies. Finally, it is important to remember that the reliability of research results depends on the quality of data the researcher relies on.

Purpose and methodology of the study

The article presents the results of a study concerning remuneration. The analysis was based on the TOP 500 ranking – a list of 500 highest revenue companies operating on the Polish market. The ranking was published in the “Rzeczpospolita” daily between 2000-04.

The purpose of the study was to:

- determine the level of salary diversification among the highest revenue companies in Poland, taking into account the following criteria:
 - type of business activity (according to the Polish Classification of Activities – PKD),
 - industry,
 - foreign stake in the company;

- determine the strength of correlation between the level of salary, work efficiency and financial results of the companies from the TOP 500 ranking. The companies were selected according to the criteria mentioned above.

Description of the population studied¹

In the analyzed period, the companies were less and less willing to disclose their remuneration data. In 2004, only 55% of the companies included in the ranking disclosed their remuneration data. This accounted for 68% of the number of companies who revealed this data in 2000.

In the analyzed period, the share of public sector companies in the TOP 500 ranking decreased slightly. These companies accounted for 38.5% of all the companies from the ranking in 2000, and for merely 34.5% in 2004. Considering that it is the private sector companies who tend to withhold their remuneration data, public companies are relatively better represented in the TOP 500 list.

Moreover, the share of public sector companies in the TOP 500 list is three times higher than their share in the overall number of companies in Poland, which makes the ranking an interesting source of information.

Because of increased inflow of foreign capital into Poland, foreign companies became the largest group in the ranking. Foreign companies, together with companies who did not disclose their remuneration data totalled 189, and constituted 37.5% of all the companies in the ranking in 2000. Four years later, this figure grew to 263.

Industrial companies constitute a relatively high group among the 500 companies in the ranking. These include mining companies, industrial processing companies and companies from the energy industry. The share of energy companies (supplying electricity, gas and water) in the TOP 500 ranking is five times higher than their proportion in the national economy. The proportion of financial-services companies in the ranking is also higher than their share in the overall number of companies in Poland, but it is increasingly more difficult to obtain remuneration data from them.

In the period studied, trading companies were the least willing to disclose their remuneration data. If we also consider those companies who did not disclose their data, we will observe that the number of trading companies in the ranking increased markedly between 2000-04.

The ranking was made based on the revenues achieved by the companies, which is reflected in the size of companies included in it. The ranking mostly

¹ The study presents only those companies from the TOP 500 list who revealed their remuneration data.

consists of large companies. However, medium and small companies are also well-represented². In the period studied, they constituted from 24.5% to 29% of the 500 companies in the ranking.

Diversification of salaries

The study assumes the near-average remuneration range at 75-120%, which, in 2000 and 2004, was PLN 2,500-4,000 in nominal terms. In both of these years, the percentage of companies whose salaries were within the near-average range was similar. However, in the base year, about 30% of the TOP 500 companies offered an average salary below PLN 2,500, whereas in 2004 – this figure was 21.3%. On the other hand, 26.7% of the companies offered relatively high salaries (above PLN 4,000) in 2000, but in 2004 this figure went up to 35.8%. This means that increasingly more companies offer high salaries and that there is a positive skewness in the distribution of remuneration (see Table 1).

Table 1

Distribution of the TOP 500 companies according to the average salary between 2000-2004

Average salary (PLN)	2000		2001		2002		2003		2004	
	Number	%	Number	%	Number	%	Number	%	Numer	%
up to 1,500	14	3.5	11	3.3	8	2.6	5	1.7	5	1.8
1,501-2,000	38	9.4	26	7.8	22	7.1	23	7.8	14	5.1
2,001-2,500	69	17.0	37	11.1	37	12.0	35	11.9	40	14.4
2,501-3,000	87	21.4	76	22.8	52	16.9	46	15.6	43	15.2
3,001-4,000	90	22.2	85	25.5	83	27.0	77	26.1	76	27.4
4,001-5,000	36	8.9	38	11.4	43	14.0	41	13.9	39	14.1
5,001-6,000	27	6.7	24	7.2	19	6.2	29	9.8	23	8.3
6,001-7,000	13	3.2	11	3.3	16	5.2	12	4.1	15	5.4
7,001-8,000	15	3.7	8	2.4	7	2.3	9	3.1	8	2.9
8,001-10,000	9	2.2	9	2.7	10	3.4	9	3.1	6	2.2
Over 10,000	8	2.0	9	2.7	11	3.6	9	3.1	8	2.9
Total ⁵	406	100	334	100	308	100	295	100	277	100

Source: TOP 500, the “Rzeczpospolita”, April 2000; TOP 500, the “Rzeczpospolita”, May 2001; TOP 500, the “Rzeczpospolita”, May 2002, TOP 500, the “Rzeczpospolita”, May 2003, TOP 500, the “Rzeczpospolita”, April 2004, TOP 500, the “Rzeczpospolita”, April 2005.

² Although, according to the European Commission directive, a *small* company is a company which employs up to 49 employees, a *medium* company is a company which employs up to 249 people, this article uses different thresholds to differentiate between the size of companies (mainly because the number of posts in the statistics is not translated into full-time posts). Therefore, in this article, a *large* company is a company which employs over 499 people.

Companies from the energy industry displayed the highest level of concentration of remuneration (in 2000, their share was 63.2%; four years later – 58%). Industrial companies usually paid their employees salaries within the near-average range (49.3% in 2000 and 46.3% in 2004). In 2000, their share in the group of companies who offered relatively “low” salaries (below PLN 2,500), was 36%, and went down to only 22.4% in 2004. This means that financial results in many companies in this sector improved over the four-year span.

Trading companies dominated the group of companies who offered salaries below PLN 2,500 (38% in 2000 and 30% of all such companies included in the TOP 500 list). These companies had also as high a representation in 2000, and in 2004 – a 10 percentage-point higher representation in the group of relatively “high” salaries (above PLN 4,000). They also had an almost 10% representation in the group of “very high” salaries (above PLN 8,000). This indicates that salaries in the trading sector are among the most diversified ones.

The group of companies paying “low” salaries included domestic companies with a majority or a 100% stake held by domestic investors. In 2004, the average level of salary in 40% of these companies did not exceed PLN 2,500.

The leading position of companies with a majority or a 100% stake held by domestic investors in terms of the average salary was achieved in the situation of a growing diversification of average salaries. In this group, companies with a stake held by foreign capital displayed the lowest level of concentration around the average level of salary.

It was mainly the foreign companies who offered their employees “high” salaries. The number of such companies in the TOP 500 increased. While in 2000 they accounted for 41% of all the 500 companies in the ranking, four years later their share rose to 51%. Among them, high and most balanced salaries could be found in those companies in which foreign investors owned a majority stake.

Employees in the so called Jednoosobowa Spółka Skarbu Państwa companies (joint stock companies in which the Treasury has a full stake) received relatively generous salaries. In 2000, the average salary in about 10% of those companies was higher than the upper threshold of the near-average remuneration range (120% of the average salary). Four years later, this figure increased to 28%. This group displayed the highest concentration around the average salary among the 500 companies.

The lowest average salary could be found in state companies. This is because of low salaries in the Polish Railways (PKP), whose employees constitute a majority of employees in this sector. However, salaries in state companies tended to go up in the course of time. On the other hand, in 2004, 34% of state companies included in the ranking offered an average salary over

PLN 4,000 was. This narrowed the gap between remuneration levels in different sectors.

The group of 50 companies offering the highest average salary is dominated by companies with a full foreign stake (in 2000 – 22 companies; in 2004 – 26). It is interesting, however, that among the “best-paying” companies in 2004 there were 14 companies from the public sector (7 Jednoosobowa Spółka Skarbu Państwa companies, and 7 state companies). In the group of companies offering their employees the highest average salary, trading companies accounted for 50% of them.

Table 2

TOP 500 companies offering the highest average salary in 2004

Name of the company	Salary (PLN)
Daimler Chrysler Leasing sp. z o.o., Warszawa	21,104
Pioneer Pekao Investment Management SA GK, Warszawa	15,097
Glencore Polska sp. z o.o., Gdańsk	12,743
Alfred C. Toepfer Internationale sp. z o.o., Warszawa	12,250
Siemens sp. z o.o., Warszawa	11,788
Bayer sp. z o.o., Warszawa	11,600
Slovnaft Polska SA, Kraków	11,144
Totalizator Sportowy sp. z o.o., Warszawa	10,303
Renault Polska sp z o.o., Warszawa	9,380
Canal Plus Cyfrowy sp. z o.o., Warszawa	9,037

Source: TOP 500, the “Rzeczpospolita”, April 2005

Although the lowest positions in the ranking are occupied by domestic companies (mainly private ones), in 2004, 13 out of the 50 “worst-paying” companies were those in which a full stake was held by foreign investors (in 2000, there were only 6 such companies in this group). Among them are: cosmetics producers and retailers – Avon and Rossmann Polska³, McDonald’s Polska, and Daewoo EM Poland.

It was the production companies, wholesalers and retailers who offered their employees the lowest salaries. The fact that many of those companies have very high revenues confirms that there is a high diversification of salaries in this sector, which is typical to this sector.

³ In 2004 Daewoo was 431 and Rossmann Polska – 435, in the ranking based on the average salary offered.

Table 3

TOP 500 companies offering the lowest average salary in 2004

Name of the company	Salary (PLN)
Torfarm Sa, Toruń	1,087
PHZ Elmar, Jędrzejów	1,259
Grupa MM Duda, Sosnowiec	1,311
Mars S.A., Gorzów Wielkopolski	1,397
McDonald's Polska sp. z o.o., Warszawa	1,439
Zakłady Mięsne Łmeat Łuków S.A., Łuków	1,516
Christianopol Fabryka Mebli Tapicerowanych Rokita sp. o.o. Łowię	1,622
PPH Mars, Gorzów Wielkopolski	1,637
Autoliv Poland sp. z o.o., Oława	1,682
Constar S.A., Starachowice	1,725

Source: TOP 500, the "Rzeczpospolita", April 2005.

The data in table 4 show a very high, but decreasing, diversity in the average salary levels among the TOP 500 companies. While in 2000 the average salary in ten best-paying companies was almost five times higher than the average salary in the whole group of 500 companies, four years later it was about 3.5 times higher.

Table 4

Vertical range of salary levels in the TOP 500 companies in 2000-2004

Years	Average salary in the whole population (PLN)	Average salary in the 10 best-paying companies (PLN)	Average salary in the 10 worst-paying companies (PLN)	2:3 (%)	2:1 (%)	3:1 (%)	(2-3)/1 (%)	Coefficient of variation for the whole population
	1	2	3	4	5	6	7	8
2000	2,853	1,3680	1,263	1,083	479.5	44.3	435.3	0.8
2001	3,105	1,3048	1,061	1,229.8	420.2	34.2	386.1	0.8
2002	3,307	1,3356	1,088	1,227.6	403.8	32.9	371	0.7
2003	3,369	1,1612	1,592	729.4	344.7	49.0	295.7	0.7
2004	3,228	1,1204	1,458	768.4	347.1	44.5	301.9	0.7

Source: TOP 500, the "Rzeczpospolita", April 2000; TOP 500, the "Rzeczpospolita", May 2001; TOP 500, the "Rzeczpospolita", May 2002, TOP 500, the "Rzeczpospolita", May 2003, TOP 500, the "Rzeczpospolita", April 2004, TOP 500, the "Rzeczpospolita", April 2005.

Correlation between financial results and salary levels in the TOP 500 companies

When we compare salaries in both the best-paying companies and the worst-paying ones with their financial results (see table 5), we will see that the differing salary levels the companies offer their employees reflect their differing financial performance and the level of revenue per employee.

Between 2001-2002, the best-paying companies reported a spectacular increase in their profits. This widened the gap between the level of salaries offered by them and by companies offering the lowest salaries. Although this gap decreased in the course of time, in 2004 the gross profit per employee in the first ten best-paying companies was 35 times higher than the gross profit per employee in the ten worst-paying companies.

There are also big differences in the efficiency of work. In 2000, profit per employee in the best-paying companies was 24 times higher than in companies offering the lowest salaries. However, four years later this ratio decreased to “merely” 14 times. The same can be said if we compare larger groups from both ends of the list (for instance, 50 best-paying and 50 worst-paying companies).

Similar relations are not as straightforward if we compare the results of 10 worst-paying companies with the results of 50 worst-paying ones. In 2000, both groups reported a loss (however, the loss was higher in the group of 50 worst-paying companies). 2001 was even worse for the 50 worst-paying companies. Not only did their financial results worsen, but the gap between them and the 10 worst-paying companies widened. The same can be said of their labour efficiency. During the whole period studied⁴, 10 worst-paying companies achieved better financial results and demonstrated higher labour efficiency than the group of 50 worst-paying companies. This shows that the level of salary is very weakly connected with the performance of companies.

The results presented in table 6 show a strong correlation between the level of salaries and the financial performance if we analyze the companies from the point of view of their ownership structure.

The results presented in the tables above show that the best-paying companies in the group are those in which foreign investors hold a minority stake, and that their level of the average salary corresponds with their financial performance. A significant decrease in relative profitability among those companies in 2002 resulted in a decrease in salaries they offered, and they lost their leading position as the best-paying companies in the group. In the following years, however, salaries in those companies grew faster than in

⁴ Only in 2003 gross profit per employee in 50 companies offering the lowest average salary was slightly higher than in the first ten in the ranking.

Table 6
Average salary, revenue and gross profit per employee in the TOP 500 companies between 2000-2004 (according to their ownership structure)

[illegible]

Source: TOP 500, the “Rzeczpospolita”, April 2005.

companies with a different ownership structure and were closely linked to those companies' ability to increase profits. In this respect, companies with a minority stake held by foreign investors surpassed in 2003 companies with a majority stake held by foreign investor, who in 2002 lead the group not only in terms of profits but also in terms of the average salary offered. In 2004, the gross profit per employee in companies with a minority foreign stake was higher than in companies with a majority foreign stake by 60 percentage points.

The situation in the Jednoosobowa Spółka Skarbu Państwa companies is very interesting. With the highest average salary, higher than in private domestic companies by 32 percentage points, they offered a higher average salary than foreign companies in 2003. However, their financial results were three times worse than companies' with a full or a majority stake held by foreign investors, and twice worse than companies' in which a full or a majority stake was held by Polish investors. Their labour efficiency was also about three times worse than labour efficiency in foreign companies. Although, in 2004, salaries in the Jednoosobowa Spółka Skarbu Państwa companies decreased, these relations were even worse.

The multiple correlation coefficient was used to determine how strongly the level of salaries is connected with the financial results of companies. However, we should be aware of the limitations of this coefficient and we should interpret the data with due care.

The results presented in table 7 and table 8 indicate that the connection between the level of salary and the financial results of the TOP 500 companies is still not very strong.

Table 7

Correlation between financial results and the level of salaries in the TOP 500 companies in 2000-2004 (according to the section)

Section	Correlation coefficient									
	Between financial results and salary					Between work efficiency and salary				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
C	-0.43	0.05	0.67	0.4	-0.50	0.64	0.06	0.71	0.69	0.40
D	0.28	0.33	0.33	0.28	0.42	0.50	0.57	0.48	0.38	0.38
E	0.42	0.15	0.45	0.68	0.57	0.41	0.59	0.50	0.52	0.53
F	0.90	0.90	0.42	0.31	-0.9	0.34	0.82	0.91	0.83	0.99
G	0.30	0.38	0.45	0.40	0.46	0.40	0.39	0.51	0.40	0.40
I	0.13	-0.03	0.66	0.80	0.41	0.68	0.53	0.74	0.83	0.65
J	0.20	0.03	0.89	0.87	1.0	0.47	0.51	0.72	0.97	0.84
Total	0.28	0.27	0.38	0.53	0.53	0.32	0.38	0.47	0.49	0.47

Source: TOP 500, the "Rzeczpospolita", April 2005.

If we analyze the correlation between the level of salary and the financial performance of companies from different industries (Tab. 7), we will see that, in 2000 and 2004, there was a negative correlation between the salary level and the financial results in companies from the coal mining sector. It leads to a disturbing conclusion that companies in this sector offer relatively high salaries without consideration to the financial performance.

Table 8

Correlation between financial results and salaries in the TOP 500 companies in 2000-2004
(according to their ownership structure)

Companies	Correlation coefficient									
	between financial results and salary					between work efficiency and salary				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
Joint stock companies in which the Treasury has a full stake (the <i>Jednoosobowa Spółka Skarbu Państwa</i> companies)	0.51	0.03	0.75	0.70	0.40	0.39	0.36	0.37	0.41	0.40
State companies	0.46	0.13	0.79	0.85	0.43	0.26	0.33	0.32	0.37	0.48
Municipal companies	0.61	0.39	-0.18	-1.0	0.65	0.56	0.63	0.82	-1.0	0.45
Private companies with a majority or a 100% stake held by Polish investors	0.28	0.03	0.2	0.61	0.51	0.43	0.46	0.68	0.49	0.53
Including: Companies with a minority stake held by foreign investors	-0.3	-0.69	-0.64	0.6	0.79	0.48	0.84	0.36	0.49	0.35
Companies with a majority or a 100% stake held by foreign investors	0.47	0.66	0.36	0.5	0.55	0.4	0.46	0.51	0.64	0.72

Source: TOP 500, the "Rzeczpospolita", April 2005.

The analysis of the level of salaries and financial results of companies according to their ownership structure (see table 8) does not lead to definite conclusions. Until 2003, the correlation between those two factors seemed to be quite strong in state companies (however, not including the few communal companies in the TOP 500 list). Between 2000-2003, there was a clear reverse correlation between the level of the average salary and gross profits in companies with a minority foreign stake. Although the level of the average salary in those companies was fully justified by their financial results in general, this correlation did not occur within this group⁵.

⁵ 2004 was different. However, it is not advisable to draw conclusions from this fact because of the aforementioned imperfection of this indicator.

The analysis of the degree of correlation between the level of salary and work efficiency shows that the ownerships structure does not have a big impact on this correlation. In general, this correlation is rather weak.

Summary

1. Differences in salary levels among the companies ranked in the TOP 500 list are still considerable. While in the previous years this diversification was growing, at the beginning of the 21st century the gap started to narrow.

2. The low level of the multiple correlation reveals a weak connection between salaries and work efficiency as well as between salaries and financial results. The negative correlation between the level of salary and the financial performance, which was over three years typical to companies with a minority stake held by foreign investors, shows that (although those companies owe their relatively high level of salaries to good financial results) inside this group there is no evidence that the level of salary depends on the company's labour efficiency and financial performance. Polish companies still do not treat salary as an important factor in their economic calculation.

3. Because of some particular features of the companies from the TOP 500 list, we can not treat the results of the study as representative of all companies in Poland. However, we can assume that if the TOP 500 companies (who can be considered as economic leaders in Poland) have not implemented mechanisms through which better financial performance would translate into a higher level of salary, we should not expect that smaller (and poorer) companies implement such schemes. Nevertheless, we can expect that the new economic reality will force companies to improve their remuneration schemes in which the motivational feature of remuneration will play a more significant role.

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THE RANGE OF UTILIZATION OF THE STRATEGY OF REWARDS IN THE REALIZATION OF THE DEVELOPMENT STRATEGY OF THE ENTERPRISES IN POLAND

Wojciech Popławski¹, Sylwia Stachowska²

¹ Department of Enterprise Management
Nicolaus Copernicus University in Toruń

² Department of Organization and Management
University of Warmia and Mazury in Olsztyn

Key words: rewards, the strategy of rewards, the strategy of the organization.

A b s t r a c t

One of the essential development trends in rewarding employees is the increasing role of rewards as tools of the strategic management within the enterprise. In compliance with such an idea, the strategy of rewards should support the strategy of the organization as well as it ought to be coherent with its objectives, enable the enterprise to achieve better results and consequently assure the increase in its competitiveness.

The aim of the research presented herein is to answer the question whether the strategic priorities of rewarding established by the enterprises existing on the Polish market are compliant with their strategic activity targets.

ZAKRES WYKORZYSTANIA STRATEGII WYNAGRODZEŃ W REALIZACJI STRATEGII ROZWOJOWEJ PRZEDSIĘBIORSTW W POLSCE

Wojciech Popławski¹, Sylwia Stachowska²

¹ Katedra Zarządzania Przedsiębiorstwem
Uniwersytet Mikołaja Kopernika w Toruniu

² Katedra Organizacji i Zarządzania
Uniwersytet Warmińsko-Mazurski w Olsztynie

Słowa kluczowe: wynagrodzenia, strategia wynagrodzeń, strategia organizacji.

Abstrakt

Wzrost roli wynagrodzeń jako narzędzia zarządzania strategicznego w przedsiębiorstwie jest jedną z najistotniejszych tendencji rozwojowych w wynagradzaniu. Zgodnie z tą koncepcją strategia wynagrodzeń powinna wspierać strategię organizacji, być z nią spójna, powinna stwarzać możliwość osiągania przez przedsiębiorstwo lepszych wyników, a tym samym zapewniać wzrost jego konkurencyjności.

Celem badań prezentowanych w artykule było znalezienie odpowiedzi na pytanie, czy priorytety strategii wynagradzania realizowanej w przedsiębiorstwach funkcjonujących na polskim rynku są ukierunkowane na realizację ich strategicznych celów działania.

Introduction

The strategy of rewards should support the strategy of the organization and should be coherent with its objectives as well as with the strategy of human resources management. It should also create an opportunity for achieving better results and consequently assure an increase in the company's competitiveness. It seems essential to present a more detailed description of this general term. E. Lawler claims that it is impossible to plan a successful rewarding system within an organization without establishing strategic goals in such areas as human behaviour which needs a great deal of motivation, people who should be attracted to their jobs and willing to stay on with the company and the institutional structures that the organization decides to adopt.

Every organization should define its own chief aims of the reward strategy. It must be remembered that such a task is extremely difficult and complicated as it requires keeping a balance between numerous objectives of the different groups within the organization which are often antagonistic. The catalogue of all objectives is a vital source of information for workers as they can gain awareness of the priorities of the organization, the standards and results it expects and demands for which it is ready to pay.

The analysis of the literature on the subject and practical observations reveal that the most important aims of the strategy of rewards are:

- attracting to the organization the best qualified workers
- stimulating and encouraging formation of positive attitudes what is connected with achieving the best results and with the quality of work at all levels of the management.
- creating new attitudes what results from the necessity of adapting to the changeable and extremely competitive condition of the market.
- motivating to achieving better results at work
- supporting qualified and effective workers.

In other words, the strategic aims in the field of management include:

- realization of the basic functions of rewards, i.e.:
 - compensation for the workers' contribution and effort as well as stimulating workers' success
 - recruitment of new workers on the internal labour market in the enterprise and retaining those who are necessary and desired in the firm,
 - teaching employees new, desired attitudes
- the support of the realization of the general strategy of the enterprise and the strategy of the human resources management.

The strategic aims in the sphere of rewarding which are traditionally most often mentioned include: recruiting appropriate staff, retaining highly qualified specialists and improving work effectiveness. Nowadays this list ought to be supplemented with such objectives as teaching new attitudes i.e. activities aiming towards the development of the enterprise, helping workers to adapt to changes, and creating desired employee relations. These aims can appear in enterprises in various configurations, according to the foundation of the general strategy and the organizational culture. The realization of each objective demands incorporating detailed and most suitable solutions and in every case it should agree with the specific character of the firm. Leaving aside the fundamental aims of the strategy of rewards, there is a necessity of specifying the objectives and directions of the strategic transformation in rewarding systems in Polish firms according to modern demands. M. Juchnowicz points out that:

- many Polish firms face the challenge which results from the transformation in organizational culture and the character of employee relations. It is vital to prefer the culture based on cooperation, engagement and loyalty. The firm of the future should be considered as a joint undertaking which is profitable for workers, union organizations and owners. This objective can be fulfilled by introducing the strategy of rewards that promotes combined effort leaving aside individual effectiveness;

- next strategic challenge for firms is the recruitment of highly qualified personnel i.e. attracting the most suitable workers, giving them desired inspiration and retaining them despite the growing competition on the employment market and battles for the best qualified workers. The firm must be able to transform and utilize successfully the intellectual capacity of its own workers as well as provide the conditions for permanent development of its employees;

- the aim of the strategy of rewards is to increase productivity and not to reduce labour costs. The realization of this postulate is a challenge for the management system on macro- and micro-scale, which also includes the system of rewards. This problem is extremely complicated what may be proved

by the gap between the level of the productivity in Poland and that of other European Union countries. Taking into account such a situation it is obvious that traditional systems of rewards are not in a position to meet the expectations as what matters is not only the improvement in work effectiveness but also its rapid increase.

The aims and methods of research

The aim of the research presented herein was to answer the question, whether the priorities of the strategy of rewards realized in the enterprises existing on the Polish market are compliant with their strategic activity objectives.

The surveyed enterprises included:

- 1) all large industrial companies (employing more than 250 workers) situated in Warmia-and -Mazuria Province (total number of enterprises: 47);
- 2) all industrial companies whose stocks and shares are registered at Warsaw Stock Exchange (total number of joint stock companies: 98).

Taking into account the fact that five firms mentioned in the first group were also registered at Warsaw Stock Exchange and were included in the second group, the total number of tested enterprises was 140.

The research was conducted by means of questionnaires. The questionnaire forms were sent to the surveyed enterprises, namely to personnel management departments or managerial staff thus the interviewees were people responsible for decision making in the field of rewarding.

In reply the investigators obtained 71 correctly answered research questionnaires thus the survey efficiency reached the level of 50.7%.

The survey was carried out mostly at private companies of commercial law i.e. joint stock companies and limited liability companies. The number of these firms was 54 and made 76.1% of the whole. 29.6% of them had the participation of the foreign capital. Other firms included in the survey were 7 cooperatives, 2 state enterprises, 3 companies of the Treasury and 5 other subjects (Tab. 1).

In the group of subjects covered by the survey there were 29 companies whose stocks were registered at Warsaw Stock Exchange (joint stock companies made 40.9% of the examined enterprises).

Considering the criteria of selecting of the target group the survey was conducted mostly in large and very large enterprises employing more than 250 workers (95.8 %). There were only 3 enterprises (joint stock companies) that employed less than 250 workers. 35 firms showed that their average annual staff employment ranged from 250 to 499 workers. Other firms employed more than 500 workers.

Table 1

The surveyed enterprises according to the form of property

Form of property	Number	Percentage of the whole number of enterprises
State enterprise	2	2.82
Company of the Treasury without foreign capital	2	2.82
Company of the Treasury with foreign capital	1	1.41
Private company of commercial law without foreign capital	33	46.48
Private company of commercial law with foreign capital up to 50%	6	8.45
Private company of commercial law with foreign capital above 50%	15	21.13
Cooperative	7	9.86
Other*	5	7.04
Total	71	100.00

* two private companies of natural persons and three enterprises being the property of natural persons running the economic activity

Source: Own elaboration based on the conducted survey.

Findings

Assuming that the basic imperative for the enterprises administered in a modern style is the connection between the strategy of rewards with the realization of the strategic objectives of the organization, the respondents were asked to define the basic functional aims in their firms and to present the kind of strategy they incorporate in their realization.

The question concerning the general organizational strategy: 50.7% respondents (36 firms) answered that their firm follows the strategy of development aiming at an increase in the market share. 47.9% respondents (34 firms) pointed to the strategy of the stabilization i.e. to holding and defending their position on the market. In one case referring to the company of the Treasury with foreign capital participation the respondents admitted that they follow the strategy of the reduction i.e. opting out from the market.

The strategy of development was pursued by most of private companies of commercial law (61.1%), including the vast majority of companies with the foreign capital participation. In the remaining established groups of companies dominated the strategy of stabilization (Tab. 2).

The strategy of development was adopted by most joint stock companies covered by the research (62.1%) while the rest of joint stock companies pointed to the strategy of the stabilization. 55% enterprises which were not the joint stock companies registered at Warsaw Stock Exchange realized the strategy of

stabilization. The firm which admitted pursuing the strategy of reduction belonged to that group as well.

The feature of general strategy which was most often mentioned by the surveyed business entities turned out to be costs reduction (63.4%). What is even more interesting it was also the most essential feature for all enterprises irrespective of the kind of strategy they pursued.

Other important features included maintaining the highest quality of the product (60.6% indications) and encouraging technological innovation (49.3%). These two features were most often mentioned by the enterprises pursuing the strategy of development (69.4%) alongside with the costs reduction (63.9%) and launching new products (27.8%). On the other hand the enterprises which adopted the strategy of stabilization mentioned such features as costs reduction (61.8%), maintaining the highest quality of the product (52.9%), encouraging technological innovation (29.4%) and product diversification (14.7%). The company realizing the strategy of reduction (withdrawing from the market) mentioned only one of the above features, namely costs reduction.

Table 3

Most important objectives of the activity in surveyed enterprises with regard of realized general strategy

Objectives of the activity of the firm		General strategy of the organization			Total
		development	stabilization	reduction	
Profit maximization	Number of indications	14	16	0	30
	Percentage*	38.89	47.06	0.00	42.25
Increase in capital productivity	Number of indications	9	8	0	17
	Percentage	25.00	23.53	0.00	23.94
Increase in sales	Number of indications	28	27	1	56
	Percentage	77.78	79.41	100.00	78.87
Costumer satisfaction	Number of indications	21	18	1	40
	Percentage	58.33	52.94	100.00	56.34
Staff satisfaction	Number of indications	3	4	0	7
	Percentage	8.33	11.76	0.00	9.86
Stockholders satisfaction	Number of indications	6	5	0	11
	Percentage	16.67	14.71	0.00	15.49
Quality of the product and services	Number of indications	24	16	1	41
	Percentage	66.67	47.06	100.00	57.75
Others (environment protection)	Number of indications	1	0	0	1
	Percentage	2.78	0.00	0.00	14.08

* – percentage of the enterprises realizing given kind of strategy

Source: Own elaboration based on the conducted survey.

The most important objectives of the surveyed business entities were: increase in sales (78.8% indications), care for the quality of the product and services (57.8%) and care for the customer satisfaction (56.3%). The same hierarchy of the importance of the objective proved to be true for the enterprises which adopted the strategy of development as well as those pursuing the strategy of the stabilization (Tab. 3).

The care for stockholders satisfaction as a basic objective of functioning was underlined by 15.5% of the surveyed business entities (11 private companies of commercial law ,7 of which represented joint stock companies). It seems surprising that the care for the stockholders; satisfaction was mentioned among the priority aims by only 24.1% of joint stock companies registered at Warsaw Stock Exchange (Fig. 1).

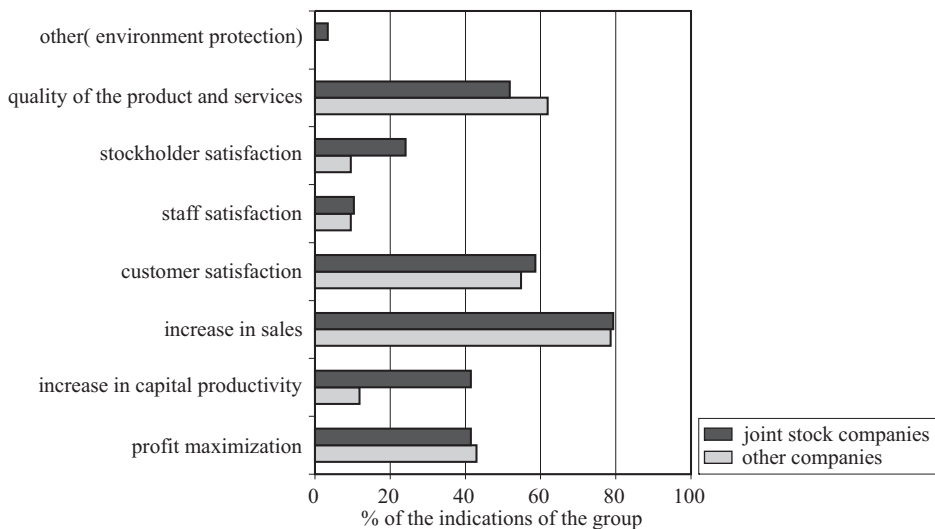


Fig. 1. The most important objectives in joint stock companies in comparison with other surveyed enterprises

Source: Own elaboration based on the conducted survey.

The surveyed companies defined their basic objective in the field of human resources management as the recruitment and retaining with the firm the most qualified and skilled employees (60.6%). Other important aims appeared to be: constant development of the workers (52.1%) and motivating system of rewards (43.7%). This hierarchy of importance proved to be true in the enterprises pursuing the strategy of development, while the group of subjects realizing the strategy of the stabilization valued the management encouraging

initiative, creativity and autonomy rather than motivating system of rewards. The only aim of the enterprise which pursued the strategy of reduction was the management encouraging initiative, creativity and autonomy.

Employing and retaining the best qualified and skilled workers is definitely the most important goal in the private companies of commercial law with foreign capital participation. This aim is of lesser importance for the companies without foreign capital participation which relatively care more for the constant development of their employees and creating motivating systems of rewards.

The most important objectives in the sphere of human resources management (HRM) in the surveyed joint stock companies were recruiting and retaining in the firm suitable and qualified workers, (it was also the most important objective in the sphere of HRM for other enterprises which did not belong to the joint stock companies group), care for constant development of workers (67%) and motivating system of rewards (55%). Other enterprises pointed to these objectives relatively more seldom. On the contrary the last of the mentioned objectives: the management encouraging initiative, creativity and autonomy was chosen by 38% of the firms belonging to this group.

Definitely the first priority in the strategy of rewards in surveyed companies is stimulating workers to achieving good results of their work. The realization of this objective was admitted by 90.1% of the companies, of which 51.8% pointed to this goal as a basic one. This fact doubtlessly shows the pro-effective orientation of the surveyed subjects. Other important objectives appeared to be stimulating the development of the personnel which was realized in 78.9% of the firms (26.8% of the firms considered it a priority), retaining employees with the firm (25.4% of the firms considered it as a basic objective in the strategy of rewards) and integrating workers with their firm (it was found essential in 83.1% of the firms).

On the other hand attracting desired and suitable employees was not recognized as an objective in the strategy of rewards by as many as 28.2% of the surveyed enterprises while creating desired employee relations through the rewards was rejected by over 26% of the firms.

The concentration on the achievements of already employed labour potential is seen especially in the group of the enterprises pursuing the strategy of stabilization. In this group as many as 38.2% of the firms does not realize as an objective attracting to the firm suitable workers (Tab. 4). In this group of subjects in comparison to the firms pursuing the strategy of development it is clearly visible that the objectives of the strategy of rewards such as inspiring workers toward development, integrating with the firm and staff retaining are of lesser importance. On the other hand achieving the desired employee relations through the policy of rewards plays more important role. The

enterprise pursuing the strategy of reduction declared aiming at only two goals: retaining the employed staff and stimulating staff effectiveness, however neither of these aims was considered to be a priority.

Table 4.
Objectives of the strategy of rewards with regard of general strategy realized in the surveyed enterprises (percentage of the indications in the group)

Objectives of the strategy of rewards		General strategy of the organization			Total
		development	stabilization	reduction	
Attracting suitable staff to the organization	0	16.67	38.24	100.00	28.17
	1	61.11	50.00	0.00	54.93
	2	22.22	11.76	0.00	16.90
Staff retaining in the organization	0	5.56	20.59	0.00	12.68
	1	69.44	52.94	100.00	61.97
	2	25.00	26.47	0.00	25.35
Simulating staff to achieving good effects	0	5.56	14.71	0.00	9.86
	1	33.33	29.41	100.00	32.39
	2	61.11	55.88	0.00	57.75
Stimulation staff to continuous learning (staff development)	0	8.33	32.35	100.00	21.13
	1	58.33	47.06	0.00	52.11
	2	33.33	20.59	0.00	26.76
Integrating staff with the firm	0	8.33	23.53	100.00	16.90
	1	61.11	67.65	0.00	63.38
	2	30.56	8.82	0.00	19.72
Forming desired employee relation	0	33.33	17.65	100.00	26.76
	1	52.78	67.65	0.00	59.15
	2	13.89	14.71	0.00	14.08

0 – the enterprise does not realize the aim; 1 – the aim is realized, but is not a basic objective; 2 – This is the basic aim of the strategy of rewards

Source: Own elaboration based on the conducted survey.

The hierarchy of importance of the objectives in the enterprises pursuing the strategy of development shows that stimulating the effectiveness of workers plays an essential role. The objectives which were also important include encouraging workers to constant learning and integrating workers with the organization. The enterprises pursuing the strategy of stabilization alongside with encouraging workers to achieving good effects valued preventing competent and desired employees from leaving the firm. (Tab. 5).

The priorities in the sphere of rewards in the enterprises aiming at maximizing profits and increasing sales are defined in a similar way (Tab. 6). It seems that goals defined in such a way clearly correspond with the objectives

Table 5

Coefficients of the importance of each objective of the strategy of rewards with the regard of the general strategy realized in the enterprises (the weighted mean)

Aims of the strategy of rewards	General strategy of the organization			Total
	development	stabilization	reduction	
Attracting suitable staff to the organization	1.06	0.74	0.00	0.89
Retaining staff with the organization	1.19	1.06	1.00	1.13
Stimulation staff to achieving good effects	1.56	1.41	1.00	1.48
Stimulation staff to continuous learning (staff development)	1.25	0.88	0.00	1.06
Integrating workers with the firm	1.22	0.85	0.00	1.03
Forming desired employee relations	0.81	0.97	0.00	0.87

Source: Own elaboration based on the conducted survey.

of the strategy of rewards such as encouraging greater effectiveness and caring for constant development of workers. What is even more interesting, all enterprises which considered care for the worker satisfaction as their basic objective also realized other objectives in the strategy of rewards such as retaining and integrating workers with the firm and creating positive employee relations. On the other hand companies which cared for the stockholder satisfaction seemed to value all objectives of the strategy of rewards mentioned above emphasizing the importance of the staff development.

In most groups which were created according to their basic objectives the most important strategic goals in the field of rewards turned out to be stimulating workers; effectiveness and preventing the best qualified staff from leaving the firm. This attitude refers to the entities aiming at maximizing profits, increasing capital productivity, increasing sales, caring for the customer satisfaction and caring for the stockholder satisfaction. (in the last group encouraging workers to development plays also an important role). Raising qualification of the employed staff is also valued in the firms caring for the quality of the product and services, whereas the firms which value the staff satisfaction indicated creating desired employee relations as one of particularly important objectives in their strategy of rewards.

The enterprises whose basic objective was care for the stockholder satisfaction attributed relatively greatest importance in comparison with other groups to such objectives as attracting to the organization and retaining with the firm the highly qualified labour potential and stimulating the staff development whereas the firms aiming at achieving the worker satisfaction underlined the importance of stimulating effectiveness of the staff, integrating employees with the organization and creating proper employee relations (Tab. 7).

Table 6

Objectives of the strategy of rewards with the regard of the basic activity objectives in the surveyed enterprises
(percentage of the indications in the group)

Objectives of the strategy of rewards		Objectives of the activity in enterprises							
		profit maximization	increase in capital productivity	Increase in sales.	customer satisfaction	staff satisfaction	stockholder satisfaction	quality of the product and services	other (environment protection)
Attracting suitable staff to the organization	0	23.33	23.53	32.14	30.00	28.57	9.09	29.27	0.00
	1	63.33	58.82	48.21	52.50	71.43	72.73	53.66	100.00
	2	13.33	17.65	19.64	23.33	0.00	18.18	17.07	0.00
Retaining staff with the organization	0	6.67	11.76	16.07	10.00	14.29	0.00	12.20	0.00
	1	70.00	70.59	60.71	57.50	71.43	72.73	60.98	100.00
	2	23.33	17.65	23.21	32.50	14.29	27.27	26.83	0.00
Stimulating staff to achieving good effects	0	10.00	23.53	12.50	2.50	0.00	9.09	2.44	0.00
	1	33.33	29.41	32.14	27.50	14.29	36.36	34.15	0.00
	2	56.67	47.06	55.36	70.00	85.71	54.55	63.41	100.00
Stimulating staff to continuous learning (staff development)	0	20.00	29.41	23.21	20.00	28.57	0.00	17.07	0.00
	1	56.67	47.06	50.00	55.00	42.86	72.73	48.78	100.00
	2	23.33	23.53	26.79	25.00	28.57	27.27	34.15	0.00
Integrating workers with the firm	0	20.00	23.53	21.43	12.50	0.00	0.00	12.20	0.00
	1	56.67	58.82	62.50	65.00	85.71	90.90	63.41	100.00
	2	23.33	17.65	16.07	22.50	14.29	9.10	24.39	0.00
Forming desired employee relations	0	26.67	35.29	32.14	22.50	0.00	9.09	21.95	0.00
	1	63.33	52.94	57.14	62.50	71.43	72.73	60.98	100.00
	2	10.00	11.76	10.71	15.00	28.57	18.18	17.07	0.00

0 – the enterprise does not realize the aim; 1 – the aim is realized, but is not a basic objective; 2 – This is the basic aim of the strategy of rewards
Source: Own elaboration based on the conducted survey.

Table 7
Coefficients of the importance of each objective of the strategy of rewards with the regard of basic aims of the activity in the surveyed enterprises
(the weighted mean)

Objectives of the strategy of rewards	Objectives of the activity in enterprises							
	profit maximization	increase of the capital of the product	increase in sales	clients' satisfaction	staff satisfaction	stockholder satisfaction	quality of the product and services	other (environment protection)
Attracting suitable staff of the organization	0.90	0.94	0.87	0.99	0.71	1.09	0.88	1.00
Retaining staff with the organization	1.17	1.06	1.07	1.23	1.00	1.27	1.15	1.00
Stimulating staff to achieving good effects	1.47	1.24	1.43	1.68	1.86	1.45	1.61	2.00
Stimulating staff to continuous learning (staff development)	1.03	0.94	1.04	1.05	1.00	1.28	1.17	1.00
Integrating workers with the firm	1.03	0.94	0.95	1.10	1.14	1.09	1.12	1.00
Forming desired employee relations	0.83	0.76	0.79	0.93	1.29	1.09	0.95	1.00

Source: Own elaboration based on the conducted survey.

The findings of the research also show the coherence of the objectives realized by the surveyed subjects in the field of the strategy of rewards and the objectives in the field of human resources management (Tab. 8). In 83.7% of the firms which recognize attracting and retaining the highly qualified and skilled staff as an objective in the field of human resources management rewards became a tool for attracting most suitable employees and in 93% of these firms it was also a tool for retaining the workers with the organization. As many as 94.6% of the firms, whose essential objective is constant development of employed staff, try to stimulate personnel through the rewards (40% of these firms consider this objective of the strategy of rewards as their priority). Finally as many as 96.8% of the enterprises recognizing motivating system of rewards as their objective in the field of human resources management try to encourage workers to achieving good results through the rewards (over 70% of the firms gave this objective a priority) and as many as 93.5% of them want to retain their employees by means of rewards.

These conclusions are confirmed by the data in Table 9. In the firms which are oriented towards constant staff development the essential place in the hierarchy of importance of the realized objectives in the field of the strategy of rewards is taken by stimulating staff development (just behind motivating to good effects of work). In the remaining groups the second place was taken by preventing the employees from leaving the firm. Attracting appropriate workers by means of rewards plays a relatively important role in the enterprises whose basic objectives in the field of human resources management is recruitment and retaining appropriate personnel. In the firms which are oriented towards personnel development a relatively main role was ascribed to stimulating staff development and personnel integration whereas such objectives as care for appropriate employee relations turned out to be relatively the most important in firms preferring motivating system of rewards in the field of human resources management.

The analysis of the objectives of the strategy of rewards in the surveyed enterprises with the regard of their form of property shows certain differentiation. It can be concluded that it is difficult to find priorities in this area while analysing the companies of the Treasury. In private companies of commercial law the main objective of the strategy of rewards turned out to be stimulating personnel to greater effectiveness and the importance of this aim increased with the increase of foreign capital participation. Other aims included attracting appropriate employees through rewards, integrating workers with the firm and creating appropriate employee relations. The role of retaining competent employees in the organization had the contrary effect. It is worth noticing that companies with majority stake of foreign capital in comparison to other groups emphasized the role of rewards in stimulating personnel potential develop-

Table 8
Objectives of the strategy of rewards with the regard of basic aims in the sphere of the human resources management in the surveyed enterprises
(percentage of the indications in the group)

Objectives of the strategy of rewards	Aims of the firm in the sphere of HMR			
	recruiting and retaining the personnel with highest qualifications and skills	constant development of workers	motivation system of rewards	direction, promoting initiative, creativity and autonomy
Attracting suitable staff to the organization	0	29.73	22.58	34.78
	1	58.14	58.06	39.13
	2	25.58	19.35	26.09
Retaining staff with the organization	0	6.98	6.45	8.70
	1	60.47	64.86	65.22
	2	32.56	29.73	26.09
Stimulating staff to achieving good effects	0	4.65	3.23	13.04
	1	34.88	24.32	30.43
	2	60.47	70.27	56.52
Stimulating staff to continuous learning (staff development)	0	16.28	19.35	26.09
	1	53.49	48.39	43.48
	2	30.23	32.26	30.43
Integrating workers with the firm	0	11.63	16.13	17.39
	1	69.77	64.86	60.87
	2	18.60	27.03	21.74
Forming desired employee relations	0	30.23	19.35	17.39
	1	53.49	58.06	65.22
	2	16.28	22.58	17.39

0 – the enterprise does not realize the objective}; 1 -the objective is realized, but is not a basic aim; 2 – this is the basic objective of the strategy of rewards
Source: Own elaboration based on the conducted survey.

Table 9
Coefficients of the importance of each objective of the strategy of rewards with the regard of basic aims in the sphere of the human resources management in the surveyed enterprises (the weighted mean)

Objectives of the strategy of rewards	Aims of the firm in the sphere of HMR			
	recruiting and retaining the personnel with highest qualifications and skills	constant development of workers	motivation system of rewards	direction, promoting initiative, creativity and autonomy
Attracting suitable staff to the organization	1.09	0.86	0.97	0.91
Retaining staff with the organization	1.26	1.24	1.29	1.17
Stimulating staff to achieving good effects in the job	1.56	1.65	1.68	1.43
Stimulating staff to continuous learning (staff development)	1.14	1.35	1.13	1.04
Integrating workers with the firm	1.07	1.19	1.03	1.04
Forming desired employee relations	0.86	0.95	1.03	1.00

Source: Own elaboration based on the conducted survey.

ment (86.7% of the firms realizes this objective, 40% of which recognizes it as the first priority). In the surveyed cooperatives the most important strategic objective in the field of rewards was creating desired employee relations (similarly to the state owned enterprises) and the next place was taken by stimulating effectiveness (alongside with increasing employees integration with the firm). The majority of joint stock companies declared the realization of all objectives mentioned in the strategy of rewards (and to the greater degree in comparison with other enterprises).

The first priority in this sphere turned out to be stimulating workers to achieving good effects of work (62.1%); the second place was taken by retaining employees and stimulating their development (34.5%). 89.7% of the joint stock companies realized the objective of employees integration with the firm, however, only 13.8% of the enterprises considered that objective to be basic. Creating desired employee relations through the rewards was conducted by 79.3% of the enterprises in this group, being the priority in only 6.9% of them. These two objectives mentioned above were of greater importance in other surveyed groups.

Recapitulation

Generally, it can be concluded that the strategy of rewards realized by the surveyed enterprises is orientated mainly towards maximizing benefits resulting from better utilization of their labour capacity by means of motivating employees to achievements and workers constant development. The next place was taken by creating permanent bonds with the organization. Pro-effective and pro-developmental steering in this field was emphasized by the companies with foreign capital (to the greater degree by the companies with the majority stake of foreign capital). The research findings showed that the priorities of the strategy of rewards conducted in the surveyed enterprises supported the realization of their basic objectives. In all surveyed enterprises one can observe the coherence of the realized objectives of the strategy of rewards, the priorities of the general strategy, the most important functional objectives such as the increase in sales, care for the quality of the product and services and the customer satisfaction and the objectives in the field of human resources management such as constant development of employees and motivating system of rewarding.

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REGIONAL PROCESSES OF OWNERSHIP TRANSFORMATIONS AGAINST THE BACKGROUND OF INVESTMENT ATTRACTIVENESS OF PROVINCES

Wioletta Wierzbicka

Chair of Macroeconomics
University of Warmia and Mazury

Key words: indirect privatization, direct privatization, regional diversity, investment attractiveness of provinces.

A b s t r a c t

The paper aims at investigating the dependence between the investment attractiveness of provinces and differences in frequency of application of individual privatization methods in the provinces. The studies confirmed that frequency of indirect and direct privatization application in provinces determines to a certain extent the investment attractiveness of those provinces. Both methods in absolute terms were used most frequently in the regions characterized by very high or high investment attractiveness, and relatively the least frequently in the regions with of low attractiveness. The studies have shown that investment attractiveness of provinces is not the most important factor determining the choice of privatization method in the region, it depends heavily on the number of enterprises covered by transformations in a given province, structure and specific characteristics of the transformed entities and a number of other factors of social and economic nature.

REGIONALNE PROCESY PRZEKSZTAŁCEŃ WŁASNOŚCIOWYCH NA TLE ATRAKCYJNOŚCI INWESTYCYJNEJ WOJEWÓDZTW

Wioletta Wierzbicka

Katedra Makroekonomii
Uniwersytet Warmińsko-Mazurski

Słowa kluczowe: prywatyzacja pośrednia, prywatyzacja bezpośrednia, zróżnicowania regionalne, atrakcyjność inwestycyjna województw.

Abstrakt

Celem artykułu było zbadanie zależności między atrakcyjnością inwestycyjną województw a zróżnicowaniem częstotliwości stosowania poszczególnych metod prywatyzacji w województwach. Badania potwierdziły, że częstotliwość stosowania prywatyzacji pośredniej i bezpośredniej w województwach w pewnym stopniu jest uwarunkowana ich atrakcyjnością inwestycyjną. Obydwie metody w ujęciu bezwzględny najczęściej były stosowane w regionach charakteryzujących się bardzo wysoką lub wysoką atrakcyjnością inwestycyjną, a stosunkowo najrzadziej w regionach o niskiej atrakcyjności. Badania wykazały, że atrakcyjność inwestycyjna województw nie jest jednak czynnikiem najważniejszym, warunkującym wybór metody prywatyzacji w regionie, w znacznym stopniu zależy on bowiem od liczby przedsiębiorstw objętych przekształceniami w danym województwie, struktury i specyfiki przekształcanych podmiotów oraz wielu innych czynników o charakterze społecznym i ekonomicznym.

Introduction

The process of ownership transformations continuing in Poland for sixteen years has been the key to the process of transformation of our economy. During that time very significant changes occurred in both the ownership structure and in economic relations bringing our situation closer to that of the countries with advanced level of economic growth and developed market economy as well as modern living standards.

Privatization, which next to opening the economy, demonopolization and introduction of the principle of hard budget limitation, was the necessary condition of creating market competition and initiating efficiency focused changes in the economy (*Restrukturyzacja przedsiębiorstw...* 2001) plays the basic role in the program of ownership transformations in Poland. Privatization confirms that private enterprises, particularly those with involvement of foreign capital are definitely ahead of the state-owned enterprises as concerns the economic efficiency (KALIŃSKI 2004, p. 377).

The internal structure of ownership transformation processes in Poland, considering the applied privatization methods is relatively balanced. Both nationally and in the system of individual provinces, there is no definite predominance of any of the applied privatization methods although analysis of relative application frequency of individual methods in individual provinces a significant differentiation between individual provinces resulting mainly from the number of state-owned enterprises within a given province, their size, financial standing, industry they operate in and investment attractiveness of a given region can be observed (KAWIECKA 2005, p. 104).

The paper focuses in particular on one of the abovementioned factors, i.e. the investment attractiveness of the province for investors participating in the privatization process.

The goal of the paper was to investigate the relation between investment attractiveness of provinces and differences in application of individual privatization methods in provinces.

Results of studies by the Gdańsk Institute for Market Economics "Investment attractiveness of provinces and sub-regions of Poland 2005" edited by Tomasz Kalinowski (authors team Anna HILDEBRANDT et al.), Gdańsk 2005, and results of own studies concerning regional differences in application frequency of individual privatization methods were used to achieve the goal of the study formulated in that way.

The analysis of results uses the methods of statistical data analysis and graphic methods. The application frequency for individual privatization methods in provinces is presented as relative values (as compared to the number of state-owned enterprises covered by transformations in a given province) and absolute values (relative to the total number of state-owned enterprises in Poland covered by a given privatization method), which allowed formulating conclusions concerning regional differences in that frequency. Logical analysis based on the analysis of own results and classification of provinces according to their investment attractiveness was in turn used to define the relation between the investment attractiveness of provinces and regional diversity of the internal structure of the ownership transformation process. Theoretical issues related to the studied subject matter are presented by means of the descriptive method.

The timeframe of the study encompasses years 1990-2005; the spatial framework of the discussed process covers the entire area of Poland with the division into 16 provinces according to the current administrative division of the country.

Differences in ownership transformation process structure between regions according to the privatization method

From commencement of ownership transformation process until the end of 2005 the process covered 5715 state-owned enterprises, i.e. 67,6% of the total number of state-owned enterprises existing at the beginning of the period, of which (*Dynamika przekształceń...* 2005, p. 10):

- 1578 were commercialized,
- 2253 were subject to direct privatization according to the procedure provided in art. 37 of the Act on privatization of state-owned enterprises and art. 39 of the Act on commercialization and privatization,
- 1884 were liquidated according to the procedure provided in art. 19 of the Act on state-owned enterprises.

Adding to that 1654 (*Mały Rocznik Statystyczny Polski* 2004) liquidated state-owned farms included into the Resources of the State Treasury Agricultural Resource that are excluded from the subject of further analysis, in total 7369 state-owned enterprises, i.e. 87,2% of their total number existing at the beginning of the period covered by the analysis were subject to transformation.

The paper presents the analysis of application frequency in individual provinces of indirect and direct privatization excluding liquidation of state-owned enterprises for economic reasons. From the perspective of the goal of the paper it is justified as using liquidation as a method of privatization is not dependent on investment attractiveness of a given province but on the economic standing of the state-owned enterprises present in a given area.

Analyzing the application frequency of indirect privatization that covered ca. 22.7% of wholly owned companies of the State Treasury and which, despite its still unsatisfactory scale, plays a very important role in the process of Polish economy privatization, it can be seen clearly that it shows significant regional differences. That is confirmed by the distribution of wholly owned companies of the State Treasury covered by indirect privatization in individual provinces presented in table 1.

As indicated by analysis of the data presented in table 1, the largest numbers of wholly owned companies of the State Treasury transformed by means of indirect privatization were located in the provinces of: Mazowieckie – 13.4% of all such companies privatized through indirect privatization and Śląskie – 12.8%, while the lowest shares in the number of wholly owned companies of the State Treasury transformed by means of indirect privatization had companies from provinces: Warmińsko-Mazurskie – 2.2% and Podlaskie – 2.8%. Those differences are obviously linked to the specific nature of indirect privatization to which state-owned enterprises previously commercialized with medium or large employment, characterized by good financial standing are subject, which creates large potential for inflow of direct foreign investments and the diversified level of interest of investors in participation in the process of privatization in a given region. In relative terms indirect privatization was applied most often in the areas of provinces: Podlaskie – 31.3% of the total number of state-owned enterprises commercialization in the province, Wielkopolskie – 28.1% and Małopolskie – 27.7%. In relative terms that privatization method was applied least frequently in the provinces of: Śląskie – 16.7%, Podkarpackie – 17.2% and Łódzkie – 18.1%. The differences are significant as while in the province of Podlaskie over 31% of all commercialized state-owned enterprises in the region were transformed in that procedure, in the province of Śląskie that percentage was less than 17%, i.e. more than 14 percent points less.

Table 1

Wholly owned companies of the State Treasury privatized by means of the indirect method during the years 1990-2005 by province

Province	Commercialized state-owned enterprises (1)	Wholly owned companies of the State Treasury transformed through indirect privatization		
		Total (2)	% (Poland = 100%)	% (2/1)
Dolnośląskie	181	41	11.5	22.7
Kujawsko-Pomorskie	90	23	6.4	25.6
Lubelskie	60	11	3.1	18.3
Lubuskie	38	10	2.8	26.3
Łódzkie	116	21	5.9	18.1
Małopolskie	112	31	8.6	27.7
Mazowieckie	177	48	13.4	27.1
Opolskie	63	14	3.9	22.2
Podkarpackie	87	15	4.2	17.2
Podlaskie	32	10	2.8	31.3
Pomorskie	73	19	5.3	26.0
Śląskie	275	46	12.8	16.7
Świętokrzyskie	65	15	4.2	23.1
Warmińsko-Mazurskie	31	8	2.2	25.8
Wielkopolskie	121	34	9.5	28.1
Zachodniopomorskie	57	12	3.4	21.0
POLAND	1578	358	100	22.7

Source: own work based on the bulletin *Dynamika Przekształceń Własnościowych*, Ministry of State Treasury, Department of Analyses and Forecasts, Warszawa 2005, No. 61, pp. 32, 43.

Moving to the analysis of direct privatization attention should be brought to the fact that it characterizes by high effectiveness and plays an important role in the process of ownership transformation in Poland. Since the beginning of that process until the end of 2005 direct privatization was applied to 2253 state-owned enterprises, of which the privatization processes have been completed in 2157 enterprises representing 95.7% of the total number of approvals issued by the Ministry of Ownership Transformations/Ministry of State Treasury. The structure of enterprises covered during the studied period with direct privatization by province is presented in table 2.

Table 2

State-owned enterprises subjected to direct privatization During the years 1990-2005 by province

Province	State-owned enterprises subject to transformations (1)	Directly privatized state-owned enterprises		
		Total (2)	% (Poland = 100%)	% (2/1)
Dolnośląskie	533	216	9.6	40.5
Kujawsko-Pomorskie	337	140	6.2	41.5
Lubelskie	283	130	5.8	45.9
Lubuskie	180	75	3.3	41.7
Łódzkie	434	163	7.2	37.6
Małopolskie	381	158	7.0	41.5
Mazowieckie	686	288	12.8	42.0
Opolskie	190	71	3.2	37.4
Podkarpackie	279	114	5.1	40.9
Podlaskie	170	83	3.7	48.8
Pomorskie	295	131	5.8	44.0
Śląskie	739	201	8.9	27.2
Świętokrzyskie	179	55	2.4	30.7
Warmińsko-Mazurskie	262	106	4.7	40.5
Wielkopolskie	484	195	8.7	40.3
Zachodniopomorskie	283	127	5.6	44.9
POLAND	5715	2253	100	39.4

Source: own work based on the bulletin *Dynamika Przekształceń Własnościowych*, Ministry of State Treasury, Department of Analyses and Forecasts, Warszawa 2005, No. 61, pp. 84, 105.

As indicated by the data in table 2, the largest number of state-owned enterprises covered by direct privatization was situated in the provinces of: Mazowieckie – 18.6% of the total number of enterprises, Dolnośląskie – 9.6% and Śląskie – 8.9%. The lowest share in the total number of enterprises privatized by that method had the provinces of: Świętokrzyskie – 2.4%, Opolskie – 3.2% and Lubuskie – 3.3%. In relative terms direct privatization was applied most often in the area of provinces of: Podlaskie – 48.8% of the cases of state-owned enterprises transformations in the province and Lubelskie – 45.9% that is in the regions of eastern Poland. That type of privatization was least often applied in the provinces of: Śląskie – 27.2% and Świętokrzyskie – 30.7%.

Investment attractiveness of provinces and structure of ownership transformation processes

Investment attractiveness of provinces that could be understood in the categories of the tendency of investors to choose the region as the place for location of the investment (GAWLIKOWSKA-HUECKEL, UMIŃSKI 2000, p. 7), is a very important factor conditioning progress in the ownership transformation process in individual regions. It is particularly important as concerns the foreign investors whose interest in Polish economy in the circumstances of shortage of domestic capital plays an important role in the process of privatization of state-owned enterprises.

The spatial allocation of foreign capital in Poland is significantly diversified. Investments concentrate mainly within the capital city, in strong industrial centers (Śląsk, Wielkopolska, Tricity), along the major transport routes and along the western border of the country (HELLER, WARŻAŁA 2005, p. 788).

Studies on investment attractiveness of provinces of Poland carried out by the Gdańsk Institute for Market Economics considering seven groups of factors most important for investors that included: transport accessibility, labor resources and costs, sales market, economic and social infrastructure, level of general safety and activity of provinces in relations with investors, categorize provinces into five groups of attractiveness, which is presented in table 3.

The first group of very high (class A) investment attractiveness consists of three provinces: Śląskie, Mazowieckie and Małopolskie. The province of Śląskie has a very good situation in all aspects of investment attractiveness except the level of general safety and activity of the province in relations with investors. The only weaknesses of Mazowieckie province are the labor costs and level of safety. The high position of Małopolskie province is the result of good or very good situation in all analyzed aspects of attractiveness with the exception of general safety level.

The lowest level (class E) of investment attractiveness was recorded in case of provinces of: Świętokrzyskie, Lubelskie and Podlaskie. In all those three regions the serious problems include low activity in relations with investors, poor transport accessibility and low level of economic infrastructure development. The problems for provinces of Lubelskie and Podlaskie also include low resources of labor and poorly developed social infrastructure while for province of Świętokrzyskie a very low capacity of the sales market.

It should also be mentioned that according to the authors of the report the specificity and diversity of business activity causes that depending on its type, industry and even mode of operation of individual enterprises different

Table 3

Assessment of investment attractiveness of provinces

Province	Transport accessibility	Labor resources and costs	Sales market	Economic infrastructure	Social infrastructure	General safety level	Activity of the province in relations with investors	Investment attractiveness of the province*
Śląskie	A	A	A	A	A	E	C	A
Mazowieckie	B	D	A	B	B	E	A	A
Małopolskie	A	A	B	A	A	D	B	A
Dolnośląskie	B	B	B	A	A	D	A	B
Wielkopolskie	A	B	B	C	C	C	A	B
Łódzkie	C	A	C	D	C	C	C	B
Pomorskie	D	C	A	B	B	E	C	C
Zachodniopomorskie	C	C	C	D	B	D	B	C
Opolskie	B	D	C	B	D	B	C	C
Lubuskie	C	D	D	C	E	C	B	C
Podkarpackie	E	C	D	C	D	A	D	D
Kujawsko-Pomorskie	C	B	E	D	C	C	E	D
Warmińsko-Mazurskie	D	E	E	C	D	B	D	D
Świętokrzyskie	D	C	E	E	C	B	E	E
Lubelskie	E	E	C	E	E	A	E	E
Podlaskie	E	E	D	E	E	A	D	E

* The synthetic investment attractiveness of the province indicator built on the basis of analysis of a set of partial indicators including, according to the research assumptions made, the highest weight was allocated to the labor resources and costs. Activity of the province in the relations with investors was considered slightly less important but also bearing for development of investment attractiveness of a province. The further assessed factors were ranked as follows – transport accessibility, size of sales market and level of economic infrastructure development. The relatively lowest significance was allocated to two components of investment attractiveness – the level of social infrastructure development and the general safety level.

Source: *Atrakcyjność inwestycyjna województw i podregionów Polski 2005*. Editor. T. Kalinowski (author:s team. Anna Hildebrandt et al.), Gdańsk Institute for Market Economics, Gdańsk 2005, p. 77.

location factors are preferred. As a consequence, we cannot talk about absolute investment attractiveness of areas. It depends on the demand for specific aspects of location and that demand depends on the investment size and structure (*Atrakcyjność inwestycyjna...* 2005, p. 10).

Referring in this point to the earlier discussed diversified frequency of application of the presented privatization methods in individual provinces it can be noticed that provinces in which the largest numbers of wholly owned companies of the State Treasury were subject to indirect privatization (Mazowieckie, Śląskie, Dolnośląskie), are provinces belonging to the groups of regions with high or very high investment attractiveness. On the other hand, provinces where that method was applied least frequently (Warmińsko-Mazurskie, Podlaskie, Lubelskie, Lubuskie) are provinces that were classified to groups of low or the lowest investment attractiveness. The exception in that group is the province of Lubuskie, which in investment attractiveness was classified as medium attractive while it belongs to the group of provinces where indirect privatization was applied quite rarely which was probably a consequence of the fact that the province belongs to the group of the less industrialized provinces while indirect privatization was applied to large enterprises with good financial standing.

It is also worth noticing that the earlier mentioned provinces with low or very low investment attractiveness are the regions situated in the eastern part of Poland. Analysis of foreign investments indicates on the other hand that investors have very precisely defined expectations and generally prefer large urban areas or western and southwestern provinces. Backwardness of eastern provinces makes them unattractive as partners for the majority of external investors while peripheral location away from modern transport routes and dynamic economic centers amplify that status even further (KOZAK 2003, p. 9).

That clear dependence between the application frequency of indirect privatization and province investment attractiveness cannot be seen in case of analysis considering the relative frequency of its application. That method was applied relatively most frequently in both provinces of high attractiveness such as Wielkopolskie and those of very low attractiveness as Podlaskie and the opposite, among the provinces where indirect privatization was applied relatively the least frequently we have the province of Śląskie. That of course is justified and related to the overall number of enterprises that were subject to transformations in a given province. Based on the example of Śląskie province it can be seen that although that region is the most attractive for foreign investors, characterized by a large number of locations by international corporations, the fact that at the same time it is the largest urbanized area in Poland where saturation with state-owned enterprises at the beginning of the period of ownership transformations was very high and where more than 37%

of all privatized state-owned enterprises were subject to commercialization causes that in relative terms that province is not among the national leaders.

Analyzing the direct privatization application frequency in individual provinces against the background of their investment attractiveness it should be concluded that in absolute terms the largest numbers of state-owned enterprises were subject to direct privatization in the provinces of Mazowieckie – 18.% and Dolnośląskie – 9.6%, that is provinces that are characterized by high or very high investment attractiveness. On the other hand, that method was used the least frequently in the provinces of Świętokrzyskie – 2.4% and Opolskie – 3.2%, which in investment attractiveness are in the lowest and medium groups of attractiveness respectively. Analyzing in turn the relative frequency of direct privatization application in individual regions it can be noticed that although direct privatization occurred relatively the most often in the provinces of the lowest attractiveness (Podlaskie, Lubelskie) in the provinces where it was applied relatively the least frequently there was no clear link to attractiveness. They were both provinces of very high attractiveness (Śląskie) and very low attractiveness (Świętokrzyskie). That is probably the consequence of the fact that direct privatization is applied to small or medium enterprises, frequently with poor financial standing, requiring restructuring and capitalization and consequently that method was used most frequently in the regions of eastern Poland.

Conclusions

Analysis of application frequency of indirect and direct privatization in individual provinces against the background of their investment attractiveness allowed formulating the following conclusions:

1. The frequency of direct and indirect privatization application in provinces in absolute terms is conditioned to a significant extent by their investment attractiveness. As of commencement of ownership transformation processes until the end of 2005 the largest numbers of indirect privatization in absolute terms were recorded in the provinces of Mazowieckie and Śląskie, that is provinces belonging to the group of regions of very high investment attractiveness. The lowest numbers of such cases were recorded in the provinces of Warmińsko-Mazurskie and Podlaskie that in investment attractiveness were classified in the groups of low and lowest investment attractiveness. On the other hand, direct privatization in absolute terms was applied most frequently in the provinces of Mazowieckie and Dolnośląskie that is provinces of high or very high investment attractiveness. Provinces of Świętokrzyskie and Opolskie, which in investment attractiveness were positioned in

the lowest, and medium investment attractiveness groups had the lowest share of enterprises transformed according to that method.

2. There is no such clear dependence between analyzed values in case of relative frequency of application of individual privatization methods in the investigated regions. The studies showed that indirect privatization in relative terms was applied most frequently in the province with very low investment attractiveness – Podlaskie as well as in the province characterized by high attractiveness – Wielkopolskie. Direct privatization was in term applied relatively most frequently in the provinces of Podlaskie and Lubelskie that is the least attractive ones from the foreign investors point of view and the least frequently in the province of Śląskie characterized by the highest level of investment attractiveness and Świętokrzyskie that is among the least attractive provinces.

3. The studies confirmed that the frequency of indirect and direct privatization application in individual provinces was conditioned to a certain extent by their investment attractiveness but it also depends to a significant extent on the number of enterprises subjected to transformation in a given province, the structure and specific characteristics of the transformed entities and many other factors of social and economic nature. Both the progress status of the privatization process as well as its internal structure are the derivative of very many factors among which we could include investment attractiveness of provinces, however, as the analysis of the relative frequency of application of individual privatization methods in the studied regions and their investment attractiveness, it is not the most important factor.

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PLANNING OF AN URBAN IMAGE STRATEGY AND BARRIERS TO ITS IMPLEMENTATION

Agnieszka Stanowicka-Traczyk

Department of Macroeconomy
University of Warmia and Mazury in Olsztyn

Key words: urban marketing, town identity, town image.

A b s t r a c t

The aim of the article has been to characterize the planning of urban identity strategy as well as to underline some crucial barriers to its successful implementation. The author's own research shows that in most Polish towns and cities actions undertaken to shape a desirable urban image are consciously planned. The process of constructing and selling the image of a town is most often one of the major objectives for municipal authorities. However, plans dealing with the shaping of urban identity are typically short-term ones, and very few towns conduct surveys and studies on conditions underlying urban image strategies or the current perception of a town by particular target groups and their expectations as regards the town image. Insufficient knowledge of the market is one of the key factors which impede successful implementation of urban image strategies by towns and cities in Poland.

PLANOWANIE STRATEGII TOŻSAMOŚCI MIASTA ORAZ BARIERY JEJ REALIZACJI

Agnieszka Stanowicka-Traczyk

Zakład Makroekonomii
Uniwersytet Warmińsko-Mazurski w Olsztynie

Słowa kluczowe: marketing miejski, tożsamość miasta, wizerunek miasta.

A b s t r a k t

Celem artykułu było scharakteryzowanie procesu planowania strategii tożsamości miasta oraz wskazanie najistotniejszych barier w jej realizacji. Z przeprowadzonych badań wynika, że w większości miast polskich działania mające na celu kształtowanie ich pożądanego wizerunku są świadomie planowane. Ustalono, że jest to jeden z najważniejszych celów w zarządzaniu miastem. Jednak plany dotyczące kształtowania tożsamości miasta najczęściej mają charakter krótkookresowy, poza tym w większości miast nie prowadzi się badań na temat uwarunkowań kształtowania strategii

tożsamości, aktualnego wizerunku miasta w poszczególnych grupach docelowych oraz oczekiwań odbiorców odnośnie tożsamości miasta. Związana z tym nieznajomość rynku jest jedną z istotnych barier realizacji skutecznych strategii tożsamości miast polskich.

Introduction

European integration within the EU common market has created new conditions for development of all entities in the European economy, including towns. It is obvious that large cities and agglomerations in Europe compete with one another to achieve the highest functions in the existing hierarchy. This is also the case of Poland, especially among large, internationally important cities. In the past no competition between towns in Poland existed, and but its recent emergence has been a consequence of the system transformation compounded by processes of integration with the EU. Inter-city competition is most often understood as struggle to gain various advantages, such as obtaining access to funds, attracting external investors, capturing and preserving capital in own region, establishing seats of state agencies and institutions, hosting and organizing international events, etc. In a broader sense, inter-city competition can be said to comprise struggle for social and economic development that will guarantee high quality of living conditions (KLASIK 2001, p. 23). In the light of growing globalization, competition for resources (which are being depleted) is becoming less essential, while a competitive advantage of one town over another more frequently stems from its subjective image perceived by the general population. Thus, in gaining a competitive advantage it is becoming increasingly important to be able to affect the image of a city by creating a desired urban identity. However, activities which aim at shaping a town identity cannot be single or incidental efforts as those will produce little effect. They should be carefully planned and monitored during their execution in terms of the aims they strive to achieve. Towns should realize a strategy of urban identity, which will constitute a complex plan of building a desirable image of a town.

The issue of building urban identity is largely unrecognized as far as its methodology is concerned, although in many towns mayors, councils and city managers have noticed its practical importance. Nonetheless, town authorities do not carry out studies on determinants of urban identity nor do they know all instruments which could be used for shaping a proper image of a town. The people in charge of urban policy and development sometimes fail to understand which of the identified determinants should be clearly exposed in a current urban identity strategy so as to attain a better, more positive view of their town. Moreover, they perceive the problem of building town identity as a series of short-term activities rather than part of a long-term strategy. Many councils

do not plan at all. As a result, activities which aim at shaping town image are often a series of incidental, chaotic and half-baked ideas.

The present article focuses on strategies for developing town identity, and aims to describe characteristic features of the process of planning such a strategy. The research completed for the sake of this paper has also identified the most crucial obstacles to implementation of identity strategy in Polish towns.

Basic terms related to the concept of creating a town's identity

The concepts of image and identity, both in literature and in practice, are often mistakenly interpreted and sometimes even thought to be synonymous. Thus, in order to avoid wrong interpretation of the results of this study, I will start with definitions of both terms. Identity of a town is a sum of all elements which identify this town by making it distinguishable from other towns or cities. It is a set of features typical of this town, which make it different from other urban communities, and these features can be expressed by various activities undertaken in this town, which together create its personality and character (ŁUCZAK 2000, p. 48). Identity is a set of characteristics or attributes of a town, through which the town wants to be perceived by surrounding world and which are a background or a context for communication with others (WIKTOR 2001, p. 183). The features in question are the so-called identity attributes – which should be exposed and communicated to surrounding world so as to shape the town's identity that will be clear and unambiguous and that will easily distinguish a given town from its competitors. Perception of the town identity by others will eventually create a certain image of the town.

The image of a city or town can be defined as a total of ideas, attitudes and impressions, which an individual or a group of individuals express about a given town (ŁUCZAK 2001, p. 83). The image of a town is a set of ideas, attitudes, feelings and experiences of a single person or many people concerning a given town, which is full of nuances, relatively permanent and easily communicable. The ideas can be objective or subjective, thus including also false or very emotional views (ŻYMINKOWSKI 2003, p. 7). It is an aggregate of rational and emotional attributes related to a given town. It is a collection of communiques concerning this town, and shaping its personality and reputation in the eye of surrounding communities (WEBSTER 1991, p. 297). The image of a city is a multi-dimensional structure of impressions we hold about it (DILLER 1992, 434). In short, it is a sum of positive and negative ideas which we associate with a given town, including our concept of its future development.

Such impressions are created as a result of activities undertaken by both municipal authorities and other entities which function in that town, undertaken consciously or accidentally. The image of a town is its vision created in the social mind, thus it is everything that particular subjects think about this town, the value they attach and attitudes they demonstrate to this town.

This paper focuses on an urban identity strategy, also referred to as a complex strategy of shaping the image of a town (ŻYMIŃSKI 2003, p. 136). It should be added that a town image strategy is the first stage in the process of urban marketing – this term was imported from the USA to Germany in the 1950s (MARKOWSKI 2002, p. 13). It is a set of tools, planned in detail and supported by market research, which, by striving to reach the aim such as formation of a town positive image, make it possible to realize other objectives set forth in the town's development strategy. The identity strategy is based on establishing the aim, i.e. desired image of a town, adopting directions of activities and allocating resources in a way that is essential for attaining the aim. The urban identity strategy is a planned set of activities and enterprises which aim at actively forming the town identity, communicating the image to surrounding world and influencing perception of the image. This is achieved with an aim of carefully selected tools.

It can therefore be hypothesized that town identity, through its strategy, shapes town image. The strategy of building a town's identity enables all entities involved in this process to shape purposefully the town's image, which is a product of decoding communiques (identity strategy tools) included in perceptions received via stimuli (URBANIAK 2003, p. 36).

Methods

The research was carried out among 206 town councils located all over Poland, in 2003-2005¹. Towns for the survey were chosen by the layer random selection method. The whole group of towns was divided into layers according to two criteria: size (3 size groups²) and location (16 groups according to Poland's administrative division).

The basic research method for data collection was a categorized mail survey, which was sent to selected town councils, having first determined the most competent addressee of the survey³. In addition to this, telephone

¹ The survey research was conducted in 2003. In 2004, a supplementary questionnaire was posted to towns which did not respond to the first survey. In 2005, the information was updated by the Internet.

² Small towns – population of 10,000 to 19,999; medium-sized towns – population of 20,000 to 99,000; large towns – population over 100,000.

³ In larger towns those were persons responsible for marketing, promotion, town image creation

interviews were completed in order to gain deeper knowledge on certain subjects. The analysis of the survey results involved determination of stochastic independence of immeasurable features (quality traits) and a study on relationships between features of which at least one was quantitative in character. In order to find out whether the traits analyzed (particular elements) were correlated, Pearson's chi-square test of independence⁴ was performed. Theoretical considerations related to the research were presented in a descriptive form.

Planning of how to build town identity

Each action, irrespective of its character or purpose, requires proper direction and structuring. Otherwise it will be haphazard and chaotic, thus making it less likely to be successful (BARUK 2002, p. 131). Strategic planning dealing with the shaping of town identity is a formalized process of decision making, during which a desirable future image of a town as well as means for attaining such an image are being elaborated (BUDZYŃSKI 2002, p. 89). While characterizing the process of planning of a town identity strategy in Polish towns, the first question asked to council officials was whether in their towns activities which aimed at shaping a town's desirable identity were undertaken in a premeditated and planned manner (which frequently meant a formalized fashion). The results, including the size of towns, are presented in table 1.

Table 1
Conscious planning of activities to create desirable identity of a town, according to the size of towns

Response	Population size			Total
	small towns	medium towns	large towns	
Yes	90.4	91.6	100	92.2
No	9.6	8.4	0	7.8
Evaluation of correlation	$\chi^2=4.96; p=0.083$			

Source: Own study

and development strategy. In smaller towns, where no person was employed to deal with such matter, the questionnaire was addressed to mayors or persons they delegated.

⁴ The level of significance of difference was established at $\alpha=0.05$, which assumed certain degree of trust to the results obtained and is a typical significance level in research on social and economic matters. The zero hypothesis of independence between two traits (which implies a stochastic relationship between predefined elements) was discarded when $p=0.05$, (where p – probability of exceeding the calculated statistics of 2).

Although there is no statistically significant relationship between the traits analysed, the answer to the question posed seems rather clear. For the vast majority of the respondent towns, activities aimed at shaping desirable identity are extremely important. Over 90% of the surveyed group of towns planned such activities in view of an aim to achieve. Thus, it can be concluded that these towns engage in a planned execution of a strategy of building town identity (although in most cases, the realization of strategies is not formalized). In short, activities undertaken in order to shape urban identity are not incidental or haphazard. In contrast, they all serve the superior aim, such as the creation of the identity of a town. In large towns, up to 100% of the respondents declare that activities to shape urban identity are planned, which means that the awareness of the analysed issue is the largest in big cities. In medium-sized and small towns, 9% of municipal authorities on average do not pursue a planned strategy of building town identity – those communities do not have plans for shaping proper urban identity.

A starting point in building urban identity should be identification of its determinants and a study on the effects of an up-to-date strategy for creating the identity of a given town. At this stage, information is collected about factors which condition a town identity strategy, current image of a town among particular target groups and expectations regarding the identity of this town. The survey contained a question whether in the respondent towns studies were carried out to determine expectations of residents concerning desirable identity of their town. The results are given in table 2.

Table 2
Conducting surveys on inhabitants' expectations, according to the size of towns (% of towns)

Response	Population			Total
	small towns	medium towns	large towns	
Yes, regularly	6	5.3	21.4	7.8
Yes, but rather irregularly	14.5	20	39.3	20.4
Sporadically	30.1	48.4	32.1	38.8
No	49.4	26.3	7.1	33
Evaluation of correlation	$\chi^2=30.07; p=0.000$			

Source: Own study

Statistically significant correlation ($\chi^2=30.07; p=0.000$) exists between the analysed factors. It turns out that most of the towns surveyed either sporadically carry out studies on their inhabitants' expectations (38.8%) or do not undertake such studies at all (33%). Only 8% of the respondents said that in

their towns such studies were conducted regularly. Again, large towns dominated in the latter group – over 20% of cities run regular opinion polls dealing with urban identity, which then form a basis for creating the strategy of building urban identity. Most of medium-sized and small towns either do not carry out such surveys or run them sporadically. Slightly more than 5% of small and medium-sized towns survey their residents regularly. In conclusion, strategies of building urban identity in small and medium-sized towns involve activities based on intuition and ideas of persons responsible for those strategies.

A key stage in planning a strategy of urban identity development comprises determination of its aim. The main objective in that case is the shaping of a desirable image of a town. This aim belongs to the so-called psychographic objectives (ŻYMINKOWSKI 2003, p. 47). It is influenced by a very large number of factors, which makes it a multi-dimensional entity. As a result, some authors suggest that while creating an urban identity strategy one should determine the most important characteristics of the target image of a town (its attributes, i.e. identity distinguishing features), which will serve as a basis for shaping the desirable image of the town (ALTKRON 2000, p. 10). Selected, most essential characteristics of a town facilitate formation of a strategy of urban identity, which will in turn enable us to attain the set aim.

The survey conducted for the purpose of this article contained a question on the importance of a desirable image of a town for urban management. The replies are illustrated in figure 1.

It turns out that stimulation of economic activity is a key aim in urban management, as this response was indicated by 93.1% of the respondents. One possible way of attaining this goal is by increasing investment attractiveness of a town (92.6%). Investment growth will lead to greater production volume, higher employment rate, higher available incomes of the town's population and, as a result, increased consumer demand, which in turn stimulates the growth and development of the town and its surroundings and, from the viewpoint of the residents, raises their wealth and improves quality of living standards in the town (development of urban infrastructure, better access to a variety of services, appearance of new urban sub-products, etc.).

The second most important objective implied by municipal officials was the creation of a town's desirable image by pursuing a strategy for building town identity. Nearly 90 per cent (87.7%) of the surveyed towns suggested that this was one of the major objectives in urban management, as it was perceived as another possible means of attaining the main aim such as stimulation of the town's economic activity.

The respondents chose growing satisfaction of inhabitants derived from living in their town as the third most important aim in urban management

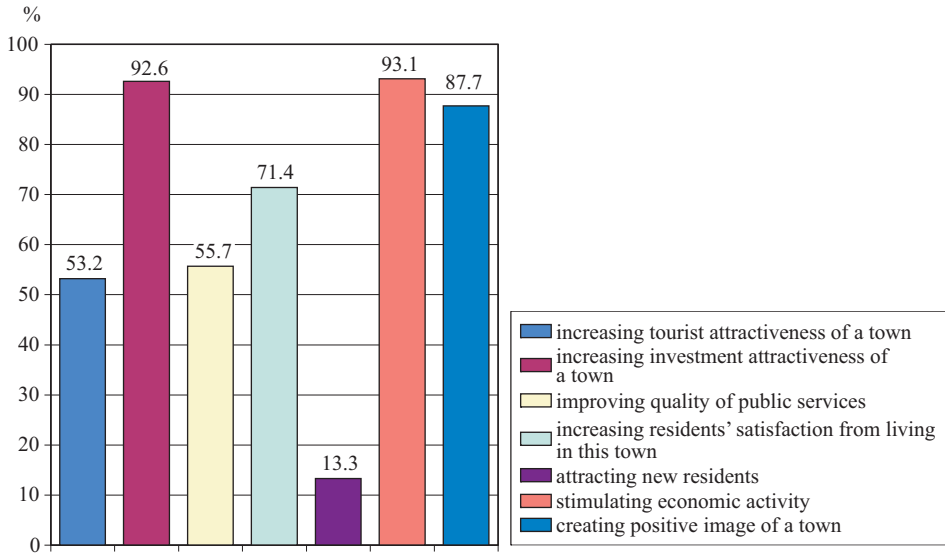


Fig. 1. Position of a desirable image in the system of primary aims of towns

Source: Own study

(70% of the surveyed population chose this aim). In addition, every other town questioned also suggested that better quality of public services and improved tourist attractiveness were important objectives in running a town. In contrast, nearly 90% of the respondents did not feel that attracting new residents was an important objective related to the creation of a desired image of a town. Recapitulating, although formation of a proper image of a town is one of the main objectives from the point of view of institutions and individuals involved in urban management in Poland, it is not considered to be a leading objective or a top priority.

While considering the formation of town image as an objective, the following three types of identity strategies pursued by towns in Poland were distinguished:

- maintaining the current image (image maintenance strategy),
- partial modification of the obtained image (improvement strategy),
- radical change of the present image (strategy of change).

The results of our studies within this area are shown in figure 2.

An identity maintenance strategy is declared by 28% of the surveyed entities. Such a strategy is preferred in towns which are satisfied of their identity and its perception outside – the current image is in accord with the desired one. In that case, the identity strategy relies on maintaining the town attributes in an unchanged shape and on the same level of distinction from

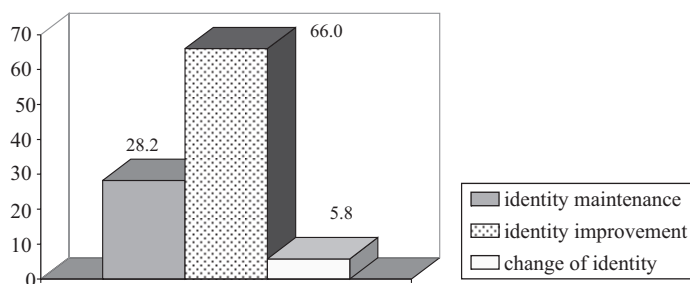


Fig. 2. Types of identity strategies including a desired image

Source: Own study

other towns. An identity maintenance strategy does not mean that “nothing is being done” regarding the town identity and image. The positive image of a town is not given once and for all – conditions around each town change and they all need to adjust to those changes. One of the advantages of an image maintenance strategy is that a town which follows it knows well which of its attributes are certain and should be exposed or strengthened so as to achieve positive perception among surrounding communities. However, in order to implement an identity maintenance strategy it is necessary to conduct research on the town image among particular groups of people who take advantage of the town’s offer. Lack of such research may lead to erroneous interpretation of reality and unsuccessful realization of a town identity strategy that has not been modified on time.

It is also essential to determine the time perspective when a desired urban image should be achieved. Obviously, town image cannot be created in a short time as it involves a long-term process of shaping the awareness of customers. Thus, a desired image of a town is considered to be a strategic, long-term aim. For the purpose of reaching such a strategic aim, a bundle of operational aims must be formulated, which will support the pursuit of the image-directed target (e.g. aims within particular marketing activities are set up).

The time perspective of activities planned to build town image has also been examined. The results, according to the three size groups, are presented in table 3.

There is a statistically confirmed relationship between a time period for which urban image strategy is planned and size of towns. The highest percentage of towns plan urban image shaping activities for a short period of time, i.e. 2-3 years. Such length of time was indicated by over 40% of the respondents. Nearly 30% of the respondents chose a 5-7-year-long planning time. One in four towns suggested that they planned their image shaping strategies for longer periods of time.

Table 3
Time period of identity strategy planning according to size of towns (% of towns)

Time period	Population			Total
	small towns	medium towns	large towns	
	<i>n</i> = 83	<i>n</i> = 95	<i>n</i> = 28	<i>n</i> = 206
Short time period (2-3 years)	55.4	31.6	28.6	40.8
Medium time period (5-7 years)	21.7	31.6	35.7	28.2
Long time period (over 8 years)	16.9	28.4	32.1	24.3
No planning	6	8.4	3.6	6.8
Evaluation of correlation	$\chi^2 = 13.69; p = 0.033$			

Source: Own study

As regards the size of towns, it was observed that small towns tended to realise short-term urban image strategies – one in two small towns chose a time period of 2-3 years. These towns implement operational plans, which implies activities and tools that will be used in the nearest year. In medium-sized and large towns long-term strategies dominated – one out of three towns claimed that their image building strategies covered over 8 years. In conclusion, larger towns have strategic plans for shaping a desired urban image.

Prior to delineating specific actions and tools used in an urban identity strategy, one should precisely define who those actions and tool are directed towards, i.e. identify urban offer customers (selection of a target market), a step which is preceded by market segmentation. The next stage involves determination of tools for shaping the strategy (identity-mix). The following steps in building an identity shaping strategy comprise identification of persons and institutions responsible for execution of particular tasks and then preparation of a timetable and budget. The final stage is the evaluation of the effectiveness of the strategy. Monitoring (and if necessary measurement of performed tasks) should follow completion of each essential stage and task. Depending on the results of such monitoring activities, the current strategy can be modified.

Barriers to the implementation of urban identity strategy

The present study has shown that although towns plan their identity building strategies, they not always pursue them. On the one hand, town authorities are aware that the building of a desired image is an important

objective. On the other hand, they come across certain obstacles which make it impossible to undertake planned activities. The most important obstacles are specified in table 4.

Table 4

Barriers to impenetation of urban identity strategy (%)

Barriers	Population			In total
	small towns	medium towns	large towns	
Number of surveyed towns	83	93	28	204
Lack of knowledge of marketing principles	9.6	9.7	7.1	9.3
Lack of marketing-orientated management structure	32.5	22.6	17.9	26.0
Underestimating need to conduct activities to build urban identity	28.9	31.2	35.7	30.9
Activities dispersed among various departments and individuals	39.8	44.1	57.1	44.1
Activities incidental in character – lack of systematic and continuous action	43.4	26.9	39.3	35.3
Cliche activities, limited number of original marketing forms, means and techniques	19.3	11.8	7.1	14.2
Lack of full recognition and complex information about town resources, strengths, opportunities and threats in the town's surroundings	8.4	7.5	17.9	9.3
Small budget	89.2	84.9	78.6	85.8
Lack of support on behalf of local community	27.7	32.3	14.3	27.9

Results do not add up to 100% as several responses could be chosen

Source: own study

Shortage of funds which could be allocated to implementing an image strategy is the largest barrier. Over 85% respondents pointed to narrow budget as a significant barrier, which made it impossible to realise a chosen strategy for building the town image. In over 80% of the surveyed towns, the budget for creating urban identity is established according to “available means” and those means turned out to be rather limited. As a result only some of the activities that would be useful for shaping a desired identity of a town are performed. This more often happens in small towns, of which 90% suggested that small budget was a limiting factor in implementation of an identity strategy (in large cities the percentage of respondents choosing this answer was 78.6%).

Another important barrier to an identity strategy is the fact that tasks and activities it involves are scattered among many departments and individuals. Although 80% of the towns declared that their councils comprised a separate unit responsible for execution of an identity strategy, in reality it is impossible to pursue all the tasks within one organisational unit.

It seems advisable, for the sake of proper execution of an urban identity strategy, that the activities involved be dispersed – this way, sub-strategies within the overall identity strategy are created. However, a resulting problem is lack of uniform and well coordinated execution of the planned tasks⁵. This problem concerns larger towns (nearly 60%) rather than small ones (less than 40%).

Yes another obstacle suggested by many respondents is that actions undertaken within a the town identity strategy are unsystematic and lack continuity. Although 90% of the towns surveyed suggested that they pursued actions shaping urban identity, in reality many plans were abandoned and the actual actions were accidental in character. One possible reason is that actions aimed at shaping town identity are often underestimated – this barrier was pointed to by over 30% of the respondents. Nearly 30% of those who answered our questionnaire said that a town identity strategy could not be fully implemented due to lack of complete and stable support on behalf of local communities for activities undertaken by city councils and authorities. Besides, the management structure of a typical town lacks market-oriented organisation – even though city councils have been reoriented towards market economy, which meant they opened to needs and expectations of local communities, the fact that they are still unable to respond fully to market demands causes dissatisfaction among local residents, and this in turn means that local residents do not support activities pursued by mayors and councillors. This problem appears particularly strongly in small towns, where over 30% of the respondents pointed to lack of market organisation in town management (in large towns the analogous percentage was 17.9%). Nearly 30% pointed to lack of full and stable support of local communities for activities undertaken by town authorities as another barrier (in large towns the analogous percentage was only 14%). Nearly 20% of small towns suggested that identity building activities were cliché and the marketing forms, techniques and means were limited. Only 7% of large towns pointed to this factor as an obstacle.

Other barriers in the pursuit of urban identity strategies were insufficient knowledge of marketing (9.3%) and lack of complete recognition of and complex information on a town's strengths and weaknesses, opportunities and threats on the surrounding market (9.3%). The latter problem appears mainly because marketing research is undervalued in urban management – this is mainly the case of large towns (18% of responses).

⁵ The conclusion was based on several interviews carried out at city councils after the written survey.

Conclusions

1. Creation of urban identity in Polish towns is not formalised although the actions undertaken for this purpose are not accidental, chaotic or ill-considered. They are all subordinated to one aim, such as a desired town image (which is perceived as one of the major objectives in urban management in Polish towns). It is therefore possible to speak about rational shaping of identity strategies in towns and cities in Poland;

2. In most Polish towns plans concerning formation of desired identity are short-term in character. Town image cannot be created in one year – this means that an urban identity strategy should be designed in a long time perspective. Then it is possible to plan activities that will be uniform and will correspond directly to a common goal.

3. Another essential element in the process of shaping an identity strategy is regular market monitoring. Strategies based on intuition and ideas held by persons who create a town identity strategy will not necessarily lead to attaining a set aim. At present, studies on residents' expectations regarding a desired identity of their town are carried out irregularly or else are not undertaken at all. As a consequence, the market surrounding a given town is largely unrecognized, which appears to be one of the major barriers to implementation of successful identity strategies.

4. In order to plan successfully an urban identity strategy, it is necessary to search for new sources of funds, as the financial means available to most of municipal authorities in Poland seem insufficient.

5. Another significant obstacle in shaping town identity in Poland is the fact that activities involved in identity strategies are dispersed among various organisational entities or individuals. As a result they are unsystematic and lack continuity. This happens even though most towns plan activities aimed at shaping urban identity, but the actual actions undertaken are sporadic. One possible reason is that local communities do not fully support activities initiated by municipal authorities. Another cause lies in the fact that urban management lacks marketing-orientated structure.

6. Urban identity strategies planned by towns often remain incomplete. On the one hand, persons in charge are aware of the importance of town image. On the other hand, the barriers mentioned above hinder activities undertaken to create a town's identity and image. Therefore, most towns declare that they pursue a current town image improvement (partial modification) strategy. The activities they undertake are expected to gradually change the current image of a town – this aim was indicated by most Polish towns when asked about objectives of their identity strategies.

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PROCESS OF SYSTEMIC CHANGES IN THE POLISH PENSION FUNDS MARKET

Adam Rudzewicz

Chair of Market Analysis and Marketing
University of Warmia and Mazury in Olsztyn

Key words: Polish pension funds, legal system, innovations.

Abstract

The paper aimed at assessment of the implemented and proposed changes in the legal environment governing operation of the pension funds in Poland. That included the legislative process in which the legislator approved the solutions aiming at improvement of competitiveness, decrease of costs of the existing system and increase of profitability in the pension funds market. The presented changes (innovations) clearly privileged the position of members in open pension funds. They decreased the fund management fee depending on the volume of assets. The bonus account was established from which the best PTE's can obtain additional profits. The contribution fee was decreased and unified. The negative direct influence of the largest pension funds on the weighted average rate of return was decreased. Additionally, new concepts aiming at streamlining the pension system are developed. They include the e.g. expanding the funds investment opportunities (e.g. in real property) and decreasing the limitations concerning foreign investments.

PROCES ZMIAN SYSTEMOWYCH NA POLSKIM RYNKU FUNDUSZY EMERYTALNYCH

Adam Rudzewicz

Katedra Analizy Rynku i Marketingu
Uniwersytet Warmińsko-Mazurski w Olsztynie

Słowo kluczowe: polskie fundusze emerytalne, system prawny, innowacje.

Abstract

Celem artykułu była ocena przeprowadzonych i proponowanych zmian, jakie już zaszły (bądź wkrótce zajdą) w otoczeniu prawnym regulującym funkcjonowanie funduszy emerytalnych w Polsce. Był to proces legislacyjny, w którym ustawodawca przyjął rozwiązania zmierzające do poprawy konkurencyjności, obniżki kosztów istniejącego systemu oraz zwiększenia zyskowności na rynku

funduszy emerytalnych. Zaprezentowane zmiany (innowacje) wyraźnie uprzywilejowały pozycję członków otwartych funduszy emerytalnych. Spowodowano obniżenie opłaty za zarządzanie funduszem w zależności od wielkości zarządzanych aktywów. Wprowadzono rachunek premiowy, z którego najlepsze PTE mogą osiągać dodatkowe dochody. Obniżono i ujednolicono opłatę od składki członków funduszy emerytalnych. Zmniejszono negatywne zjawisko bezpośredniego wpływu największych funduszy na średnią ważoną stopę zwrotu. Dodatkowo powstały kolejne koncepcje mające na celu usprawnienie systemu emerytalnego. Dotyczą one między innymi poszerzenia możliwości inwestycyjnych funduszy (np. w nieruchomości) oraz zmniejszenia ograniczeń w inwestycjach zagranicznych.

Introduction

In 1999 the pensions system reform was introduced in Poland. Next to the existing social insurance institution (ZUS) general pension companies (PTE) and open pension funds (OFE) were established and included in the system. The legislator made a number of amendments in the new pension system operating for several years. It is important that the currently operating system is still dynamic, which means that it is not yet complete and finally closed. So far it is missing one more body that is to take over the funds accrued from the OFE and disburse them in the form of benefits to individual pensioners. The only thing that is known about functioning of those institutions is their mane – pension insurance agency that should start operating in 2009 disbursing the first pensions.

Goal and methodology

This paper characterizes the innovations that occurred in the Polish pension system after introduction of the pension system reform in 1999. It also shows the areas (directions) for potential changes that are currently the subject of experts' discussions. It was attempted to determine the importance of such changes and the reasonability of such changes describing the consequences of introducing them and indicating potential beneficiaries. For that purpose the published data and materials by experts dealing with the financial market, publications of the Insurance Supervision Commission and Pension Funds as well as legal regulations controlling the market of pension funds were used. The analysis was carried out on the basis of secondary sources.

Obtaining information concerning benefits of the accepted legal solutions was the key aspect of the conducted problem research (PYTKOWSKI 1981) in the area of accepted and proposed changes in the pension system.

The operational characteristics of open pension funds

Open pension funds (OFE) are entities forming the second pillar of the new pension system in Poland. According to the law the task of those funds is to accumulate and multiply funds accrued on individual accounts of OFE members intended for pension (*Podstawowe informacje...* 2001).

The pension fund allows grouping of scattered funds from individual payments of the insured into a large capital fund that is invested in financial markets. That offers much more extensive investing options than the traditional banking account. The savings are entrusted to specialists who in turn place them also in those financial market segments to which a small investor has no access. That assures higher income, lower commissions of brokers and decreases the investment risk thanks to the possibility of a significant diversification of the placements.

The minimum rate of return of fund assets is guaranteed. Until recently it was equal to the half of the weighted average rate of return of all open funds during the period of 24 months or a rate lower from that rate by 4 percent points depending on which of those values is lower. If the rate of return of any fund is lower than the guaranteed one, the deficit is covered first from the funds of the reserve account established especially for that purpose to which the funds of the general pension company are transferred and second from its own funds. The next source for coverage of the possible shortage is the Guaranty Fund to which all operating PTEs contribute. The State Treasury is the final guarantor of solvency of the open pension funds¹.

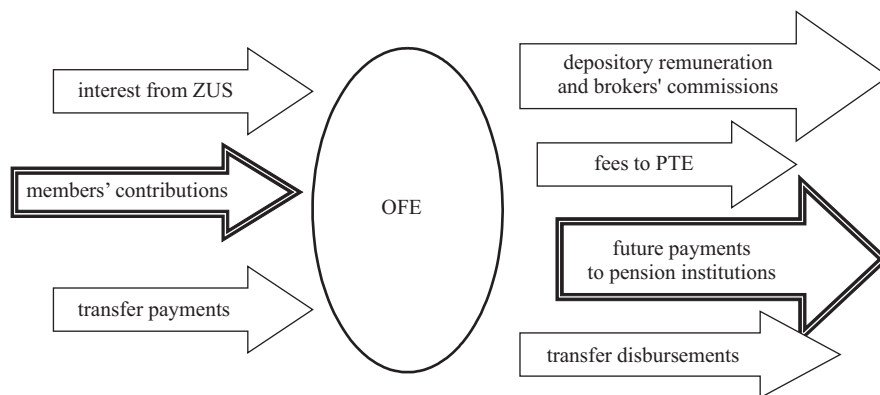


Fig. 1. Diagram of Open Pension Funds revenues and costs

Source: Office of Supervision over the Pension Funds 2001.

¹ Act of 28.08.1997 on organization and operation of pension funds (DzU no 139, item 934 as amended).

The funds available to OFE are used to pay for services of the depository and the costs of operations carried out in the financial market and they can be used for payment of fees due to the company for management of the fund. The fees are deducted only in the form of deducting a specific percentage – from the contributions paid (commission) or directly from the assets (which includes the costs of fund management – according to the previous legal regulation not exceeding 0,05% of net assets per month). OFE also receives the funds in the form of transfer disbursement that accompanies a change of the open fund by the insured person. The company receives the transfer fees in case of early (up to two years) change of participation in the OFE. That fee amounted (before amendments) the maximum amount of PLN 200 and was decreased by PLN 25 for each quarter of membership in a given fund.

General pension companies (PTE) were established for the purpose of creating open pension funds and manage them at a fee. The company is a body of the fund and it can manage only one OFE (the exception is the case of a merger or acquisition of companies).

The basic tasks of each company include:

- increasing the value of the accrued OFE assets,
- winning members for the fund,
- managing the accounting of OFE and PTE,
- fulfillment of the legal information duties,
- cooperation with transfer agent and depository as well as protection of professional confidential information.

The company manages the fund at a fee. The commissions deducted from contributions paid to OFE before conversion to participation units and

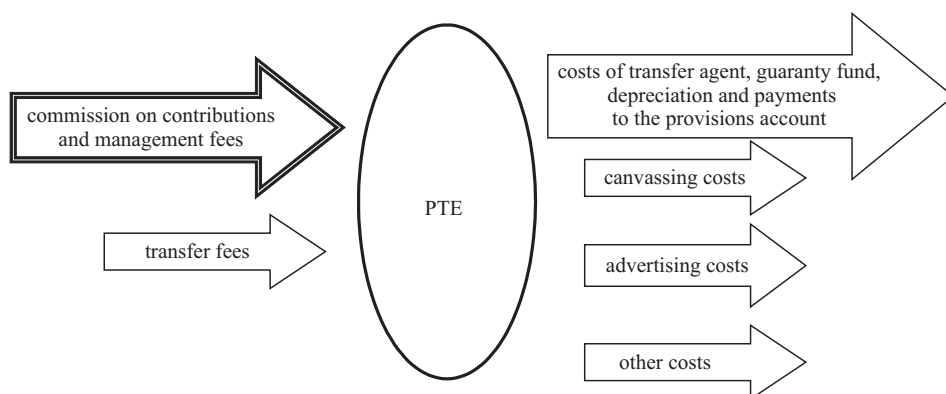


Fig. 2. Outline of revenues and costs in General Pension Companies

Source: Office of Supervision over the Pension Funds 2001.

reimbursement of fund management costs deducted from fund assets represent the largest items of company incomes. The incomes also include the transfer fees for leaving the pension fund by its members before expiration of two years of membership. Figure 2 presents the outline of revenues and costs of General Pension Companies.

Changes made in the pension funds sector

In 2003, amendments were made to the act on organization and operation of pension funds (becoming effective on April 1, 2004) that result, first of all, in financial consequences decreasing the revenues generated by the general pension companies (KOŁOSOWSKA 2004), which, in turn results in lower costs for members of pension funds and increases the effectiveness of investment of OFE members capital (at least according to the assumptions). The most important changes include:

- 1) modification of management fee for fund management,
- 2) establishment of the bonus account in the pension fund,
- 3) application of standard fee on contribution by fund member,
- 4) decrease of penal fee paid by the participant changing the fund,
- 5) change of the method for calculating the weighted average rate of return,
- 6) change in principles of the draw of new members (those, who did not choose the fund themselves).

The management fee for fund management was modified. It was decreased depending on the volume of assets managed (table 1). The percent rate of the fee will be decreasing with the increase of OFE net assets managed (from 0,045% to 0,015% per month). The fund pays direct from its assets the

Table 1

The management fee for fund management up to the net assets value

Net assets value (PLN M)		Monthly management fee for fund management up to the net assets value shall amount:
over	up to	
	8 000	0.045% of net assets value per month
8 000	20 000	PLN 3.6 M + 0.04% of the amount in excess of PLN 8 000 M of net assets value per month
20 000	35 000	PLN 8.4 M + 0.032% of the amount in excess of PLN 20 000 M of net assets value per month
35 000	65 000	PLN 13.2 M + 0.023 % of the amount in excess of PLN 35 000 M of net assets value per month
65 000		PLN 20.1 M + 0.015% of the amount in excess of PLN 65 000 M of net assets value per month

management fee of the company for fund management according to the following scale².

The bonus account was established to which the pension fund will transfer funds to the cup of 0.005% of the value of assets managed per month. The PTE obtaining the best result will receive the full amount of such funds, the other proportionally less, and the worst one will receive nothing. The percentage bonus ratio is calculated as the quotient of the difference between the rates of return obtained by a given fund and the fund with the lowest rate of return and the difference between the rate of return obtained by the fund with the highest and the lowest rate of return. The calculated ratio is then multiplied by the total amount of funds accrued on the bonus account. The company transfers the amount received to its account and the rest is immediately transferred to the open fund. That solution is to offer a premium to the best PTEs and force them towards more competition for good financial results and better effectiveness in multiplying the future pension benefits.

The single fee charged on the contributions was applied. During the initial years it will amount not more than 7% to decrease gradually towards the ultimate target of 3.5% in 2014 (Tab. 2). Limitation of commission is a significant change influencing the level of incomes generated by the PTEs. Before the change that fee was constant and set even as high as 9% in some PTEs. It should be pointed out that the fee is to be the same for all companies. The uniform system of fees will make fees independent from the membership duration (which occurred before amendments). As of April 1, 2004, the fund collects the fee through deduction from every contribution paid by the member of the amount corresponding to³:

Table 2

Uniform fee on contributions to OFEs

Fee	Period
7%	of the paid contribution amount until December 31, 2010
6.125%	of the paid contribution amount in 2011
5.25%	of the paid contribution amount in 2012
4.375	of the paid contribution amount in 2013
3.5%	of the paid contribution amount as of January 1, 2014

² Ustawa z dnia 27 sierpnia 2003 r. o zmianie ustawy o organizacji i funkcjonowaniu funduszy emerytalnych oraz niektórych innych ustaw (DzU nr 170, poz. 1651).

³ Act of August 27, 2003 on amendment to the Act on organization and operation of pension funds and some other acts (DzU no 170, item 1651).

Introduction, as of 2004, of a uniform fee on contributions to all OFEs should limit the decisions of members concerning migration between funds.

The penalty fee paid by the member migrating between funds and, which is equally important, its form, were changed. The penalty fee in case of changing the fund earlier than 24 months after joining is to be paid by the client from own funds and not, as it used to be earlier, from the funds accumulated on OFE member's account. That fee cannot be higher than 20% of the minimum remuneration. It was fixed at two levels: PLN 160 and PLN 80 depending on the duration of membership in the fund. If the period from the last day of the month in which membership in the fund was obtained until the date of transfer disbursement was less than 12 months, the fee shall amount PLN 160, if that period is more than 12 months but less than 24 months the fee shall amount PLN 80. Also the principles for calculating the membership duration changed as it will be calculated as of the last day of the month during which the membership contract with the fund was signed or during which membership in the fund was obtained as a result of a draw (earlier the membership was counted as of the moment of receipt of the first contribution to the member's account).

The pressure on obtaining the best short-term results possible was somehow limited by the design assuming that in calculating the weighted average rate of return the results of a single OFE cannot be given the weight higher than 15%. That decreased the negative phenomenon of the direct influence of the largest entities (the 3 largest OFE have 70% of assets) on the measure according to which all funds were assessed (GRADZIK 2004). To compensate for that influence in case when the average share of a given fund in the market is at least 15%, for the purpose of calculating the weighted average rate of return of all open funds the value equivalent to 15% is assumed for that fund and the indicators of the average share of the other funds in the market are proportionally increased so that the total of all of them is equal to 100%. Additionally, other adjustments concerning the weighted average rates of return were introduced. The length of base period for determination of the rates of return for individual funds and the average rate was extended from 24 to 36 months. The frequency of the rate of return testing was changed from quarterly to semiannual. That allows greater investment policy flexibility and decreases the risk of not achieving the minimum rate of return.

The principles applying to the draws of new members who failed to make decisions on choice of the pension fund within the specified deadline were also changed. The earlier draws made allocation of members among funds proportionally to the number of already registered members of funds, which generally supported concentration. After modification of the rules the

allocation of new members (in equal numbers) is given to the funds that achieved higher than average rate of return excluding the funds with market shares exceeding 10%. Those solutions by their nature prevent concentration (OTTO 2004).

Concepts for further development of pension funds sector

Among experts discussions continue on what else could be changes (improved) to streamline the operation of open pension funds market. The major directions of those considerations cover:

- 1) expanding the investment possibilities of the funds,
- 2) increasing the limit for foreign investments,
- 3) choice of the concept of operation of pension insurance institutions.

The first change proposed concerns allowing the funds investments other than those in the financial instruments, e.g. investments in real property. Involvement of pension funds in the real property market should have a positive effect on liquidity and transparency of that market as well as expanding the options for financing that market. The growth rates for investments in real property are less dependent on the rates of return on the capital market, which means that including real property in portfolios of funds could decrease the risk of that portfolio. The rates of return for investments in real property in long term exceed those obtained on financial instruments and, as a consequence, including real property among investment options for funds can mean their increased effectiveness (JAJUGA 2004). However, it is doubtful if that will happen. Polish solutions assume, first of all, the system security and daily appraisal of the pension fund unit. For that reason direct investments in real property or venture capital cause a problem considering their daily appraisal. Investing in that type of instruments, however, is not entirely forbidden. Such investments can be done indirectly through closed investment funds the investment certificates of which could be stock exchange listed (EGGINK 2004).

The next issue is increasing the current 5% limit for foreign investments. The current limit hinders geographic diversification significantly. The more so that the EU Directive 2003/41/EC recommends that pension funds should place 30% of their assets outside the country in which they operate. That aims at minimizing the country risk. Simple sectoral diversification does not protect the managed portfolio against currency crisis risk or political risk. Such risk, although low, is still real. The opponents against that innovation present the argument that even the current limit of 5% is not fully used by OFEs. Probably the low interest of funds in foreign

investments is a consequence of the fact that the limit is too low to justify additional analytical and organizational effort of the management. Even if the rate of return on such investments is significantly higher than on the domestic investments, its influence on the rate of return of the entire portfolio would still be minor. It should also be remembered that foreign investments are relatively more expensive than the domestic ones. The additional argument for increasing the limit for foreign investments is that the supply of liquid financial instruments in the Polish market is (or rather will be) too small to respond effectively to the demand represented by open funds. The projections of the Office of the Commission of Supervision of Insurances and Pension Funds forecast that by 2010 the value of OFE assets will amount ca. PLN 170 billion, i.e. roughly 3 times more than in 2004 when the OFEs managed the funds of PLN 57.4 billion. That means that the demand from the OFEs will increase by around 300% while the total supply of financial instruments will increase by around 90% only to the level of PLN 590 billion (*Perspektywy rozwoju*. 2003). On the other hand those in favor of the low limit for foreign investments say that it should not be allowed for future Polish pensioners to finance foreign economies instead of the Polish one. In the interest of members of the funds the funds should be invested in domestic assets only (considering decrease of unemployment and GDP growth). That is a strong argument, although that issue could also be viewed from the other side. Instead of talking about Polish pensioners financing foreign economies we could talk about foreign economies financing future (Polish) pensioners (GRODZIK 2004). As a consequence, it seems inevitable to allow open pension funds investing 20-30% of their assets abroad.

The second pillar of the pension system must include, in addition to the institutions that serve accumulation of pension capitals, i.e. the open pension funds, also the institutions that will disburse benefits from the capital part of the pension system. The Act on organization and operation of pension funds of 1997 calls those institutions the pension insurance institutions without specifying the details of their operation. At present a number of solutions for that problem are offered. The disbursement of pensions could be carried out by entities established especially for that purpose, which, similarly to the general pension companies, would be commercial entities operating on market principles. The other proposal concerns a concept of a system of disbursements based on establishing one State institution as an alternative to the market of private pension institutions. Another concept assumes that the function of pension institutions could be taken by already operating life insurance companies. The pros and cons of those solutions are presented in table 3.

Table 3

Pros and cons of solutions concerning the number of institutions disbursing pensions

Item	Many entities	One institution
Establishing the system	Pros: – possibility of using the knowledge and experience of many financial institutions Cons: – low profitability of entities (particularly at the early stage of system operation)	Pros: – possibility of using the existing structures of ZUS – low general costs of commencement and continuation of operation Cons: – elimination of competition mechanism – susceptibility to political influence
Servicing of operations involved with entering the system	Pros: – competition increasing service level Cons: – possible high canvassing costs	Pros: – possibility of limiting costs – simplification of retiring Cons: – no competition – low service level
System management	Pros: – higher investment effectiveness – immunity to political risk Cons: – no possibility of leaving an ineffective institution	Pros: – no difference in rates of return for individual participants Cons: – political risk (influence of different social groups)
Disbursement of pension benefits	Pros: – flexibility in method and time of disbursement	Pros: – possibility of simple combining disbursement of pillars I and II.

Source: Commission of Supervision of Insurances and Pension Funds, 2005

Conclusion

The paper presents the most important changes that occurred in the legal environment of the Polish pension system after 1999. The main focus in the legislative process was placed on the needs of open pension funds members. The amendments made aimed at decreasing the operational costs of the system and encouraging those managing the funds to obtain higher rates of return.

The innovations made in operation of the pension system should be considered positive and going in the right direction. The major ones include modification of the fund management fee, establishment of the bonus account in the pension fund, application of uniform fee from fund member's contributions, decreasing the fees incurred as penalty by a member migrating between funds, change in the method of calculating the weighted average rate of return and change in the principles of drawing new members for funds by ZUS. The management fee will decrease with the increase in the amount of net assets managed by a fund. The pension companies obtaining the best financial results will obtain additional compensation from the bonus account. The fees covered

from the member's contribution were decreased significantly. In calculating the weighted average rate of return the excessive influence of the largest pension funds was decreased improving as a consequence the position of the smaller funds.

The paper also presents the areas of potential changes in the pension system that are subject to current discussions concerning their rationale. The major items of improvements include expanding the opportunities for investing funds (in addition to currently allowed financial instruments), increasing the limit for foreign investments and choice of the concept for operation of the pension insurance institutions (the payer of pension benefits).

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THE CHANGES OF THE CONSTRUCTION MARKET IN HONG KONG DURING THE YEARS 1990-2002

Andrzej Buszko

Chair Macroeconomics
University of Warmia and Mazury in Olsztyn

Key words: market, competition, development, changes.

A b s t r a c t

The main task of this study is to show the changes in construction market in Hong Kong. The study is connected with the time of 1990-2002. The construction companies were divided into three groups: foreign, local and Chinese ones. The major role in the 90 played the foreign organizations. In the middle of 90 the Chinese firms took the advantage. The background of this process was examined and presented.

ZMIANY NA RYNKU USŁUG BUDOWLANYCH W HONGKONGU W LATACH 1990-2002

Andrzej Buszko

Katedra Makroekonomii
Uniwersytet Warmińsko-Mazurski w Olsztynie

Słowa kluczowe: rynek, konkurencja, rozwój, zmiany.

A b s t r a k t

Celem artykułu jest przedstawienie zmian na rynku budowlanym Hongkongu. Zbadano lata 1990-2002. Zwrócono uwagę na trzy kategorie przedsiębiorstw: zagraniczne, lokalne oraz chińskie. Stwierdzono, iż udziały w rynku uległy zasadniczym zmianom. W połowie lat 90 przewagę utraciły firmy zagraniczne na rzecz podmiotów lokalnych oraz chińskich. Ukazano podstawowe źródła powyższych zmian.

Introduction

The aim of the paper is to present the changes of construction market in Hong Kong nad the attempt estimation of the influences of the foreign companies on domestic ones. The study was covered during the years 1990-2002

when there was the economic revival of the construction market. The following hypothesis was named: The activity of foreign construction companies helped the development of local and Chinese firms operating in Hong Kong.

During the 1990-2002 the overall construction output performed by yearly dynamic more than 10% providing the turnover nearly 10 HK\$b (*Singapore Annual Report* 2003). The basic information on Hong Kong construction market is presented at table 1.

Table 1

The selected economic data of Hong Kong's construction market during the years 1990-2002

Data	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
The value of construction market HK\$b	8.9	9.5	10.6	11.9	13.6	16.9	17.9	18.2	19.5	20.1	21.8
The GNP yearly dynamic (%)	5.5	4.8	5.9	5.1	5.9	7.1	6.1	4.8	6.1	3.2	3.1
The share of construction in GNP (%)	6.1	7.1	7.3	7.8	8.2	6.2	8.8	9.0	8.9	9.1	9.1
The number of construction workers '000	122	121	119	117	122	121	117	117	119	111	133

Source: own calculation based on Singapore Annual Report 1. Singapore Chamber of Commerce. Singapore 2003

Since the construction market in Hong Kong always reached high dynamic and turnover it was a an attractive place of penetration for foreign construction companies. Additionally there was a boom in the market (LAI 1984). During the years 1978-1984 the value of construction output reached the level of 7-9 HK\$b on yearly basis. That time nearly all contracts were taken over by foreign companies (HO 1987). After seasonal boom in mid 80 foreign construction companies left Hong Kong, and such a step did not make any changes in the market (ALEXANDER 1995).

The law in Hong Kong is based on English solutions. Additionally the system of commerce law is based on international standards. Due to above factors foreign construction companies could gain all needed information for their business activity.

The market of construction materials has not developed. The basic materials are imported from three main sources (the basic stream of deliveries come from the region and Australia – 85% of total import, the rest come from USA and EU). The finishing products come mainly from USA, UE, China and Taiwan (60% of deliveries). There are the close ties between production of construction products and contractors. The construction companies rely on successful deliveries of materials. Secondly the high value of construction materials import attract the contractors. This is not only because of capital connection among the producers of construction materials and contractors but

because of the practical skills of usage such products. That why construction companies follow the import of construction materials (LEONG 1987). Such a scenario was noted in 1978 in Hong Kong. The import of construction products increased on yearly basis by 7% made foreign companies to reopen their activity in this market (HO 1987). Based on literature the benefits of foreign companies operating in local markets are like follows:

- there is the shortage of local construction companies. Demand for the works is higher than supply. Foreign firms can increase the supply and reduce the demand significantly.
- the foreign construction companies offer is better according quality and price terms (MURRA 1995).

The second statement is very important. In free market economy the price is the key factor and influences the terms of the tenders. This is confirmed by the situation in Hong Kong in mid 80, when the contracts were taken over by foreign firms (FLANNGAN 1999). The financial results study confirms the relation among the level of taxes and turnover and profits. The relation is presented in table 2.

Table 2

The yearly turnover dynamic, the profit brutto and the tax level paid by foreign companies and local ones during the years 1978-1984

	Foreign companies							Local companies						
	78	79	80	81	82	83	84	78	79	80	81	82	83	84
The yearly turnover dynamic (%)	16	22	34	51	43	51	46	7	8	11	9	14	11	14
The share in the market (%)	27	35	41	46	52	56	71	73	65	59	54	48	46	29
The profit brutto HK\$b	21	16	11	9	11	6	4	17	14	11	16	9	7	8
The tax value HK\$b	14	11	9	8	5	4	2	11	8	7	9	7	4	5

Source: Hong Kong Trade Development Council. Report 1. Hong Kong 1985.

During the economic revival the foreign construction companies increased their turnover. The dynamic of increase was several higher than among local entities. For example in 1983 foreign companies increased their turnover by 51% but local ones by 11% only. The share of the market was changed as well. The unquestionable share was taken by foreign companies. Their share in the market (taking into consideration the value of production) in 1978 was 27%, but in 1984 reached the level of 71%. The share of local firms decreased from 73% to 29% accordingly. In spite of the fact that foreign companies increased their turnover the level of taxes and profit brutto decreased. In 1978 the value

of profit brutto was 21HK\$b decreased to the level of 4 HK\$b. This was more than five times. The same trend was related with the taxes. During the same period of time the foreign companies reduced their taxes obligations by seven times, from 14HK\$b till 2 HK\$b in 1984.

Local companies performed differently. Their value of profit brutto decreased, but the decline was not so sharp like in foreign entities. The same process was connected with the taxes value. Such a decline was caused by the low dynamic of turnover and the loss of the market share.

During analysed time the changes of big value contracts(over 500 mio HK\$) were noticed. In the years 1978-1984, 97% of such contracts were taken over by foreign companies. Moreover local companies did not take any part in 61% of big value contracts (CHOW 1995). This result gives clear information, that foreign companies relied on their labor force only and the local companies could not perform as the effective competitors.

The situation in the market (where the key role play foreign companies) is regarded as possitive in folowing cases:

- local companies increase their technological ability, and they can provide competitive offer systematically,
- there is a close cooperation between foreign and local companies. The domestic companies take part in technology advanced projects and they increase their share in the market (CARILLO 1996).

Within the years 1990-2002 the local companies gained the better position. This process was different from the situation that happened in the mid 80. The companies from mainland China could strenghten their position as well. This was especially seen after 1997, when Hong Kong was returned back to China. Those changes were presented in table 3.

The analysed period should be divided into two sperate times. first covers the years 1990-1997 the second one covers the years 1998-2002. During the first period of time the 10th largest foreign construction companies increased their turnover from 2.1HK\$b till 6.6HK\$b in 1997. Starting from 1997 their turnover decreased till 4 HK\$b in 2002. The different trend was noticed among local and Chinese companies. The first group of companies gained higher level of turnover from 0.1HK\$b in 1990 till 5.8HK\$b in 2002. There was the break poit in 1999. when local companies surpassed foreign companies. That time local companies reached the level of 4.8HK\$b. but foreign companies 4.1HK\$b accordingly. The group of 10th local largest construction companies become the key market player in Hong Kong. At the same time Chinese companies sistematically increased their turnover. In the beginning 90 their turnover was realtively small. less than 10 mio HK\$. This turnover level was far below local and foreign;s turnovers. Till 1996 the Chinese construction companies played marginal role in the market. Starting from 1997 the turnover increases. The

Table 3

The turnover value of 10th largest foreign, local and Chinese construction companies operating in Kong Kong during the years 1990-2002 (HK\$b)

Year	Foreign companies	Local Firms	Chinese Firms
1990	2.1	0.1	*
1991	3.4	0.13	*
1992	3.1	0.14	0.01
1993	3.6	0.12	0.01
1994	4.2	0.3	0.02
1995	5.1	1	0.3
1996	6.6	1.3	1
1997	5.9	2	1.1
1998	4.3	3.2	1.7
1999	4.1	4.8	2.2
2000	4	5.3	1.9
2001	4.2	5.8	3.2
2002	4	5.8	3.5

Source: Hong Kong Chinese Chamber of Commerce Annual Report. Hong Kong 2003

* less than 10 mio HK\$.

Tabela 4

The share of foreign, local and Chinese construction firms in A and B project execution in Hong Kong during the years 1990-2002 (%)

Years	A Category Projects			B Category Projects		
	Foreign companies	Local companies	Chinese companies	Foreign companies	Local companies	Chinese companies
1990	95	5	*	91	9	*
1991	97	3	*	82	18	*
1992	91	9	*	63	37	*
1993	87	13	*	47	45	8
1994	88	12	*	37	48	15
1995	76	14	10	37	46	17
1996	65	22	13	32	48	20
1997	58	25	17	22	53	25
1998	55	23	22	19	51	30
1999	48	33	19	18	51	31
2000	43	25	32	19	48	33
2001	42	24	34	21	44	34
2002	41	31	28	17	58	25

Source: Building and Contractor Authority. Hong Kong 2003.

dynamic was quite high and was quite close to the turnover's of 10th largest foreign companies. The value of Chinese construction companies turnover reached the level of 3.5 HK\$b.

The increase of the turnover was not the only change in the construction market. The next change was related to complicated investment which required technical knowledge, experience, works of coordination skills. Such complicated investment were divided into two categories A and B. The first one included high value investment more than 1 HK\$b, and focused on project management like Hong Kong airport contract. The value of this contract exceeded 100 HK\$b and 650 construction firms were included. The group B focused on special project like tunnel works, land improvement. The approximate value of those project was about 500 mio HK\$.

In the beginning of 90 the foreign companies took over majority of A and B contracts. In 1990 those firms were involved in 95% A contracts and 91% B contracts. This dominant share was decreased systematically. In 2002 foreign construction companies executed 41% A contracts and B contracts only. The local companies gained bigger share of the market. In 1990 they could take over 5% of A contracts, but in 2002 they took over 31% this category of projects. Within 6 years Chinese firms could get any contracts of A category. They won the first such projects in 1996. Their share of the market was 10% of A category projects. In following years Chinese companies increased their share of the market. In 2001 they gained even bigger share in the market than local companies. The share of Chinese entities was 34% in A category projects. In 2002 the share decreased slightly till 28%.

The constructions companies were involved in B category contracts differently. In the beginning of 90 dominant share of above mentioned projects gained foreign firms. Their share of the market was on the level of 91%. Such a high share can be explained by the skills of foreign constructions companies, which allowed them to carry on any kind of special projects. There was a shortage of such skills among Chinese and local firms. Year by year foreign companies lose their share in B category projects. In 2002 this share was on the level 17%. Majority of those contracts won local companies. At the end of analyzed period their share of the market constituted 58%. Just for comparison in 1990 such share was 9% only.

A substantial progress was noticed among Chinese companies. They started expansion in 1993, when their share of the market was just 8%. In 2002 Chinese firms could reach the level of 25% and replaced the foreign entities.

The close cooperation and setting up joint-venture is regarded as the key factor of local and Chinese firm's success. The Chinese companies were searching for close contacts with domestic and foreign companies. This trend is presented in table 5.

Table 5

The number of joint-venture firms (JV) in Hong Kong during the years 1990-2002

Year	J.V. Foreign firm and local one	J.V. Foreign firm and Chinese one	J.V. Local firm and Chinese one
1990	226	*	8
1991	137	*	11
1992	112	11	22
1993	76	34	28
1994	65	46	33
1995	57	51	37
1996	54	48	56
1997	44	71	51
1998	47	86	50
1999	51	119	75
2000	43	210	78
2001	28	221	89
2002	5	326	116

Source: own estimation based on Business Register of Companies of HongKong. Hong Kong. 2003.

The data from table 5 provide the information on the number of joint-venture companies among foreign, local and Chinese firms. The significance number drop of joint – venture between local and foreign companies was noted. In 1990 there were 226 such an organizations, but in 2002 there were only 5 joint ventures between local and foreign entities. From the other hand the number of joint venture between foreign and Chinese firms grew up systematically. They started the activity in 1992 with relatively small number 11. In 1993 there was such joint-venture three times more, and in 2002 the number of joint venture bewteen foreign and Chinesees firms reached the peak of 326 organizations. The dynamic trend was notice among local and Chinese companies. In 1990 there was 8 such organisations only, but in 2002 – 116.

The increasing number of joint-venture could reduce the technological gap among companies originated from different markets. The participation of Chinese companies in joint venture allowed them not only to adopt new technology but strenghten their position in the market. In 2002 the local and Chinese companies become the important executors of A and b category projects.

Apart from that Chinese and local companies become the general contractors in many important projects. In the beginning of 90 Chinese companies were mainly named as the subcontractors. Starting from 1995 Chinese firms started to act as the general contarctors and setting up the tasks for the other members of the market. This process is presented at the table 6.

Table 6

The number of projects (exceeded 5 mioHK\$) executed as the contractor or subcontractor by foreign, local and Chinese companies in Hong Kong during the years 1991-2002

Year	Foreign Company		Local Company		Chinese Company	
	Contractor	Subcontractor	Contractor	Subcontractor	Contractor	Subcontractor
1991	76	9	122	229	*	*
1992	69	11	127	238	*	*
1993	77	13	128	183	*	*
1994	43	15	119	201	*	*
1995	38	18	89	106	28	7
1996	38	17	138	73	43	11
1997	39	28	122	88	48	17
1998	41	45	98	133	51	46
1999	40	50	99	144	55	277
2000	36	51	101	154	58	356
2001	33	54	95	166	62	422
2002	30	76	95	188	77	411

Source: Hong Kong Chinese Chamber of Commerce Report. Hong Kong, 2003.

Within the years 1991-2002 the role as the contractor and subcontractor of foreign companies changed. These firms lost their share as the contractor of 5 mio HK\$ projects. In 1991 foreign companies acted as the general contractor in 76 projects, but in 2002 they took part in 30 such projects. Foreign companies focused on subcontractors works. In 1991 they were involved as the subcontractor in 9 projects, but in 2002 in 76 projects.

The local companies slightly reduced their commitment as the subcontractor and contractor. In 1991 local companies were involved as the contractor in 122 big value projects, and in 2002 in 95 such contracts. The similar trend was noticed according the role as the subcontractor. In 1991 local companies were involved as the subcontractor in 229 more than 5 mioHK\$ projects and in 2002 188 such projects.

The Chinese companies implemented different strategy. The started to act as the contractor in 1995. That time they took over 28 big value contracts and acted as the subcontractor in 7 such contracts. The Chinese firms systematically increased their activity and in 2002 they become contractor in 77 projects and as the subcontractor in 411 projects.

Conclusion

The carried out analyze confirmed the right of taken hypothesis. The foreign companies operating in Hong Kong helped to develop domestic market and construction firms.

During 1990-2002 the market was changed fundamentally. In the first years of 90 the dominant role of the market played the foreign construction companies. They took over the majority of A and B category of contracts. The foreign companies acted as the contractor mainly. The local and Chinese firms played the role as the subcontractor. In this way they could adopt effective management skills, works technology. In the beginning the local and Chinese companies were involved in B category projects. Thanks to close cooperation, especially based on joint-venture formula local and Chinese firms gained the needed experience and later on could compete in the market. The increase of engagement in A ranked projects and the role as the contractor were confirmation of above mentioned trend.

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**APPLICATION OF INFORMATION TECHNOLOGIES
IN FOOD SUPPLY CHAINS AND NETWORKS
MANAGEMENT IN THE ENVIRONMENT
OF FOOD MARKET GLOBALISATION –
TRACEABILITY CONCEPT**

Wacław Szymanowski

Department of Enterprises Economics
University of Warmia and Mazury in Olsztyn

Key words: food supply chain and networks, globalisation, information and communication technology.

A b s t r a c t

The paper aims at presenting the concept of *food supply chain and networks management* and its components applicable in design of modern fresh and processed (frozen) food distribution systems. Introduction of the traceability concept allows analysis of shipments movements and their origin and, as a consequence tracing the movement of food and its components throughout all stages of its production and distribution. Global standardization of barcodes allows identification of the placement in space and time of food products, the sender and the destination within the food chain. The use of Information and Communication Technology (ICT) serves that purpose. The principles of consistency and transparency in data and information exchange among the participants in the food supply chain and networks create conditions for effectivity and efficiency of food supply systems operation securing their safety and quality making full use of the resources thanks to flexibility of reaction to changes occurring in the needs appearing in the market.

**WYKORZYSTANIE TECHNOLOGII INFORMACYJNYCH DO ZARZĄDZANIA
ŁAŃCUCHAMI I SIECIAMI DOSTAW W WARUNKACH GLOBALIZACJI RYNKU
ŻYWNOŚCI- KONCEPCJA TRACEABILITY**

Wacław Szymanowski

Katedra Ekonimiki Przedsiębiorstw
Uniwersytet Warmińsko-Mazurski w Olsztynie

S ł o w a k l u c z o w e : łańcuch i sieci dostaw żywności, globalizacja rynku żywności, technologie informacyjno-komunikacyjne.

Abstrakt

Celem artykułu jest przedstawienie koncepcji *zarządzania łańcuchami i sieciami dostaw żywności*, jej składowych, znajdujących zastosowanie w budowie nowoczesnych systemów dystrybucji żywności świeżej i przetworzonej (mrożonej). Wprowadzenie koncepcji *traceability* umożliwia analizę ruchu ładunków i ich pochodzenia, a dzięki temu śledzenia ruchu żywności i ich składników przez wszystkie fazy jej produkcji i dystrybucji. Ujednolicenie w skali globalnej systemów kodów kreskowych pozwala zidentyfikować miejsce w przestrzeni i w czasie produktu żywnościowego, jego nadawcy i przeznaczenia w łańcuchu żywnościowym. Temu celowi służy wykorzystanie technologii informacyjnych i komunikacyjnych (*Information & Communication Technology – ICT*). Przedstawione następnie zasady spójności i przezroczystości wymiany danych i informacji między uczestnikami łańcuchów i sieci dostaw stwarzają warunki efektywności i skuteczności funkcjonowania systemów dostaw żywności, zapewniając im bezpieczeństwo i jakość, z pełnym wykorzystaniem zasobów, dzięki zachowaniu elastyczności reakcji na zmiany zachodzące w potrzebach pojawiających się na rynku.

Introduction

Acceleration of changes in the food market occurring after Poland's accession to the European Union in 2004 caused its increased variability and fragmentation. The continuous increase of significance of food quality for the buyers of products is a consequence of that. The increase of food quality importance is possible as a consequence of quality management principles having their roots in the principles developed by E. Deming. Food market fragmentation and increase in significance of quality requirements are accompanied by the need to reconstruct the traditional and build modern food supply chains and networks. The principles of that reconstruction are presented below.

Mega-trends and their influence on the food market

Enlargement of the European Union in May 2004 by ten states boosted the earlier trends concerning supply conditions in the food market in the areas of economics, demography, social and cultural and legal, as well as technology and natural environment protection (SZYMANOWSKI 2004, 2006, TRIENEKENS VAN DER VORST 2006):

- in the *area of economics* it boosted the client focus and search for effective revenue/cost relations, which can be exemplified by the following phenomena:
 - defining consistency of food production and distribution systems with clients; expectations;
 - defining revenue/cost solutions concerning quality assurance and health safety systems in food supply chains and networks;

- influence of the Community Law concerning health (General Food Law EU/2002/178) on external competition conditions of enterprises;
- in the *areas of: demography, social and cultural and legal* – the conditions of food production, distribution and trade are influenced by:
 - EU and domestic law regulations and regulations of other international institutions;
 - expectations and behaviours of consumers concerning food (exotic foods from cuisines of the entire world)
 - legal regulations and enforcement institutions in the area of food compliance with human health and animal welfare levels as well as: changes in the demographic structure of consumers determined by professional activity of women, increased share of one- and two persons households, ageing of the society, differentiation of its affluence;
- in the *area of natural environment* the operational environment of links in the food supply chains and networks are influenced by:
 - energy and water consumption in food production, distribution and trade;
 - recycling of packaging materials and waste generated during food production, distribution and trade; and
 - development of new *bio-packages* friendly to the natural environment;
- in the *area of technology* conditions of design of products and processes, systems of transport and telecommunication influence food production and distribution quality and food safety through:
 - compliance with quality standards consistent with national and international legal regulations;
 - systems of management and control of processes and flow of products through the supply chains (of traceability type, HACCP);
 - care for products and information for the public, as well as:
 - increased share of genetically modified food and extended shelf life foods in production;
 - new solutions in organization of logistics infrastructure;
 - appearance of network economy and new possibilities in food trade.

The above phenomena lead to increasing *variability and fragmentation of food market* catering for individualized needs of consumers by means of (SZYMANOWSKI 2004, SCHAAFSMA, KOK 2005):

- increased consumption of exotic foods from various cultural areas;
- increased demand for ecological food (KŁOSIEWICZ-GÓRECKA 2003);
- increased consumption of food through various catering institution away from place of residence, *convenient* prepared for fast consumption;
- increased demand for *functional* food of special use with diversified content of fat, vitamins and other nutrients supporting treatment of specific civilisation diseases or preventing them or causing increased demand for food and drinks improving mental or physical fitness of people.

Changes in food quality management systems

Food products quality (according to: BARYŁKO-PIEKIELNA 1975) is understood as the: “degree of health, sensory attractiveness and availability in wide consumer and social meaning, important only within the limits of accessibility determined by conditions negative for that product: raw materials, technology and price”.

The above mentioned trends in the food market, increased competition and consumer demands cause that *quality* according to the international ISO 8402:1996 standard is understood as the “set of product characteristics concerning its ability to satisfy the expressed and expected needs”. The quality should not be treated as the level of satisfying selected characteristics as a specified level but it is suggested to approve of quality the level of intensity of which is accepted by the client and the market.

Food quality is a *multidimensional* concept. LUNING, MERCELIS, JONGEN (2002) divide the qualitative characteristics of a food product into *intrinsic* and *extrinsic*, allowing satisfaction of consumer expectations. The *intrinsic* characteristics allowing *objective measurement* of product quality include: health safety and health value of the product, sensory attractiveness and shelf life as well as compliance of product characteristics with the standard and ease of preparation for consumption. The *extrinsic* quality characteristics of food product are determined by specific characteristics of production system (e.g. acceptable production level of genetically modified food of food preservation processes), influence of environment conditions of food product and its production (use and utilization of used packages) and marketing activities increasing the level of consumer perception (through brand policy, marking method and price).

The above mentioned intrinsic and extrinsic characteristics of food product quality determine its position in the logistics chain and, as a consequence, determine organization of its control or creating conditions for its assurance.

Food quality management is based on 8 quality management principles published in ISO 9001-2000 standard applied at enterprise levels stemming from the principles developed by E. Deming covering, among other things (HAMROL 2005, LUNING, DEVLIEGHERE, VERHE 2006, SZYMANOWSKI 2006):

- *client focus (principle 1)* i.e. taking actions consistent with client's quality expectations through identification of internal and external clients the relations with whom are based on a variety of contractual arrangements;
- *leadership (principle 2)* including creating conditions for drawing from organization resources, in particular *commitment of employees (principle 3)* in achievement of quality targets. Food production enterprise is characterized by high quality management system dynamics with a changing time-frame and as a consequence increased level of uncertainty concerning the

decisions taken. The timeframe of market decisions ranges from 0.5 to 2 years while the timeframe of technological innovation decisions is 2-5 years; the timeframe of changes in raw materials base using genetic engineering is 5-15 years (VAN BOEKEL 2005);

- *approach: process (principle 4) and systemic (principle 5)*. The process approach means that the organization focuses on processes implemented within it and not on organizational units or functions. *Maps of processes* that make the owner and people involved in preparing them that the performed sequence of interlinked actions represents a correctly formulated logical whole leading to multiplying the added value, are a tool for identification of processes and their components (sub-processes). The systemic approach to organization management means perception of organization operation results not as a sum of the results of component processes over time and space but the consequence of using the effect of synergy boosting the global effect of activity in absence of partial effects optimisation. In food quality management the systemic approach generates tools for identification of food safety that are components of food quality management;
- *continuous improvement (principle 6)* represents continuous improvement of the quality management system closing the gap between the consumer expectations and the fulfilment of those expectations. The continuous quality improvement model satisfies the conditions of the improvement cycle by E. Deming P-D-C-A (plan, develop, control, implement) describing continuous quality improvement in a systematic way and implemented by ISO 9001-2000 standard;
- *informed decision taking (principle 7)* – is based on systematic data collecting and processing by means of trustworthy methods giving the base for taking decisions, being an inseparable component of information systems for quality management. Quality strategy and policy decisions in a food production company concerning a food product can be divided into (LUNING, MARCELIS, JONGEN 2002):
 1. *strategic decisions* that represent the process of choosing the organization mission, i.e. clients, areas and methods of operation, goals to be achieved within specific time periods and selection of basic resources for achievement of those goals. Definition of the mission determines the choice of the target group of customers and, as a consequence, the choice of products quality level satisfying the requirements of clients, which in turn would determine the quality of long-term decisions concerning concentration of resources on selected measures;
 2. *innovation decisions* determining the choice of products and their characteristics consistent with the mission and strategic goals as well as the future abilities of the company. Those decisions include design of new products, selection of market segments, selection of processes allowing

- achievement of the designed characteristics by those products and specification of resources for building the supply chains and distribution channels for finished products; market analysis;
3. *operational decisions* are decisions allowing current achievement of the volume, quality, times and places of deliveries as well as securing means for creating hygienic conditions within which those tasks will be performed;
- *partnership in relations with suppliers (principle 8)* is based on establishing mutual long-term relations with the suppliers. The long-term partnership should be based on the “win-win” strategy the beneficiaries of which are both the suppliers and the producers. The importance of that principle is particularly well marked in production and sale of high quality food. The increase of strategic importance of suppliers selection for food manufacturers is achieved by means of (ROSS 2003):
 - increased time, quality and cost requirements resulting from the principles of cooperation between the supplier and the producer;
 - change in the specific features of the supplies market that is subject to similar changes as the consumer goods market;
 - changes in market infrastructure as a consequence of appearance of new wholesale market institutions, distribution and trade centres;
 - increased demand for quality assurance and control and assuring innovation processes;
 - assuring the implementation of the continuous management processes improvement principle;
 - increased importance of Internet technologies in planning, forecasting and filling the stocks.

Concept and characteristic of Food Supply Chain Network – FSCN

Fragmentation of food market, in line with the above-presented principles of quality management is accompanied by restructuring of traditional food distribution channels into modern supply chains and networks. The Food Supply Chain Network – FSCN is understood as a direct network of actors (participants), who cooperate with one another in supplying products to the consumers (LAZZARINI, CHADDAD, COOK 2001). Those entities can play different roles in different chains (FSCN) within which the vertical and horizontal partner relations between them change dynamically. That allows identification of two types of food supply networks (ZUURBIER, TRIENEKENS, ZIGGERS 1996):

1. *FSCN for fresh agricultural products* (fruit, vegetables, flowers) involving the growers, auctions, wholesalers (distribution centres) exporters and

importers, retailers, specialized shops, their suppliers and services provided. The basic processes cover purchase, conditioning, packaging, transport and trade in those products;

2. *FSCN for processed food products* (packaged processed meat products, snacks, deserts, frozen foods). In those chains agricultural products are used as raw materials for production of products for consumption representing high level of processing. Preservation and conditioning extends the shelf life of agricultural and food products.

Food Supply Chain Networks (FSCN) are characterized by 4 components allowing analysing and reconstructing them. Those are (VAN DER VORST, BEULENS, VAN BEEK 2005):

- *network structure* that represents key actors (participants) and their mutual relations;
- *chain of business processes* defining the sets of business activities allowing production of products possessing particular characteristics, offering specified services (LAMBERT, COOPER 2000);
- *management of supply chains and networks*, that describe management and coordination of supply network structure facilitating performance of tasks by participants through appropriate actions and use of their resources;
- *supply chains resources* used for production of products and supplying them to clients covering people, equipment, information systems and their infrastructure. Each process is identified in the network to use it for reconstruction of the FSCN.

Application of information and communication technologies in food supply chain networks management. The concept of traceability

Management of Food Supply Chain Networks (FSCN) is linked to development of (*Information & Communication Technology – ICT*) defined as the technically available resources, knowledge and attitudes allowing organization of their application for performance of business and communication activities through (VAN DER VORST, BEULENS, VAN BEEK 2005):

- more effective and efficient use of the resources by their users;
- development and application of ICT technology for better management of supply chain and network and the individual links within them;
- development and application of ICT tools and infrastructure for building the business strategy within the food supply chains and networks.

Application of information technology in FSCN is implemented through:

- *data accumulated in databases*, which is necessary for business processes management based not only on local information networks but, first of all,

- on the Internet. Those databases contain information on the number of producers, providing the clients with information on products, processes and cooperation with other food supply chain and network partners;
- *formulating a consistent system for coding and information transfer* allowing automation of communication among business partners within the FSCN on the basis of the international standard EAN-UCC (European Article Number Association/Uniform Code Council), which was transformed into the Global Standard GS1 in 2005;
 - development of *technical infrastructure* encompassing appropriate computer networks and software and personnel employed, allowing use of databases contents and effective communication within the food supply chain network (FSCN);
 - defining *organizational infrastructure* covering all internal activities of the organization and the FSCN and separating the entity dealing with making those resources available and, as a consequence, the diffusion of innovation based ICT along the supply chain.

The *traceability concept* is the key to effective and efficient use of information technologies in food supply chain network management. Successful food policy defines the role of traceability for animal feeds and food components by implementation of appropriate procedures. Directive of the European Commission EC/178/2002 determines the importance of traceability as the instrument to warranty food safety. That Directive specifies that as of January 1, 2005, the producers must identify the suppliers of their raw materials and consumers of their final products on the basis of transactions. The basis of *traceability information* is the possibility of determining the source of action of specific structure and places where other actions possessing corresponding structure are positioned in the supply chain. That is why tracking products movement and tracing their origin represent the concept of traceability.

Among many other definitions, two definitions of traceability deserve consideration (TRIENEKENS, VAN DER VORST 2006). Those are:

- the ability to track the movement of food, animal feeds or other components that could become components of food throughout all stages of production and distribution (EC/178/2002); and
- traceability is the quality management system ability to track the history, application or identification of the object or activity or similar objects or activities thanks to their identification (ISO 84022).

Traceability can be defined in the narrow or wide meaning of the term. In the narrow meaning it allows people to determine where the products are at any moment of time. The real time tracking function allows identifying the history of not only the product but also of its components as well as the use of every final product. In the wide meaning traceability means that information on products and processes of producing them can be used for optimization and

control of processes within and between individual links of the supply chain offering the possibility of decreasing costs, increasing productivity and assuring quality.

Traceability of information has a separate importance for organization and supply chain. At the enterprise level it allows supplying information on location of products and their history. At the supply chain level, it allows determining not only information on product location, but also information on products origin.

As a consequence of participation of many actors (industry, government administration institutions, consumers) in the chain, it is of particular importance for entrepreneurs participating in the supply chain to be able to guaranty the composition and genesis of their products through building the *information system allowing cooperation in supply chain*. Information system for traceability in case of a supply chain is presented in Figure 1. It allows:

- identification of production and products within the supply chain. The purpose of identification is the obtaining data concerning individual activities using codes (barcodes, labels, etc.);
- tracking movement of objects allowing locating them along all their path within the supply chain;

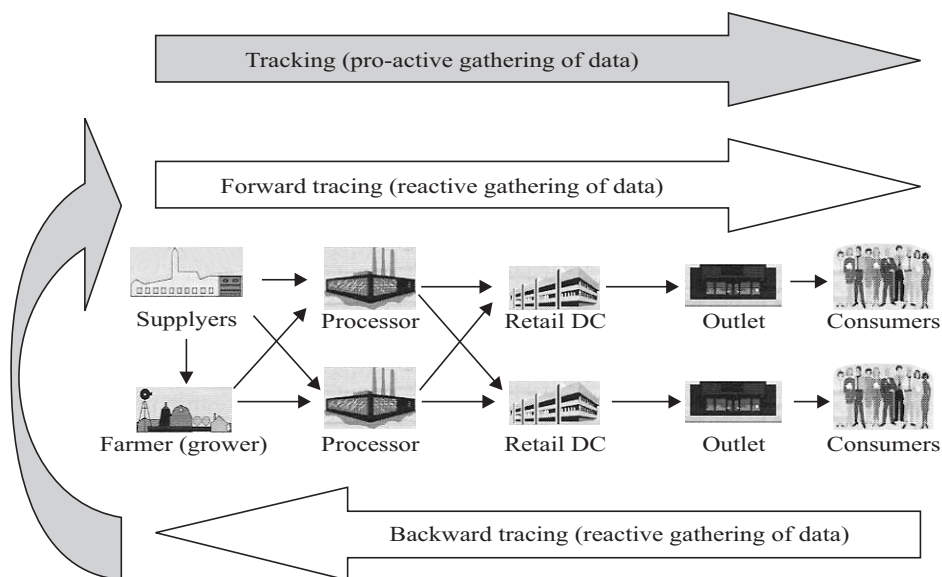


Fig. 1. Tracking and tracing the movement of products and their origin in the supply chain
 Source: J. Trienekens & J. van der Vorst: Traceability in Food Supply Chains in: Safety in the Agri-Food Chain, Wageningen Academic Publishers, 2006, p. 449.

- traceability of movement of objects within the food chain allows identifying their composition at individual stages of the supply chain. In the lower part of the supply chain the purpose of tracing is to determine the history of the object and sources of problems causing their damage. In the upper part of the chain the purpose of tracking is to determine location of products made using, e.g. contaminated raw materials.

The concept of traceability offers benefits for supply chain participants, i.e. consumers, industry and government administration institutions that are presented in Table 1 below.

Table 1
Benefits of traceability concept for supply chain participants

Consumers	Industry	Government administration institutions
Maintaining food safety thanks to the system of returns. Allowing avoidance of foods and food components causing civilisation diseases.	Protecting public health through food withdrawal procedures. Protection against adulterations that cannot be detected through analyses. Help in protecting human and animal health in situations of threats.	Compliance with applicable legal regulations. Have the right to withdraw products from sale. Possibility of diagnosing production conditions assuring quality of food in the market and confidence of consumers

Source: J. Trienekens, J. van der Vorst: Traceability in Food Supply Chains in: Safety in the Agri-Food Chain, Wageningen Academic Publishers, 2006. p. 447.

Principles of information traceability system organization in food chains and networks

The implementation of information traceability in food supply chain networks involves, among others, organization of traceability of data obtained from various sources. Such data covers (more on the subject in SOKOŁOWSKI 2005):

- *transaction data* allowing management of information system covering: identification of transaction itself and measures for assessment of the transaction;
- *product identification data* in the form of the *Global Trade Item Number* – *GTIN*;
- *data on transaction participants in the supply chain* using the *Global Location Number* -*GLN*.

Besides data traceability, consistency and transparency of data exchange among participants in the FSCN is the condition of traceability for their information systems. This means that exchange of information between

participants in the FSCN is done according to a specified sequence. It starts from data registration and collection through design of data analysis model allowing data processing as the base for taking decisions by FSCN participants. The *Global Data Synchronization – GDS* model offers the standard of information allowing assurance of compatibility of the basic data in products and services of business partners. The *Electronic Data Interchange – EDI* system based on the Internet allows using the Global Standard GS1.

The above-presented principles of data traceability and information systems allowing management of food supply chain networks FSCN, allow designing the functional classification of information systems applicable to managing them.

We can identify the following types of information systems of FSCN participants:

1. Production Automation Systems of *Digital Control Systems* (DSC) type at the production plant level that allow determining the level of production, stocks and transport tasks;

2. Supervision, Control and Data Collection Systems. Those are systems controlling many production automation systems combined in one whole in real time. They gather detailed information and report information on transactions between those components of FSCN;

3. Systems acting as intermediaries between production performance control systems and the integrated business area systems. Those are *Manufacturing Execution Systems MES*. They support work of operational level managers in drafting schedules, allocation of tasks, for control and monitoring of operational activities;

4. Business area systems include Integrated Enterprise Management Systems such as *ERP (Enterprise Resourcing Planning)* covering taking decisions at the planning and operation levels concerning all major functions in the enterprise. The ERP systems are accompanied by *CRM (Customer Relationship Management)* and *SCM (Supply Chain Management)* type systems as well as *TMS (Transport Management Systems)* and *WMS (Warehouse Management Systems)* type systems. Exchange of information between organizations is done using the EDI system. Traceability is one of the functions increasingly often included in business and executive area systems;

5. At the highest strategic level there are the *MIS (Management Information Systems)* and *DSS (Decision Support Systems)*. Those systems support decisions taken by managers at strategic level while formulating and assessing strategic options for individual organizations and the entire FSCN (Fig. 2).

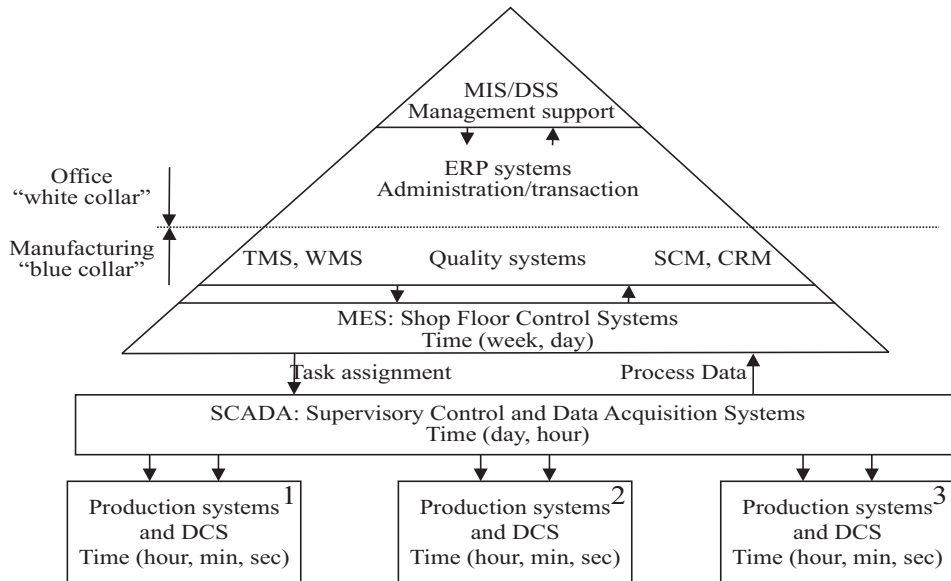


Fig. 2. Types of information systems in supply chain management

Source: J. Van der Vorst, A. Beulens, P. van Beek: *Innovations in Logistics & ICT in Food Supply Chain Networks in: Innovation in Agri-Food Systems* (editors: W.M.F. Jongen, M.T.G. Meulenberg), Wageningen Academic Publ. 2005, p. 273.

Conclusion

Application of information technologies in FSCN management can be presented in the following way:

- that application focuses on cost effectiveness with increasing attention devoted to generating profit and using the available resources;
- increased importance of food safety and quality;
- use of process and system approach and possibility of continuous improvement in FSCN restructuring processes;
- increasing the role of international cooperation as a consequence of possibility of making flexible choice of partners;
- increased use of modern information collection and processing methods;
- consolidation of products and information flows within organizations, between them and within the FSCN.

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INFLUENCE OF RESOURCES ON APPLICATION OF COMPETITION TOOLS IN FOOD INDUSTRY COMPANIES BASED ON THE EXAMPLE OF WARMIA AND MAZURY REGION

Lech Nieżurawski¹, Andrzej Skonieczek²

¹ Chair of Organization and Management
University of Warmia and Mazury in Olsztyn

² Information Sciences and Management
Prof. Tadeusz Kotarbiński Memorial Olsztyn Tertiary College

Key words: resources, functional-resource spheres, competition instruments, competitiveness.

A b s t r a c t

In view of challenges faced by contemporary enterprises, increasing their ability to compete through application of appropriately selected competition tools is an important task. Results obtained from studies covering food industry enterprises from the region of Warmia and Mazury indicate that resources available to them have the major influence on application of such competition tools as company image, product price, product quality, brand and width of products range. On the other hand, the influence of resources on application of such competition tools as range of pre-sale services as well as quality and price of pre-sale services in the studied enterprises was low.

Aiming at improving the effectiveness of competition instruments applied, the food industry enterprises are forced to build and improve their resources as well as their tangible and intangible characteristics. That applies mainly to research-innovation and marketing activities. Strong resources in those areas of operation will allow applying specific and clearly unique configurations of competition instruments.

WPŁYW ZASOBÓW NA STOSOWANIE INSTRUMENTÓW KONKUROWANIA W PRZEDSIĘBIORSTWACH PRZEMYSŁU SPOŻYWCZEGO NA PRZYKŁADZIE REGIONU WARMIŃSKO-MAZURSKIEGO

Lech Nieżurawski, Andrzej Skonieczek¹

Katedra Organizacji i Zarządzania
Uniwersytet Warmińsko-Mazurski w Olsztynie

¹ Olsztyńska Wyższa Szkoła Informatyki i Zarządzania
im. Prof. Tadeusza Kotarbińskiego w Olsztynie

Sł o w a k l u c z o w e: zasoby, sfery funkcjonalno-zasobowe, instrumenty konkurowania, konkurencyjność.

Abstrakt

Wobec wyzwań stawianych współczesnym przedsiębiorstwom ważnym zadaniem jest wzrost ich zdolności do konkutowania przez stosowanie odpowiednio dobranych instrumentów konkutowania. Uzyskane wyniki z badań przedsiębiorstw przemysłu spożywczego na Warmii i Mazurach wskazują, że zasoby będące w ich dyspozycji wywierają największy wpływ na stosowanie takich instrumentów konkutowania, jak: wizerunek firmy, cena produktów, jakość produktów, marka i szerokość asortymentu produktów. Mało istotny wpływ zasobów w badanych przedsiębiorstwach ma stosowanie takich instrumentów konkutowania, jak: zakres usług przedsprzedażnych, jakość i cena usług posprzedażnych.

W celu poprawy skuteczności stosowanych instrumentów konkutowania przedsiębiorstwa przemysłu spożywczego są zmuszone budować i doskonalić swoje zasoby oraz ich cechy materialne i niematerialne. Dotyczy to głównie działań o charakterze badawczo-innowacyjnym i marketingowym. Silne zasoby w tych obszarach funkcjonalnych pozwolą na stosowanie specyficznych i jednocześnie unikatowych konfiguracji instrumentów konkutowania.

Introduction

In the market economy, among many new circumstances that appear in the business environment, particular importance is gained by the increasing level of environment variability and aggressive competition rate. Those new environment characteristics apply to both local and global markets. As a consequence increase of competition intensity through use of appropriate sets of competition instruments as means for implementation of strategic market goals is a challenge facing the enterprises. Every enterprise, in a more or less conscious way in each case, uses specific combinations of competition instruments in implementation of chosen competition strategy.

As a consequence it can be concluded that the issue of competition instruments is a rather complex issue for enterprises as a result of high complexity of economic phenomena and their quick change in space and time (ŁĘCZYCKI 2002, p. 32).

In view of new challenges facing the entrepreneurs on grounds of the development of management theory and practice the contents of competition instruments toolbox changed. Starting with the development of classic management school enterprises applied a narrow set of instruments where competition took mainly the character of price competition, and slightly later price/cost competition. Gradually, enterprises shifted from price competition to quality competition.

In the strategy of cost advantage (cost leadership), the price offered by the enterprise is lower than that offered by competitors on condition that product quality is the same or similar. The strategy of qualitative leadership assumes on the other hand the offer of higher quality of enterprise product offer while maintaining a similar level of price as the competitors or the price higher by as much as the value delivered to the consumers is higher.

In the concentration strategy, on the other hand, the enterprise aims at finding a market niche for which it has the ability and opportunities to offer a better or cheaper product. In this case price or quality of market offer, or both, become the basic instruments of competition (PORTER 1980, p. 38).

The abovementioned Porter strategies are practically no longer used in the enterprise in their pure forms. There are many reasons for that but the main one is the markets globalization process, which causes that enterprises apply other than traditional approach to defining their own competition instruments toolboxes.

With the development of management concept commonly referred to as marketing management, the list of competition instruments expanded. It became a principle that the enterprise influences the market by means of the appropriately designed composition of those tools called by M.H. Borden the marketing-mix (NIESTRÓJ 1996, p. 15).

According to Philips, the marketing-mix should be understood as „... the system of variables controlled by the enterprise in the activity that aims at implementation of selected strategic goals (Philips, 1986, p. 19). That concept is also referred to as McCarthy;s Four Ps (MCCARTHY 1981, p. 44), because the set consists of four competition tools:

- product,
- place,
- price, and
- promotion.

Within each of them many constituting instruments can be identified that can be effectively applied in various combinations by enterprises in the process of competing in the market (HAFFER 1999, pp. 49-76).

The concept of marketing-mix expresses the internally integrated structure of marketing through which the enterprise influences market phenomena. Using individual instruments and actions as well as synergies between them it is possible to develop many internally integrated marketing structures. The procedure of drafting the efficient and effective marketing structure is generally based on a search for the ideal marketing-mix concept for the selected market segment. It expresses the marketing structure that allows obtaining maximum effects under given conditions in the process of satisfying and developing the aspirations of buyers (GARBARSKI et al. 1994, p. 41).

Knowing the aspirations of buyers in a given market segment and the complete conditions of enterprise operation, it is possible to determine the characteristics of the product in highest demand among the buyers, the most effective and best accepted level of prices, the most effective distribution channels and the most efficient forms of promotion and advertising. In this way, applying the detailed analysis of individual instruments and actions and

synergies between them, it is possible to draft the ideal concept of marketing-mix, characterized by the ability to generate large effects in influencing the buyers and market phenomena.

As a consequence, it is necessary to carry out such analysis that results mainly from the fact that the scope and intensity of influencing the market by individual marketing instruments and actions as well as their importance for enterprises do not stay at the same constant level (GARBARSKI et al. 1994, p. 42).

Frequent changes in business environment lead to modifications of their behaviors. Those behaviors are expressed in changes of the configuration of competition tools applied by enterprises. Changes in the structure and intensity of application of various competition tools depend on widely understood resources of the enterprises, their development and influence on strategic goals chosen for achievement. Unchanged status of resources allows, however, a limited number of competition tools configurations. Dynamically changing environment frequently forces changes in the status and structure of resources to generate the most favorable configuration of competition tools applied (GODZISZEWSKI 1999, p. 287).

Activities of enterprises aimed at winning the consumers are most frequently visible in their market offer. As a consequence, the skills in using specific competition tools are precious assets of the enterprise in gaining competitive advantage. That is of paramount importance in view of the recent accession of Poland to the system of European economy.

As a consequence the ability of assessment of the influence of resources available to enterprises on the current scope of competition tools application in food sector enterprises and assessment of differences (distances) in application of competition tools between enterprises covered and their major competitors in their current markets as well as their competitors from the European Union is an important issue to be studied today. It is also important to be able to point at the competition tools that will be used most often in the integrated European market, or the global market.

Methodology of studies

Within the research program implemented at the Faculty of Economic Sciences of the University of Warmia and Mazury in Olsztyn, the problem group 9 "Structural, economic and legal changes in social and economic processes" subject number 1207.804 "Adjustment of enterprises to operation under conditions of European integration" results were obtained from studies carried out in 86 food industry enterprises in the region of Warmia and Mazury.

Based on subject literature (HAFFER 1999, p. 52, KALIŃSKA 1999, p. 127), 18 competition instruments considered the most frequently applied ones in enterprises in Poland and globally (tab. 1) and 11 functional-resource areas building the so-called enterprise competitiveness potential were identified.

The results obtained from the studies cover, among others, the assessment of the influence of resources in the enterprises covered on application of individual competition instruments. Mutual relations between individual competition instruments and functional-resource areas treated jointly were determined on the basis of grades awarded by management staff of the enterprises covered. Those relations were presented on the basis of the matrix field where the appropriate grade of relation power (influence) was entered according to six level scale where:

- 0 – means absolutely no influence between functional-resource areas upon application of individual competition instruments,
- 1 – means unimportant relation,
- 2 – means relation of low importance,
- 3 – means relation of importance,
- 4 – means relation of high importance,
- 5 – means relation of fundamental importance.

The assessment also covered the scope of competition instruments application by food sector enterprises in their current markets as well as the distance in their application as compared to their main competitors. Aiming at assessment of application of the 18 identified competition instruments in the current markets, during the questionnaire based studies, the management of the enterprises was asked to present that assessment. The assessment was made based on a six level scale from 0 to 5, where:

- 0 – means that a given competition instrument is not applied at all by a given enterprise;
- 1 – that it is applied very rarely;
- 2 – that it is applied rarely;
- 3 – that it is applied quite frequently;
- 4 – that it is applied frequently;
- 5 – that it is most often used by the enterprise as a competition instrument.

To assess the distance in application of competition instruments from major competitors in food industry the management staff of enterprises covered was requested to assess the status of competition instruments application by their enterprises in their current markets as compared to application of such instruments by major competitors according to a five level scale from -2 to +2, where:

- (-2) – means that the given competition instrument in your enterprise is much worse than in its major competitors;

(-1) – means that the given competition instrument is worse than in its major competitors;

0 – means that the given competition instrument is the same as in its major competitors;

(+1) – means that the given competition instrument in your enterprise is better than in its major competitors;

(+2) – means that the given competition instrument in your enterprise is much better than in its major competitors.

Assessment of functional-resource areas influence on application of individual competition instruments

To obtain an answer to the question of what is the influence of functional-resource areas on application of individual competition instrument its grade was calculated as the average of the total influence of functional-resource areas for each competition instrument separately. The power of the relation between functional-resource areas and the given competition instrument was calculated as the average of grades awarded by respondents from all enterprises covered. The influence of functional-resource areas on individual competition instruments was interpreted as the influence of all elements (resources) generally understood as components of the competitive potential of the enterprise.

The results presented in table 1 indicate that the functional-resource areas had the largest influence on application of such competition instruments as company image, product price, product quality and product brand. That influence could be classified as more than significant. The relation of fundamental importance in creating company image, according to management staff, applied to the information area. Also areas such as marketing, organization and management, quality management and employment were highly important for company image. In case of the areas of logistics and research and development activity the relation with creating the company image was of little importance. The product price as an instrument of competition had the strongest relation to the marketing area. It was assessed as relation of high importance. The price was influenced in a similar way by areas of production, information and finance. The relation between price and the area of intangible resources and research and development area was assessed as having little importance. Product quality was under the strongest influence of quality management and production areas. Areas of marketing and information showed a relation of low importance.

Table 1

Influence of functional-resource areas on application of competition instruments

No.	Competition instruments	Average
1	Company image	3.42
2	Price of products	3.24
3	Quality of products	3.12
4	Product brand	3.08
5	Width of products range	2.98
6	Difference of products offered (from products of competitors)	2.95
7	Flexibility in adjusting products to needs of clients	2.94
8	Access to products convenient for clients	2.93
9	Advertising	2.90
10	Payment conditions	2.89
11	Floating new products to the market	2.86
12	Promotion of sales	2.79
13	Stimulating (creating) so far unknown needs of the consumers	2.70
14	Scope of post-sale services	2.61
15	Guaranty conditions and term	2.56
16	Scope of pre-sale services	2.22
17	Quality of post-sale services	2.14
18	Price of post-sale services	1.95

Source: Own work based on questionnaire studies.

The areas of quality management, marketing and production showed the strongest link to the product brand. That relation was assessed as a relation of high importance. On the other hand the areas of finance and employment, according to respondents, had a relation of low importance to the product brand.

All functional-resource areas treated jointly had an influence of low importance on application of such competition instruments as scope of pre-sale services (2.22), quality of post-sale services (2.14) and price of post-sale services (1.95). According to the management staff of the enterprises covered there was no important relation between the listed competition instruments and the following functional-resource areas as the intangible" resources area, research and development area and production area in case of scope of provided pre-sale services and quality of post-sale services. The area of logistics also showed unimportant relation with prices of post-sale services.

Assessment of competition instruments application scope

Analysis of results obtained from studies based on arithmetic averages of the scale of competition instruments application (see tab. 2) allows stating that in the enterprises covered the most frequently used competition instruments were product quality (4.00), company image (3.75), width of products range offered (3.67), access to products convenient for clients (3.62), price (3.32) and product brand (3.27). Out of 18 identified competition instruments, 4 are applied frequently, 10 quite frequently and the other 4 rarely.

It can be easily concluded that the food sector enterprises covered, similar to other enterprises in Poland (HAFFER, 1999, pp. 49-76) generally focus on quality of their products, their wide range and the positive image of the company in perception of clients. Those instruments, according to management staff, represent their current strength in competitive combat against the most dangerous market competitors. Product price, that so far is the most important criterion in taking the decision on purchase among the consumers is also an important instrument frequently applied in competition between companies in the market.

Table 2
Scope of competition instruments application by enterprises in their current markets

No.	Competition instruments	Grade (0 to 5)
1	Quality of products	4.00
2	Company image	3.75
3	Width of products range	3.67
4	Access to products convenient for clients	3.62
5	Price of products	3.32
6	Product brand	3.28
7	Flexibility in adjusting products to needs of clients	3.27
8	Payment conditions	3.22
9	Guaranty conditions and term	3.13
10	Scope of pre-sale services e.g. presentation of offer, etc.	3.08
11	Promotion of sales	2.80
12	Advertising	2.78
13	Floating new products to the market	2.78
14	Difference of products offered (from products of competitors)	2.52
15	Scope of post-sale services e.g. home delivery of goods, etc.	2.42
16	Quality of post-sale services	2.42
17	Stimulating (creating) so far unknown needs of the consumers	2.12
18	Price of post-sale services	2.08

Source: Own work based on questionnaire studies.

According to the assessment by the enterprises the prices of post-sale services (2.08), stimulating so far unknown needs of the consumers (2.12), quality of post-sale services (2.42), difference of products offered from products of competitors (2.52) and floating new products to the market (2.79) are of the lowest importance among competition instruments applied. That confirms the fact that the market in which the enterprises covered function is a conservative market possessing no innovative character. The results of studies also show that the enterprises still have problems with appreciating the research and development and innovation areas. Those areas are still the areas characterized by low activity in using them for winning the competitive advantage. At the same time they represent the future reserve where progress and development of resources could secure effective competitive struggle against competitors in the global market.

Assessment of distance in application of competition instruments

The results of studies concerning assessment of distance in competition instruments application calculated as arithmetic averages for all enterprises participating in the study are presented in table 3.

Assessment by management staff indicate that compared to the major competitors the covered enterprises applying a specific set of competition instruments possess few, just 5 instruments, that are better than in case of the major competitors, 2 instruments that are assessed to be applied at a similar level while the majority, 11 competition instruments are graded worse than in case of the major market competitors. The structure of the power distance of competition instruments applied by food sector enterprises to the major competitors is presented in figure 1.

The assessed 18 competition instruments were ranked according to the positive and negative deviation from 0 that in this case represents the equilibrium in application of competition instruments between the covered enterprises and the major competitors. That means that the enterprises covered have few instruments that have stringer power of influencing the buyers than the competition instruments applied by the major competitors. It should be assumed that the means of influence of the covered enterprises in the markets that are their main domain are insufficient to secure for them obtaining the competitive advantage in the future and a significant improvement of their current market position. Creating the appropriate set of market competition instruments also expresses the implementation of accepted competition strategies by those enterprises.

Table 3

Distance between competition instruments applied in the enterprises covered and those applied by their major competitors

No.	Competition instruments	Grade (-2 to +2)
1	Quality of products	0.61
2	Product brand	0.42
3	Access to products convenient for clients	0.34
4	Width of products range	0.22
5	Difference of products offered (from products of competitors)	0.07
6	Flexibility in adjusting products to needs of clients	0.01
7	Company image	-0.03
8	Guaranty conditions and term	-0.11
9	Price of products	-0.23
10	Payment conditions	-0.25
11	Scope of pre-sale services e.g. presentation of the offer, etc.	-0.35
12	Price of post-sale services	-0.36
13	Promotion of sales	-0.44
14	Quality of post-sale services	-0.48
15	Floating new products to the market	-0.52
16	Advertising	-0.66
17	Scope of post-sale services e.g. home delivery of goods, etc.	-0.68
18	Stimulating (creating) so far unknown needs of the consumers	-0.91

Source: Own work based on questionnaire studies.

According to the assessment by food industry enterprises management staff already that small number of instruments allows effective competition and improvement of market position as well as achievement of competitive advantage in their domains of activity under the current market conditions. Those competition instruments are:

- quality of products,
- product brand,
- access to products convenient for clients,
- width of the range of products,
as well as, to a minor extent
- difference of products offered (from products of competitors), and
- flexibility in adjusting products to needs of clients.

It can also be noticed clearly that enterprises covered present a lower quality market offer as compared to the major competitors in the areas of competition instruments such as:

- stimulating so far unknown needs of the consumers,

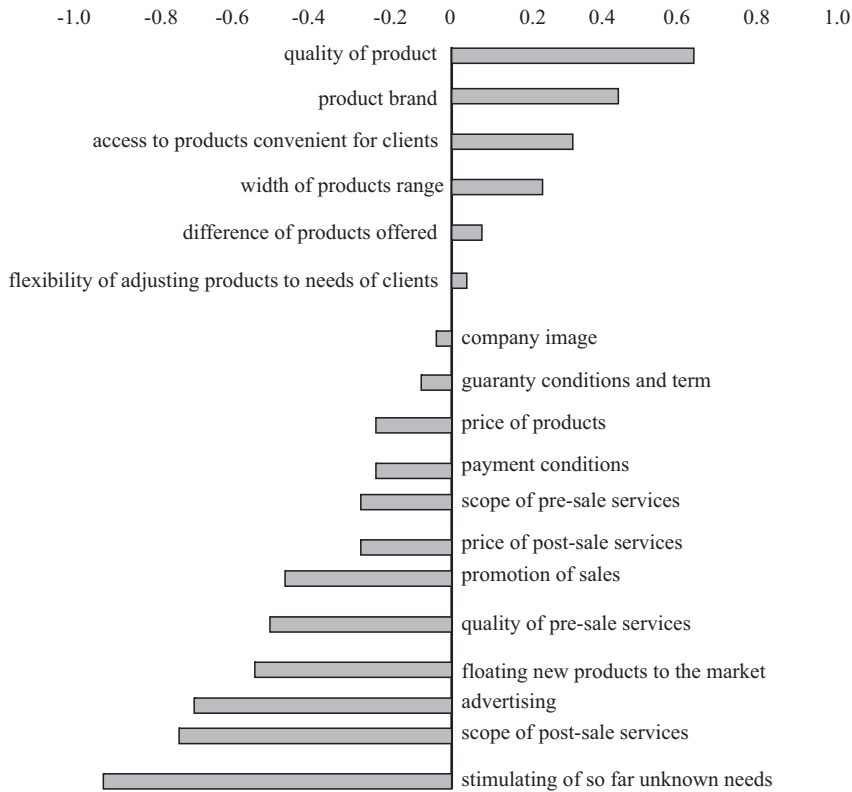


Fig. 1. Graphic presentation of the distance in competitive power of competition instruments applied by the enterprises covered as compared to their major competitors (0 – means equilibrium)

Source: Own work based on questionnaire studies.

- scope of post-sale services,
- advertising,
- floating new products to the market,
- promotion of sales,
- prices of products and payment conditions.

That fact clearly indicates that enterprises covered have large problems with formulating, implementing and maintaining competing strategies that are effective for them and differ from strategies applied by competitors, that is strategies that are unique.

Those weaknesses gain a deeper sense in the situation when we link their analysis to the use of available resources by enterprises. The enterprises covered show shortcomings as compared to their major competitors in such resources as research and development area, marketing, finance or intangible

resources (the here mentioned functional-resource areas were subject to studies and assessment in another part of the research subject). That causes the situation that the above specified competition instruments compared to the instruments applied by major competitors of enterprises covered are their weaknesses in influencing the market.

Conclusion

The obtained results of studies clearly indicate that resources available to covered food sector enterprises exert the largest pressure on application of such competition instruments as company image, price of products, quality of products brand and width of products range. On the other hand low importance of influence of resources can be noticed in case of application of instruments such as scope of pre-sale services as well as quality and price of post-sale services.

To improve the effectiveness of the most often used competition instruments, food sector enterprises should immediately build and improve their resources as well as tangible and intangible characteristics. That applies mainly to the research and development as well as marketing activities. Strong resources in those functional areas would allow enterprises covered application of specific and at the same time richer configurations of competition instruments allowing combat on equal terms with domestic as well as European Union competitors. The necessary condition to achieve that is to develop and implement unique strategies, different from those of competitors, which would allow domestic enterprises an increase in competition effectiveness using instruments that are currently undervalued and as a consequence applied less frequently, creating as for today the lower quality of the offer for consumers. A change of strategies of enterprises in that direction would allow competition on equal terms in developing and maintaining competitive advantage at a longer time perspective guarantying development and survival at the European market treated as the global market.

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PRODUCT INNOVATIONS AS THE SOURCE OF ENTERPRISE COMPETITIVENESS

Krystyna Romaniuk

Chair of Microeconomics
University of Warmia and Mazury in Olsztyn

Key words: competition, competitiveness, instruments of competing, innovations, product innovations.

Abstract

Enterprises continually search for ways of improving and strengthening their competitiveness. This is not an easy task. Continuous floating of new products to the market is one of the options. Thanks to product innovations the enterprise can increase its market share, the level of achieved profit, improve its competitive position and, as a consequence, its competitiveness. This study aimed at identification of strategic goals of creating new products, factors determining undertaking of innovation activities in that area and factors determining market success of such products. The studies showed that floating new products to the market serves, first of all, achievement of typical market goals. The success of a new product strategy is determined by marketing factors as well as the financial standing of the company, its image and promotion potential. The major factors stimulating innovative activities of the enterprise are the status of market needs and preferences, rate of changes in them, technology progress as well as resources and skills of the enterprise.

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Krystyna Romaniuk

Katedra Mikroekonomii
Uniwersytet Warmińsko-Mazurski w Olsztynie

Słowa kluczowe: konkurencja, konkurencyjność, instrumenty konkurowania, innowacje, innowacje produktowe.

Abstract

Przedsiębiorstwa stale poszukują sposobów na poprawę i umacnianie swej konkurencyjności. Nie jest to zadaniem łatwym. Jedną z możliwości jest wprowadzanie na rynek nowych wyrobów w sposób ciągły. Dzięki innowacjom produktowym przedsiębiorstwo może zwiększać swój udział w rynku,

poziom realizowanych zysków, poprawiać swoją pozycję konkurencyjną i konkurencyjność. Celem badań była identyfikacja celów strategicznych kreowania nowych produktów, czynników determinujących podejmowanie działalności innowacyjnej w tym zakresie oraz czynników decydujących o sukcesie rynkowym tych wyrobów. Badania wykazały, że wprowadzanie na rynek nowych produktów służy przede wszystkim realizacji celów typowo rynkowych. O sukcesie strategii nowego produktu decydują czynniki marketingowe, a także zasoby finansowe firmy, jej renoma i możliwości promocyjne. Głównymi stymulatorami działalności innowacyjnej przedsiębiorstwa są: stan potrzeb i preferencji rynku, szybkość ich zmian, postęp w technologii, a także zasoby i umiejętności przedsiębiorstwa.

Importance of innovation for enterprise competitiveness

Competition is a phenomenon occurring in various aspects of human social and economic life. It is also the subject of interest of economic sciences in both theoretical and practical aspects. Since the beginnings of history the questions were asked what to do to win in the competitive struggle, how to be competitive against the increasing number of market participants? Those questions are still valid. Market situation is becoming increasingly complicated. Complexity of processes occurring in the economy and enterprises increases. Enterprises are forced to take decisions in a shorter and shorter time. Unfortunately, there is no single answer to the questions asked. If the enterprises had known a panacea to their problems, they would all have been successful in the market. In that complex and multidimensional situation a statement could be risked that only the enterprises that, among others, will be able to continuously float new products to the market will have a chance of being successful because, as Peter Drucker says the “enterprise that is unable to create innovation dies” (DRUCKER 1992). Successful innovations that represent creating and floating to the market new products adjusted to changes occurring in the environment are, as a consequence, the main source of meaningful success.

The notion of innovation is not interpreted in just one way in the subject literature. According to Sztucki “innovation is every idea, behavior or thing that is new because it differs in quality from ideas, behaviors and things known so far. Transformation of innovation into products and market activities represents starting something entirely new, undertaking a complicated activity burdened with a high level of risk and uncertainty” (SZTUCKI 1998).

The product innovations that represent production of new products or improved versions of already existing products are subject of analysis in this paper (ŁOBEJKO 2005). The importance of product innovations results, among others, from the fact that new products determine the market share of the enterprise, the rate and level of income increase, the market position and the competitive leadership (KRAWIEC 2001). They are also among the key elements of competition. According to Haffer “the strategic goals of contemporary

enterprises are achieved (...) to an increasing degree through quality of new products with active support of other marketing instruments" (HAFFER 1998). Considering the fact that in the United States new products currently give companies; ca. 40% of their revenues from sales, he states that their importance among marketing instruments of competition will continually increase. That is why increasingly frequent floating of new products to the market coupled with the trend of long-term stabilization of prices and subjecting the other marketing instruments to promoting the new products can be observed.

Material and method

The analyzed problem was characterized on the basis of studies conducted at one of the best and largest dairy cooperatives in Poland. It consists of 7 production plants situated in Podlaskie, Warmia and Mazury and Kujawsko-Pomorskie voivodships. It has the daily level of raw milk purchases of 3 million liters. That volume of milk purchased places it at the industry leader position. That enterprise is also among the market leaders as concerns the quality of products manufactured, the number of brand products (it has a number of brands among which the best known ones are "Łaciate", "Milko" or "Białe"), and it enjoys appreciation of clients and consumers. That is evidenced by the fact, that it is the winner of numerous prestigious awards including the "Mister of Exports" or the main prize in the "Expansion" category in the national ranking organized by the Confederation of Polish Employers and Amadeus Art. Those qualities determined choosing that enterprise for the studies. On the other hand the product innovations formed the object of studies. The studies conducted earlier by the author showed that floating new products to the market is one of the most important instruments of competition in dairy enterprises (ROMANIUK 2003).

The objectives of the study were as follows:

- identification of strategic goals of creating new products,
- determining the external and internal factors stimulating taking actions in the area of product innovations,
- identification of factors determining market success of new products.

The lists of analyzed factors were formulated on the basis of literature. The research tool applied was the questionnaire for the management staff at all plants. The managers assessed individual factors using the scale given in the questionnaire. The results obtained were averaged.

Strategic goals of creating new products

Considering the fact that product innovations form an element of very high importance for building competitive advantage and improving enterprise competitiveness, the management staff was asked to identify strategic goals of creating new products. The results obtained are presented in table 1. The data contained in that table indicate that floating new products to the market serves, first of all, winning new markets as well as expanding and increasing competitiveness of own offer (85.7% of answers), and strengthening the market position (71.4%). The goals given above are of typical market character and serve improving the competitive position of the studied enterprise and, as a consequence, should translate into improvement of its competitiveness. Additionally, the declared entity also declared achievement of financial goals related to innovation activities undertaken. They include improvement of profitability, increase of production volume and competing on price. The last of those goals was not, however, indicated too often (14.2%). That could indicate that the enterprise carries out the competitive struggle using other instruments than competing on price that represents one of the most dangerous methods of conducting the market game. The goal of using good quality resources also scored low (14.2%).

Table 1

Strategic goals of creating new products

No.	Item	% of answers
1.	Winning new markets	85.7
2.	Expanding and improving competitiveness of own offer	85.7
3.	Strengthening own market position	71.4
4.	Adjusting the offer to customer needs	57.1
5.	Profitability improvement	42.9
6.	Increase of production scale	28.6
7.	Competing on price	14.2
8.	Making use of good quality resources	14.2

Source: Own work based on empirical studies results.

Stimulators of activity in undertaking the new product strategy

The management of the subject enterprise assessed the power of stimulating influence of internal and external factors on undertaking production of new products by applying the 0 to 5 scale, where: 0 represented no influence,

1 – very low influence, 2 – small influence, 3 – moderate influence, 4 – high influence and 5 – very high influence.

The results obtained concerning the external factors are presented in table 2. The data in that table indicate that almost all external factors of market character influencing the innovative activity of the subject enterprise had a very high or high influence. The highest scoring factors were the status of needs and preferences of the market and the rate of their change, progress in technology, level of customer requirements and development of the free market. The group of strong innovation stimulators included also progress in products and shortening of their life cycles, competition between domestic products and the domestic demand for them. The factors listed are important from the perspective of enterprise competitiveness. Not considering them creates a threat of deterioration of the competitive position in the market and in a long time perspective can become the cause of serious problems in the enterprise.

Table 2

External stimulators of a new product strategy

No.	External environment factors	Score
1.	Status of market needs and preferences	4.86
2.	Progress in technology	4.71
3.	Customers requirements level	4.71
4.	Rate of market needs changes	4.57
5.	Free market development	4.43
6.	Progress in products	4.11
7.	Competition of domestic products	4.00
8.	Domestic demand for products	3.86
9.	Availability of distribution channels	3.43
10.	Shortening of product life cycle	3.43
11.	Competition of imported products	2.86
12.	Access to foreign sales markets	2.57
13.	Ease of sales of manufactured products	2.43
14.	ISO quality system	2.14
15.	Availability of information	2.00
16.	Availability of components of supplies in the market	0.00
17.	Export requirements	0.00
18.	Production level of competitive products	0.00
19.	Economic growth rate	0.00

Source: Own work based on empirical studies results. The study was carried out together with master degree student Kariona Rejniak.

Also the following factors were stimulators of innovation according to the management staff in the subject enterprise: competition of imported products, access to foreign sales markets and ease of selling the manufactured products. The reason for that could be the fact that the studied cooperative has exported a significant part of its products for years. Currently the share of products for export in total sales is 30%. Additionally, its products have enjoyed high interest of the buyers for years. The management of the cooperative says that there were periods of such high increases in demand for products offered by the cooperative that there were problems with satisfying the demand. The insufficient production capacity was the main problem on the supply side.

The ISO quality system and access to information were also included among factors influencing undertaking of innovative activities. Those opinions could raise some doubts, particularly as concerns the later element. At the time when success of the enterprise is determined by speed of obtaining and using information such low ranking of that factor is surprising. As concerns the ISO quality system, its importance for the cooperative is lower than that of the HACCP system, which is compulsory for all entities participating in the food chain. This could be, as a consequence, the reason for its low ranking. The external factors that were ranked as of no influence on the innovation activity of the enterprise were availability of supplies of components in the foreign market, export requirements, level of competitive products promotion and the economic growth rate.

Next to the external there are also internal innovation activity stimulators consisting of resources and skills. They are presented in table 3.

Among 20 internal factors, 6 were ranked as having a very high influence, and 6 as having a high influence on undertaking innovation activities. The first group included the following stimulators: scope of knowledge of the market needs and preferences, the necessity to expand the products range, level of technical and market experience, attitudes of marketing services, financial standing of the enterprise and willingness to export products. The second group of factors, i.e. those with high influence on initiating the new product strategy included: scope of conducted development studies, expected profit level, skills and attitudes of management staff, scope of formulated strategic goals, willingness to stay in the market and propensity of the enterprise to take risk. Analysis of those factors allows concluding that the subject enterprise is aware of its market position. It takes effort to improve it through good knowledge of the market, a characteristic leader attitude, manifesting through development efforts using the available management staff skills, financial resources and high propensity to take risk. The weakest innovation activity stimulators were: the structure of power in the enterprise and the level of product strategies knowledge. Additionally, the subject cooperative decided

Table 3

Internal stimulators of a new product strategy

No.	Internal environment factors	Score
1.	Scope of knowledge of market needs and preferences	5.00
2.	Necessity to expand the range of products	4.86
3.	Level of technical and market experience	4.71
4.	Enterprise financial standing	4.71
5.	Willingness to export products	4.57
6.	Skills and attitudes of marketing services	4.43
7.	Strong willingness to stay in the market	4.00
8.	Expected profit level	3.86
9.	Skills and attitudes of management staff	3.43
10.	Scope of development research carried out	3.43
11.	Scope of formulated strategic goals	3.30
12.	Propensity of the enterprise to take risk	3.28
13.	Necessity of manufacturing costs reducing	2.86
14.	Necessity of product quality improvement	2.57
15.	Level of cooperation with distributors	2.14
16.	Structure of power in the enterprise	1.28
17.	Level of product strategies knowledge	1.14
18.	Aiming at keeping with global standards	0.00
19.	Level of knowledge on patterns to be followed	0.00
20.	Skills and attitudes of staff in R&D units	0.00

Source: Own work based on empirical studies results. The study was carried out together with master degree student Kariona Rejniak.

that three factors had entirely no influence on its innovation activities. The first of them is aiming at achievement of the global standards. The reason for that situation could be that the subject entity already currently manufactures very high quality products. The second factor is the skills and attitudes of staff in the R&D units. In the majority of dairy cooperatives in Poland there are no own R&D units and, as a consequence, that factor scored zero. The last factor is the level of knowledge on the examples to be followed. As pointed out at the beginning of the analysis, the investigated cooperative is the dairy market leader. It seems that the situation could be the main reason why that element was ranked as having no influence on innovation activity.

Factors determining market success of new products

Factors determining market success of new products were divided into market and resource factors. The scale applied was identical to that used in case of stimulators of activity to take decisions concerning creation of new products. The results are presented in tables 4 and 5.

Table 4

Market factors determining success of the new product strategy

No.	Market factor	Score
1.	Level of demand for a product of a given class	4.71
2.	Market size (actual demand)	4.57
3.	Level of quality competition	4.43
4.	Level of price competition	4.43
5.	Level of satisfaction with competitor products	4.14
6.	Number of competitors	3.42
7.	Rate of changes in user requirements	3.00
8.	Frequency of floating new products to the market	2.71

Source: Own work based on empirical studies results. The study was carried out together with master degree student Kariona Rejniak.

Table 5

Resource factors determining success of the new product strategy

No.	Resource factor	Score
1.	Enterprise financial resources	5.00
2.	Skills and possibilities of advertising and promotion	4.71
3.	Enterprise image	4.00
4.	Possession of efficient distribution	3.57
5.	Skills of management staff	3.00
6.	Propensity of management to take risk	2.57

Source: Own work based on empirical studies results. The study was carried out together with master degree student Kariona Rejniak.

Table 4 shows that market factors that have the strongest influence on success of new products strategies are the level of demand for products of a specific class, market size and the level of quality and price competition. The elements listed are of typical marketing character. They indicate, that market success of a new product can be determined by good identification of needs and preferences of clients achieved at the marketing studies stage. Continuous

improvements in quality of products offered as well as the price are not without importance. That is justified considering that dairy products that were the object of the study belong to the so-called first need products group.

Among the resource type factors (table 5) the factors with the highest importance for market success of a new product were: financial resources of the enterprise, skills in and possibilities of applying advertising and promotion as well as the image of the enterprise. The reasons for that could be found, among others, in existence of fierce competition in the dairy sector. During the buying process the client encounters a very rich offer of products. In his choice he will show more propensity to try a new product that he knows from promotional information and manufactured by the enterprise that brings positive associations. Reaching customer awareness and creating the positive image requires, however, availability of significant financial resources.

Conclusions

Competitiveness of the enterprise can be managed using a variety of instruments and competitive activities. Taking action concerning new product strategy is one of them. The studies conducted allowed formulating the following conclusions relative to the subject enterprise:

1. Factors determining innovation activity of the enterprise are of both internal and external type. Among the external factors, the factors of market character including, e.g. the status of market needs and preferences and rate of their change, progress in technology, level of customer requirements and free market development are the major stimulators of new product strategy. They are all highly important from the enterprise competitiveness point of view. The internal factors influencing the activity in undertaking innovative activities include resources and skills available to the enterprise. The main factors in that group are: scope of knowledge on the market needs and preferences, financial standing of the enterprise and its propensity to take risks.

2. Implementation of the new product strategy serves, first of all, development of market goals of the given enterprise among which the most important ones are: winning new markets, expansion and improvement of competitiveness of own offer and market position strengthening.

3. Market success of a new product is determined by factors of typically marketing character (level of demand for the product of a given class, market size, level of quality and price competition) as well as the resources. In that later group the financial resources of the enterprise, its image and promotional abilities are the most important factors.

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COOPERATION OF ENTERPRISES WITH OTHER ENTITIES IN THE AREA OF INNOVATION ACTIVITY

Anna Strychalska-Rudzewicz, Barbara Grzybowska

Department of Enterprise Economics
University of Warmia and Mazury in Olsztyn

Key words: innovation, cooperation, clusters.

A b s t r a c t

The paper presents the results of empirical studies on cooperation of enterprises with other entities in the area of innovation activity that involved 156 enterprises from the region of northeastern Poland. It was studied whether enterprises cooperate in the area of innovation with three groups of partners, i.e. their suppliers and buyers, with other enterprises and with scientific institutions (institution carrying scientific research) as well as organizations dealing with transfer of innovations. Attempts were made to obtain an answer concerning the objective of cooperation and its subject. The cooperation was much more frequently undertaken by larger entities and it involved a wide range of partner institutions. Quite frequently other enterprises with the same or similar type of activity were partners. The cooperation occurred most frequently within the chain of supplier-processor-buyer, which is consistent with the global trends. The cooperation with suppliers most frequently focused on searching for new raw materials of better quality than those used so far while that with the buyers focused mainly on obtaining knowledge on expectations and preferences of clients. Unfortunately small and medium enterprises represent a low level of cooperation with innovation transfer institutions. As a consequence, activities supporting that transfer are necessary.

WSPÓŁPRACA PRZEDSIĘBIORSTW Z INNYMI PODMIOTAMI W ZAKRESIE DZIAŁALNOŚCI INNOWACYJNEJ

Anna Strychalska-Rudzewicz, Barbara Grzybowska

Katedra Ekonomiki Przedsiębiorstw
Uniwersytet Warmińsko-Mazurski w Olsztynie

Słowa kluczowe: innowacje, współpraca, klastry.

A b s t r a k t

W artykule przedstawiono wyniki badań empirycznych dotyczących współpracy przedsiębiorstw z innymi podmiotami w zakresie działalności innowacyjnej, które przeprowadzono wśród 156 przedsiębiorstw z północno-wschodniej Polski. Zbadano, czy przedsiębiorstwa współpracują

w zakresie innowacji z trzema głównymi grupami partnerów, a mianowicie: ze swoimi dostawcami i odbiorcami, z innymi przedsiębiorstwami oraz z instytucjami naukowymi (instytutami prowadzącymi badania naukowe) i organizacjami zajmującymi się transferem innowacji. Starano się także uzyskać odpowiedź na pytanie, jaki był cel współdziałania oraz czego dotyczyła współpraca. Współpracę tę znacznie częściej podejmowały większe jednostki i dotyczyła szerszego grona instytucji partnerskich. Dość często partnerami współpracy były inne przedsiębiorstwa należące do tego samego lub zbliżonych rodzajów działalności. Współpraca odbywała się najczęściej w łańcuchach: dostawca – producent – odbiorca, co jest zgodne z tendencjami światowymi. Przedmiotem współpracy z dostawcami było najczęściej poszukiwanie nowych surowców, lepszych jakościowo od dotychczas stosowanych, natomiast z dostawcami – poznanie oczekiwań i preferencji klientów. Niestety małe i średnie firmy w małym stopniu współpracują z instytucjami transferu innowacji. Niezbędne są więc działania wspierające ten transfer.

Introduction

Competitiveness of enterprises, and as a consequence of the entire national economy, is determined to a large extent by innovation, i.e. the rate of finding and implementing innovations (TARGALSKI 1999, BESANKO et al. 2006). Already the classics of economy such as Adam Smith, Alfred Marshall or Joseph Schumpeter appreciated the importance of innovation as the process encompassing technological development and commercial activities. They also noticed the influence of innovation on economic growth. PORTER (1998) believes that national economies dominated by business sectors where companies are less innovative develop slower as concerns employment and added value than economies possessing sectors characterized by a higher level of innovation. That author noticed appearance of a new stage of economic development that he defined as innovation-led growth as different from the earlier growth stage defined as investment-led growth.

Unfortunately, among the European Union countries Poland belongs to the group of countries characterized by the lowest level of innovation (Tab. 1).

Table 1

Division of countries into four groups according to their innovation level

Innovation level of countries (I – high, IV – low)			
I	II	III	IV
Scandinavian countries, United Kingdom, The Netherlands, Ireland	Germany, France, Austria, Belgium, Luxembourg, Estonia, Slovenia	Spain, Italy, Czech Republic, Hungary, Lithuania, Malta	Portugal, Greece, Latvia, Cyprus, Poland , Slovakia

Source: own work based on WERESA (2005).

According to many authors (BOGDANIENKO 2004, WERESA 2005, KOWALCZYK et al. 2000), proliferation of new ideas and their practical application by enterprises are among the factors determining the innovation potential of the

country. Innovation of a company is determined by both its internal ability to generate and implement innovation projects and its ability to find and absorb such solutions that are developed by organizations and institutions dealing with both creating and promoting innovation (SOSNOWSKA et al. 2003, HAFFER 1998). FREEMAN (1991) reports that both empirical and theoretical research confirms the importance of external and internal information networks and cooperation for success of innovation. YOUNG, LAN (1997) believe that the ability to cooperate also depends on the willingness of enterprises and their internal capacity as well as whether their institutional environment supports or obstructs creating innovation. As a consequence, innovation is a continuous and evolving process determined by institutions, social agreements as well as intensity and scope of organizational interactions (GRABHER, STARK 1997, MORGAN 1997). Increasing costs and risk involved in innovation result in the situation where it is increasingly difficult for an individual company to embark on its own in activities requiring extensive research and development activities. The new paradigm of strategy based on creating value in the process of establishing closer relations with their suppliers, partners and even competitors appears (LEI 2003). As indicated by studies carried out in Western countries innovation of companies increases when they take up cooperation with other entities, particularly in the area of R&D; at the same time that cooperation is treated as a very important source of innovation (MAIRESSE, MOHEN 2001). That relation is also confirmed in studies carried out by the CSO (*Działalność...* 2002). They show clearly that almost 90% of enterprises that cooperated in the field of innovation activity with other entities were innovative enterprises. Data provided by the CSO, however, also show a relatively low scale of that cooperation among domestic companies. Industrial companies that during the years 2001-2003 had cooperation agreements with other entities concerning innovation activities represented 10.5% of the total number of industrial entities¹ (*Nauka...* 2004). At the same time those studies (quoted after HATZICHONOGLOU 1997) the relation between participation of enterprises in cooperation agreements and the level of technology they represent is observed, e.g. enterprises from the sector of *Industrial enterprises* belonging to the segment of high technology were more active in making such cooperation agreements.

The need for cooperation, as already mentioned results also from the fact that independent development of innovation requires possessing appropriate competence, resources and capacities. Unfortunately, domestic enterprises usually treat scientific research as the area on which it is possible to save and

¹ The data covers business entities in sections: Mining, Industrial processing and Generation and delivery of power, gas and water in which the employment exceeds 49 persons.

not as the activity that can generate profits. According to JASIŃSKI (1997) the one of the main weaknesses of Polish economy, as compared to countries developed from the point of view of innovation processes, is the rudimentary R&D potential within Polish enterprises. The above is confirmed by the results of studies presented in the *European Innovation Scoreboard* (2004). They indicate that R&D expenses of enterprises in Poland expressed as % of GDP are the lowest among the new EU member states (Fig. 1).

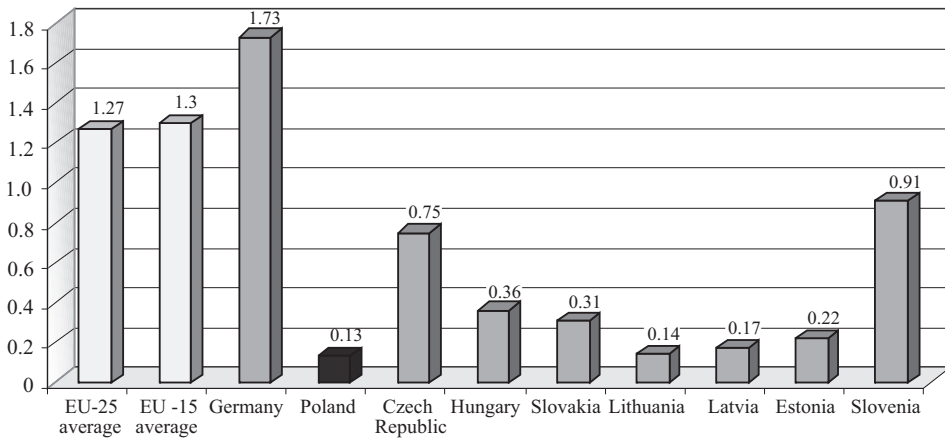


Fig. 1. R&D expenditures of enterprises as % of GDP in Germany and new EU Member States
Source: own work based on the *European Innovation Scoreboard* (2004).

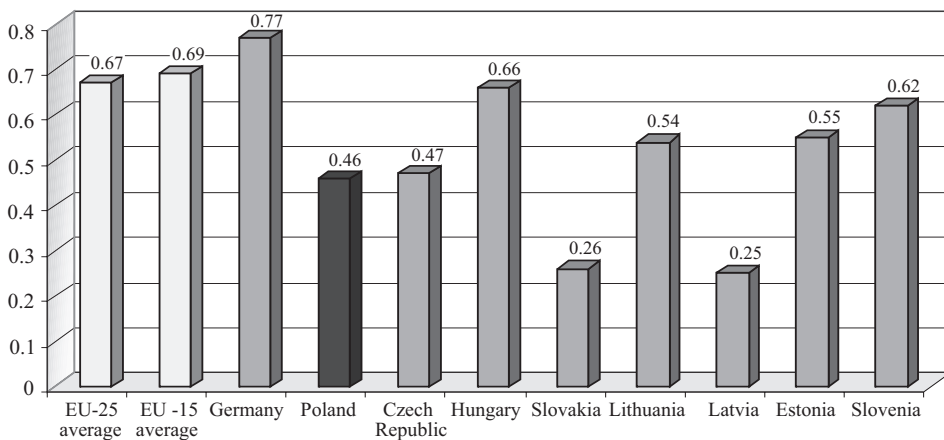


Fig. 2. Budget R&D expenditures as % of GDP
Source: Own work based on the *European Innovation Scoreboard* (2004).

The level of budget R&D expenditures in Poland as % of GDP is significantly higher than expenses of enterprises for that purpose (Fig. 2), although it is still below the weighted average for the EU Member States.

The research financing structure in Poland suggests that enterprises should cooperate closely with external entities dealing with widely understood R&D activities, especially because, according to JANASZ (2004), innovation projects implemented on the basis of cooperation between different entities have much better chances of succeeding.

Goal and methodology of studies

Extending the knowledge was the main goal of empirical studies. It was attempted to obtain answers to the following questions:

1. What typed of innovations are implemented by enterprises covered?
2. With whom did the covered enterprises establish cooperation in the area of innovation?

3. What was the goal of cooperation and what did the cooperation cover?

It was investigated whether the enterprises cooperated on innovation with the main groups of partners, that is:

1. their suppliers and buyers.
2. other enterprises.
3. scientific institutions (institutions conducting scientific research) and organizations dealing with innovation transfer.

Conclusions from the studies can also indicate those elements of cooperation that should be streamlined by applying the specific elements of support, e.g. within the frameworks of regional innovation policy implementation.

Empirical studies concerning cooperation of enterprises with other entities in the area of innovation activity covered 156 enterprises from the region of northeastern Poland. Those enterprises, according to their business activity, were divided according to the principles of Polish Business Activity Classification (PKD) into sections: A – agriculture, hunting and forestry (number of enterprises – 6), D – industrial processing (number of enterprises – 139) and F – construction (number of enterprises – 11). On the other hand, on the basis of year average employment the covered enterprises were divided into small ones – employing fewer than 50 employees (representing 39% of the group covered), medium ones employing up to 250 persons (32% of enterprises covered) and large ones employing over 250 persons (29% of enterprises covered)².

² That division is consistent with the provisions of the Act of November 19, 1999 *Business activity law*, DzU 2002, No. 1, item 2, art. 54. In classification employment only was considered because covered enterprises in their majority did not provide information on characteristics of other,

Answering the closed questions included in the questionnaire the respondents had the possibility of indicating more than one answer and as a consequence the sum of answers in the structure does not add up to 100%. The question concerning the subjects of cooperation was the open question and the enterprises could define on their own the subject of that cooperation in their case.

For the purpose of the study the *sensu largo* definition of innovation was assumed stating that innovation is what a given subject (in our case the enterprise responding) considers new.

Types of innovation implemented by enterprises covered

The group of enterprises covered was dominated by section D entities dealing with industrial processing. They represented almost 90% of the covered population of enterprises. Entities belonging to subsection DA – production of food products, beverages and tobacco products had the largest share in that group (35%).

Enterprises covered carried activities aiming at development and implementation of innovations. Those innovations had the form of new products, new processes or changes in the so-called business model (e.g. strategy change, entry into new markets, etc. – Tab. 2). The declarations by the covered group of enterprises indicate that they carry out very active innovation policies and that they do not restrict their activities to one type of innovation only. In the structure of innovations implemented in case of section F enterprises (construction), domination of process innovations is clearly visible. Such innovations were reported by over 90% of respondent enterprises. The largest number of product innovations was implemented by section D enterprises (industrial processing). Implementation of process innovations was probably

Table 2
Percentage of answers confirming cooperation of enterprises covered in the area of innovation with their suppliers and buyers

Cooperation partners	Enterprises		
	Large	Medium	Small
Suppliers	80.0	84.0	71.4
Buyers	82.2	76.9	69.6

Source: Own work based on studies.

quantitative criteria of classification (net revenues from sales of goods, services and financial operations and total assets).

a consequence of attempts at increasing the productivity of production process, and in particular, decreasing the unit costs; it could also result from the need to increase the quality level of products.

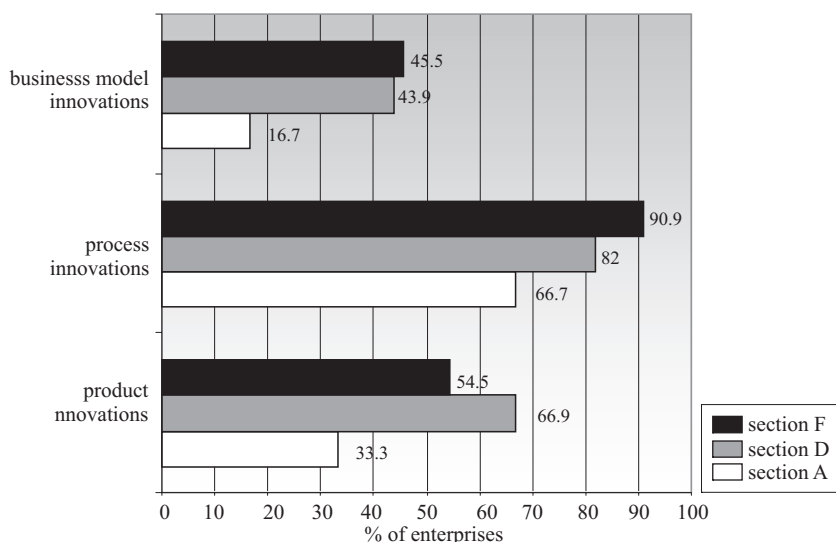


Fig. 3. Types of innovations implemented by enterprises covered (% of enterprises covered)
Source: Own work based on studies.

The questionnaire did not define the degree of innovation of implemented product innovations, although it should be assumed that the innovations represented in their majority modifications of existing products that are innovations from the point of view of the implementing enterprise (JUCHNIEWICZ, GRZYBOWSKA 2004, JOKIEL, MARCISZEWSKA 2002). The enterprises opted relatively the most rarely for innovative changes related to improvement of their market activities. However, almost 43% of the enterprises covered embark on such activities, which should be considered a highly positive phenomenon. The large gap between what is declared by the enterprises (high percentage of implemented innovations) and statistical studies concerning innovation level in Poland could result from the fact that in those later studies not all activities are treated as innovations³. On the other hand, the enterprises covered by our study probably understand innovation in the wide sense of that term (*sensu largo*), treating all new things implemented as innovations.

³ The innovation is not, e.g. a change of package or addition of new flavor additives, Marketing innovations are not considered. The innovation are technical innovations implemented by the enterprise during the last 3 years.

Cooperation of enterprises in the area of innovation

Literature is dominated by the view that cooperation between entities of different types is of major importance for the process of developing and implementing an innovation (e.g. FREEMAN 1991, GRABHER, STARK 1997, MORGAN 1997, LOVE, ROPER 2004, QUINTANA-GARCIA, BENAVIDES-VELASCO 2004, RONDE, HUSSLER 2005, LIEFNER et al. 2006). However BROUWER and KLEINKNECHT (1996) believe that cooperation occurs mainly in case of weak innovators because participants in it are companies that must share the results of their research with other enterprises. That thesis was not confirmed in studies by LOVE and ROPER (2004) carried out in Germany and the United Kingdom. Considering high innovativeness of German manufacturing enterprises of various size and their extensive cooperation networks, it is impossible, according to LOVE and ROPER (2004), that only enterprises weak in the area of innovation trigger the mechanisms of cooperation.

ARVANITIS and HOLLENSTEIN (1996) suggest that cooperation is a phenomenon characteristic for small businesses as they lack resources to create innovation on their own. That thesis was not confirmed in the carried out studies, which indicate that the number of medium and large enterprises that established such cooperation is larger than that of the small ones. Among small enterprises (with employment of up to 50 people), just over 11% reported that so far they had not been involved in such cooperation. In the other groups of enterprises the share of such enterprises was only around 2%. Also the studies by LOVE and ROPER (2004) did not confirm the thesis by ARVANITIS and HOLLENSTEIN (1996), because no statistical difference was recorded between small⁴ and large enterprises and the level of involvement in cooperation.

The vast majority of the respondent enterprises established cooperation in the area of innovation activity with external entities. Embarking on such cooperation they did not limit themselves to just one partner – they carried out cooperation with a number of partners at simultaneously (that applied in particular to large enterprises but also to a few small and medium ones). The cooperation of covered enterprises was generally vertical, along the supply chain (Tab. 2). Enterprises that established cooperation declared that it involved mainly their suppliers and buyers and in case of the small and medium enterprises involved the suppliers more often than the buyers while in case of large ones it involved the buyers more often.

Joint activities are undoubtedly beneficial for all partners as it secures decreasing the uncertainty of sales of products in case of suppliers and satisfying the expectations concerning new products in case of buyers. Empiri-

⁴ The authors considered that small enterprises were those employing no more than 100 persons.

cal studies carried out by OERLEMANS and MEEUS (1995) also showed that the majority of innovations occur within the supply chain: supplier – processor – buyer. Other organizations are in most cases involved in exchange of information and knowledge. Cooperation within the supply chain is generally of informal nature sometimes supported by contracts with suppliers. BIDAULT et al (1998) noticed, particularly in automotive industry worldwide, an increase of participation of parts and components suppliers in the innovation process. Results of studies by MIOZZO and DEWICK (2004) suggest that the strength of cooperation between organizations in construction industry can play an important role in improvement of economic results in some countries. That covers in particular the links to suppliers and sub-suppliers, universities, government organizations, architects and engineers, clients and international cooperation with other contractors.

Other enterprises conducting the same or similar type of business were partners in cooperation quite frequently. Almost 60% of entities covered participated in such cooperation relations (ca. 54% of small, 62% – of medium and almost 69% of large entities) (Tab. 3).

Table 3

Percentage of answers confirming cooperation of enterprises covered with other enterprises in the area of innovation

Cooperation partners	Enterprises		
	Large	Medium	Small
Other enterprises	68.9	62.0	53.6

Source: Own work based on studies.

Sometimes cooperation can also take place between competitors the relations of which evolve according to the win-win principle instead of the earlier win-lose situation (KŁOSIEWICZ-GÓRECKA 2003). In intensive knowledge industries where frequently large outlays on R&D activities are required the enterprises have a better motivation to form alliances in the field of innovation. Many of those alliances are characterized by partners applying strategies of both competition and cooperation (QUINTANA-GARCIA, BENAVIDES-VELASCO 2004). The same company can be both a competitor and a partner (KHANNA et al. 1998). Achieving success in business in the present times required the companies to apply both those strategies simultaneously (LADO et al. 1997). English literature defines the strategy of simultaneous competition and cooperation as the strategy of co-opetition. Studies by QUINTANA-GARCIA, BENAVIDES-VELASCO (2004) in small and medium enterprises from biotechnology sector confirmed the positive influence of co-opetition strategy on the ability to

innovate. Cooperation with direct competitors has positive and important influence on development of product lines. Alliances with direct competitors also had a positive influence on technological diversity (QUINTANA-GARCIA, BENAVIDES-VELASCO 2004). Within the so-called innovation nets where competitors cooperate technological platforms are established that serve creating the architecture for new products that often reach beyond the limits of a given industry. Competitive advantage in innovation nets is based on learning and absorption of new knowledge resources (LEI 2003).

The concept of a cluster that points at the dependence of the company on its location in a region, country or even a part of the world is an example of that approach. According to PORTER (2001) a cluster is a group of enterprises situated in geographic vicinity and other entities dealing with a specific area that are linked to those enterprises and that mutually supplement one another. Well functioning clusters transform into a network of numerous, overlapping and flexible connections between individual people, companies and institutions. In Europe clusters can be found in many countries (e.g. the Italian cluster of leather shoes and fashion goods using computer systems for design of new shoes or the Baltic bioregion of Medicon Valley, etc.). Based on analysis of different clusters (local, regional, national and international), BRODZICKI et al. (2004) conclude that conducting business activity within an effectively functioning cluster has positive effects for productivity level and innovation level as well as processes of learning, absorption and diffusion of innovation.

The importance of cooperation in the context of clusters establishment is an issue that finds no straightforward interpretation in literature. Some scientists present the opinion that cooperation is necessary for success of the existing clusters and establishment of new regional clusters (DEI OTTATI 1994, YOU, WILKINSON 1994, VIPRAIO 1996). Other authors believe that the empirical material acquired so far does not confirm the importance of cooperation and that more material should be collected to confirm the importance of cooperation in the context of establishing local clusters (GROTZ, BRAUN 1997, PANICCIA 1998). The results of empirical analysis carried out by BRENNER (2005) that aimed at investigating whether innovation and local cooperation are linked to establishment of local industrial clusters showed, however, that local cooperation plays a large role in establishment of local industrial clusters. Studies by that author also confirmed that industries with a large number of process innovations show larger dynamics in establishing clusters. A similar relation does not occur in case of product innovations (BRENNER 2005).

The Gdańsk Institute for Market Economics carried out a study aiming at identification of clusters in Poland (WOJNICKA 2004). As a result of that study it was established that potential exists in Poland for development of

cooperative competition in the form of clusters. The largest number of mature clusters characteristics was presented by pharmaceutical-cosmetic industry accumulations in Warsaw and Łódź and electronics in Warsaw. Slightly poorer results were obtained for other concentration areas of high-tech industries such as pharmaceutical-cosmetics and electronics concentrations in Kraków. Polish economy in its majority consists of traditional industries that are also the major exporters. The Gdańsk Institute for Market Economics extended its analyses also to cover the furniture, textile, leather, food, fish processing, plastics and construction industries. The largest number of characteristics of a cluster was shown by concentrations of food industries in the region of Warmia and Mazury with the center in Olsztyn and in Wielkopolskie, the fish industry in Pomorskie province and two furniture clusters in Wielkopolskie province as well as the textile industry concentration in Bielsko-Biała in Silesia. The other concentrations represent few characteristics of clusters, which applied in particular to leather industry in Radom and Słupsk, plastics in Wielkopolskie and textile companies in Lower Silesia. Construction concentrations are based mainly on service companies and operate almost exclusively in the local markets. Construction companies from Lower Silesia are characterized by a certain level of cooperation but similar to the concentration of Poznań their effectiveness is low as compared to other concentrations (WOJNICKA 2004).

According to BRODZICKI et al. (2004) low propensity of entrepreneurs to cooperate with other institutions and organizations, including other enterprises, is the barrier to development of a system of clusters in Poland. The results of own studies, however, do not confirm that thesis as a large proportion of enterprises (over 50%) cooperated with other entities in the field of innovation. On the other hand, it can be suspected that establishment of clusters would require wider and more extensive cooperation.

The third type of cooperation in which enterprises covered participated was cooperation with research and development type entities (scientific institutions, universities, research and development units) and with organizations focused on innovation transfer. Those entities, however, as compared to the earlier discussed groups, were chosen for partners in innovation activities less frequently (Fig. 4). In Poland, the research and development sphere is much more frequently separated organizationally from enterprises. It consists of structures positioned within tertiary education entities and ministerial research and development institutions responsible to ministries. Private research institutions are few. Such solutions are supportive to traditional, one-way methods of technology knowledge transfer with the supremacy of the mechanism of "pushing" innovations to enterprises without triggering the innovation "pull" mechanism by enterprises. Absence of that "pull" causes

that research programs of R&D entities are subjected more to scientific ambitions of the entity than focused on creating practical solutions matching the expectations from the market (SOSNOWSKA et al. 2003). Among the industries investigated by the Gdańsk Institute for Market Economics high-technology industries such as electronics and information technology as well as pharmaceutical-cosmetics concentrations were characterized by higher intensity of cooperation with various partners, in particular the R&D entities. The relations with the R&D entities are maintained by 70 to 90% of entities from those concentrations while in case of the total population of enterprises that proportion was 20%. In those sectors a positive link between profitability, exports level and product technology advancement and intensity of cooperation with R&D entities was recorded (WOJNICKA 2004). Success in the so-called knowledge intensive industries depends to a large extent on interactions with science.

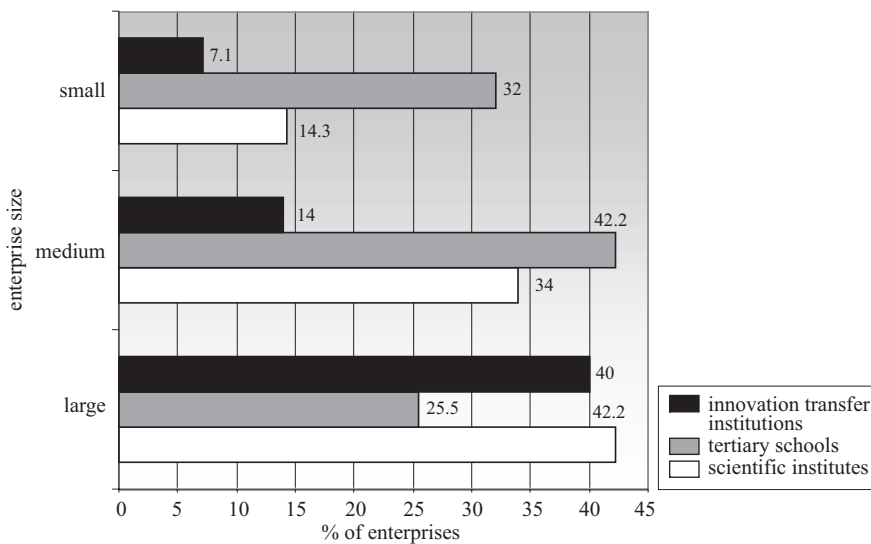


Fig. 4. Cooperation of enterprises with innovation transfer institutions, tertiary schools and scientific institutes

Source: Own work based on studies.

Generally, in the covered population of enterprises the relation between enterprise size and involvement in cooperation on innovation is quite well visible. That cooperation was carried out by larger entities much more frequently and it covered a much wider range of partner institutions, which

could result from a wider range of products offered. That trend is quite common among domestic enterprises. As shown by the studies by CSO, in Poland, similar to other countries, the activity of enterprises related to cooperation in innovation activities is correlated positively to their size measured by number of employees (*Działalność...* 2002).

Subject of cooperation

Establishment of cooperation concerning innovation activities depends to a large extent on specific characteristics of the partners' activities. They are frequently authors of innovative solutions and they help in transferring them to practical applications. They also help enterprises in obtaining knowledge and skills and as a consequence create capacity for improving their market condition and development.

The subject of cooperation between the enterprises covered and the external entities depended on whom that cooperation was with. As already presented earlier, the majority of enterprises cooperated with their suppliers. Those were suppliers of materials, equipment or components used in production processes. In majority of instances the cooperation concerned search for new raw materials (additions), of better quality than used so far, allowing development of product innovations. In a few cases those new raw materials were to allow implementation of new technology as well. Additionally, the cooperation with suppliers quite frequently concerned search for new technological solutions aiming at decreasing the production costs. Occasionally the cooperation involved improving the forms of orders and deliveries rationalizing the procurement processes in enterprises. In addition to direct contacts, mutual communication of entrepreneurs with suppliers occurred quite frequently during fairs and exhibitions, both national and international.

Enterprises covered also maintained active cooperation with buyers of their products. In that case the most frequently declared subjects of cooperation were the willingness to learn the expectations and preferences of the clients. According to the opinions by entrepreneurs, meeting the requirements of the buyers is the condition of market acceptance for products offered. As a consequence, that cooperation also concerned (in a few cases though) embarking on joint advertising activities aiming at reaching a wider group of consumers with the offer and, as a consequence, entering new markets and increasing the volumes of product sales. Generally, however, the main focus was on improvement in quality of products. In case of two enterprises cooperation with buyers was limited to performance of orders only. The enterprises filled orders filed for products with specified characteristics and parameters specified in detail by the buyer and according to the standards specified by the buyers.

Enterprises that established cooperation with other enterprises in the area of innovation did it for the need of exchange of knowledge and practical experience related to development and implementation of innovations. At the same time some enterprises treat it as a good way of searching for credible partners for cooperation. Only one enterprise declared that cooperation concerned joint organization and implementation of advertising campaigns and product promotion campaigns as well as participation in fairs, exhibitions and presentations. Also one enterprise only declared cooperation with other enterprises for the purpose of joint purchase of a license and acquiring the rights to apply a specific technology patented by the owner.

Enterprises covered also cooperated with research and development institutions that frequently were authors of innovation projects. That cooperation takes place with industry institutions (e.g. Meat and Fats Industry Institute, Dairy Technology Institute), specialists of the Polish Academy of Sciences or institutions issuing approvals and certificates. The cooperation involves mainly exchange of information and consultations with specialists concerning technical solutions. Sometimes it also involves performance of specific studies, analyses or expert studies. Quite frequently the cooperation also involves training of employees, assistance in reaching highly skilled and competent persons, and in case of tertiary schools creating opportunities for students to complete their internships in the enterprise. Only in one case the cooperation of an enterprise involved obtaining funds and credit guaranties for implementation of an investment project and assistance in appropriate preparation of documentation necessary to apply for aid funds.

Conclusion

Literature studies indicated that innovation of enterprises increases when they get involved in cooperation with other organizations, suppliers and buyers, other enterprises, research and development institutes, tertiary schools and organizations dealing with transfer of innovations. Cooperation in the area of innovation with other enterprises, including competitors, defined as the strategy of co-opetition, can have a positive influence on development of product lines, diversity of technologies or generally the ability to create innovation. Cooperation of various organizations contributes to development of clusters in which enterprises reach a higher level of productivity, innovation and knowledge absorption.

The studies carried out on 156 enterprises situated in Poland the majority of which belonged to section D (industrial processing) of the Polish Business Activity Classification show, *inter alia*, that:

1. Larger entities got involved in such cooperation more frequently and it involved a wider range of partner entities.
2. Quite frequently other enterprises belonging to the same or similar sector of activity were involved as partners of that cooperation.
3. Cooperation occurred most frequently within chains of supplier-processor-buyer, which is consistent with global trends. The cooperation with suppliers involved mainly search for new raw materials of better quality than those available so far while cooperation with buyers involved obtaining knowledge on expectations and preferences of clients.
4. Small and medium enterprises are involved in a very low level of cooperation with innovation transfer institutions. As a consequence activities supporting that transfer are necessary.

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CUSTOMER SATISFACTION IN THE PRODUCT IMPROVEMENT PROCESS AS THE FACTOR DETERMINING ENTERPRISE OPERATION EFFECTIVENESS

Bożena Pawłowska

Department of Enterprises Economics
University of Warmia and Mazury in Olsztyn

Key words: customer satisfaction, customer satisfaction measurement, product quality, quality management systems.

A b s t r a c t

This paper presents the results of questionnaire-based study carried out at Polish food industry enterprises, which, in implementation of the product quality improvement process are required to measure the customer satisfaction.

The presented work shows the progress of enterprises covered in the customer satisfaction measurement process as an important instrument if effective customer needs and expectations studying process.

SATYSFAKCJA KLIENTA W PROCESIE DOSKONALENIA JAKOŚCI PRODUKTU – CZYNNIKIEM WARUNKUJĄCYM SKUTECZNOŚĆ DZIAŁANIA PRZEDSIĘBIORSTWA

Bożena Pawłowska

Katedra Ekonomiki Przedsiębiorstw
Uniwersytet Warmińsko-Mazurski w Olsztynie

Słowa kluczowe: satysfakcja klienta, pomiar satysfakcji klienta, jakość produktu, systemy zarządzania jakością.

A b s t r a c t

Artykuł prezentuje wyniki badania ankietowego przeprowadzonego w polskich przedsiębiorstwach przemysłu spożywczego, które przez realizację procesu doskonalenia jakości produktu są zobligowane do prowadzenia pomiaru satysfakcji klienta.

Prezentowana praca przedstawia stan zaawansowania badanych przedsiębiorstw w proces pomiaru satysfakcji klienta jako ważnego instrumentu skutecznego badania potrzeb i oczekiwań klienta.

Introduction and goal of the study

Every enterprise that wants to build lasting competitive advantage must focus its activities on the client. Organizations are forced to identify the needs of their customers in a continuous and systematic way and supply the product that would satisfy the client's expectations. Currently, the necessity of continuous communication with the clients and asking them to present their opinions about products or services offered is becoming a very important issue. The client decides, which offers in the market represent the highest value. It is not important, what enterprises think of their own market offers but what the target clients think about them. The decisions by clients determine the future of the organization. The producer or service provider must communicate to the client the information that he wants to satisfy his expectations better and meet his needs. As a consequence, personalization of the client possible only through a larger involvement of employees in the process of winning and retaining the client is currently a very important factor influencing satisfaction of client expectations (HILL, ALEKSANDER 2003).

The above challenges are met by the activities of enterprise that adjusts the system of internal relations in the organization to the requirements of organization relations with its environment. As a consequence, the issues of satisfying client needs are becoming important factors determining the effectiveness of enterprise operation.

As a consequence, we should look for mechanisms of change in the methods of operation, in business processes of Polish enterprises, in the product quality improvement programs with particular focus on those elements of quality systems that determine to the highest extent the level of customer needs and expectations satisfaction. Undertaking of customer satisfaction measurement aimed at offering the required level of satisfaction to the clients in a more comprehensive and effective way than the competitors is definitely such an element.

In view of the above, each enterprise that aims at building lasting competitive advantage must be customer focused as recognizing a satisfied buyer as the enterprise asset currently possesses a strong economic value (SUDOŁ et al. 2000).

This paper aims at presenting the current status of progress in the processes of customer satisfaction management in Polish food industry enterprises possessing quality system certificates.

Methodology of studies

The study covered 55 enterprises that declared conducting customer satisfaction measurements. The organizations covered operate in the food industry sector and at the same time possess certified quality systems. According to the Statistical Classification of Economic Activities in the European Community – NACE effective as of January 1, 2001, the study covered enterprises were classified as belonging to section D – manufacturing, subsection DA, division 15 – manufacturing of food products and beverages from the area of the entire Poland that according to the employment are classified as medium and large enterprises¹ The organizations covered operate mainly in the regional and domestic market.

The plenipotentiaries for quality system in the covered enterprises expressed their answers by filling in the questionnaire form.

Customer satisfaction measurement as an instrument of internal conversion to market economy in enterprises

Strong pressure of the environment on organization causes that increasingly frequently the postulate is pressed in papers on contemporary organization management to conduct internal conversion to market economy in enterprises. That postulate assumes implementation of mechanisms regulating the nature of external relations into the internal organization of the enterprise, which means that every structural component of the organization is subject to the principles of providing services. That provision of services aims at assuring that all workstations and identified areas of the enterprise are able to implement the assumed tasks efficiently. If the processes occurring within the organization are treated as a chain of relations between clients and suppliers then it would lead to the situation where the internal supplier is assessed according to the same criteria as the external supplier, i.e. on the basis of quality, timeliness and price of services provided (GAJEWSKI 2003).

This approach to the organization should also consider customer satisfaction as the issue of paramount importance to the implementation of enterprise strategy while customer satisfaction measurement could also be considered an affective instrument for implementation of market rules within the enterprise.

Employees are the factor determining the effectiveness of activities implemented in the enterprise. Many of them maintain direct contacts with the external customers. The customer very often builds his perception of the

¹ According to NACE large enterprises are those employing over 250 employees and medium ones are those employing from 50 to 250 employees.

enterprise (the level of achieved satisfaction with a product) from the perspective of the employee providing services to him. As a consequence the problem of employee satisfaction also appears as an important link in the entire customer (i.e. external client) satisfaction management process in the enterprise. It should be stated that the more effective the internal implementation of market relations in the enterprise from the perspective of the client (external and internal) the higher the level of customer expectations satisfaction, which would offer tangible financial effects for the enterprise in a longer time perspective.

Currently, high product quality is treated as an important advantage to competitiveness of every enterprise. As a consequence, Polish food sector enterprises realized relatively quickly that quality systems should be included in their management structures to achieve efficient and effective performance of production functions and functions concerning product quality assurance.

Quality management systems include customer satisfaction assessment assurance and care for high level of his satisfaction among their assumptions. That is an important starting point for the issue of customer satisfaction measurement while undertaking and conducting that measurement becomes currently an important factor of market success. The ISO 9001/2000 standard requiring enterprises to carry out such measurement indicates at the same time that the customer satisfaction level determines the effectiveness of the quality management system. Point 8 of that standard requires continuous monitoring of information concerning customer perception. In view of the above, any improvement in quality system functioning should result in increasing the customer satisfaction level.

Consequently, customer satisfaction measurement becomes an important instrument in the so-called internal conversion to market economy in the enterprise, which leads to an increase in efficiency of its operation.

Customer satisfaction in the quality management system – results of study

The issue of customer satisfaction has become particularly important in the context of the effects of updating the earlier mentioned ISO series standards. As a consequence, the conducted questionnaire based study was to present the current status of activities in Polish food sector enterprises in that area. Customer satisfaction measurement is a tool that allows obtaining valuable information, which the enterprises cannot obtain using other methods. Credibility of information obtained through customer satisfaction measurement and its use depend to a high extent on efficiency of customer satisfaction management internal system in the enterprise. It is important that enterprises should

possess such internal systems. The study showed that the enterprises did not possess such systems at that time.

Dynamic increase in the number of enterprises implementing the quality management system compliant with ISO 9001:2000 standard during the recent time contributed to a wide proliferation of customer satisfaction measurements. This is a unique opportunity for Polish enterprises, also those belonging to the food sector. However, the problem concerns mainly the correctness of such measurement and appropriate interpretation of its results.

Over 85% of the enterprises declared possessing both the quality system compliant with ISO 9000 series standards and the HACCP system, while only 6% indicated that they also apply the ISO 14000 based system (environment management standard) (Fig. 1).

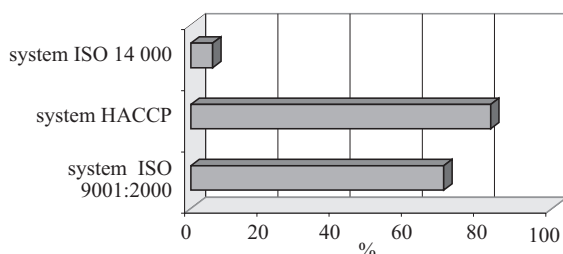


Fig. 1. Types of quality systems applied by the enterprises covered

Source: own work based on the results of questionnaire study.

Over 88% of the enterprises indicated ISO standard requirement as the main reason for conducting customer satisfaction level studies (Fig. 2). Only 7% of enterprises declared that the measurement is carried out as a component of marketing studies. In view of the above doubts concerning whether the enterprises covered are fully convinced that studies of that type are necessary and should be conducted are fully justified.

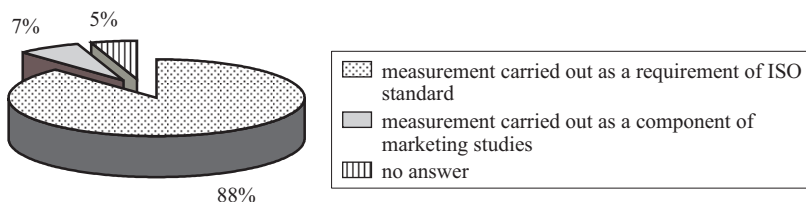


Fig. 2. Motivation for conducting customer satisfaction studies

Source: own work based on the results of questionnaire study.

According to the enterprises covered, the major goals of customer satisfaction measurements are: quality improvement (over 96% of answers), improvement of processes (over 73% of answers), winning customer loyalty (over 40% of answers) and better customer service (over 33% of answers) (Fig. 3).

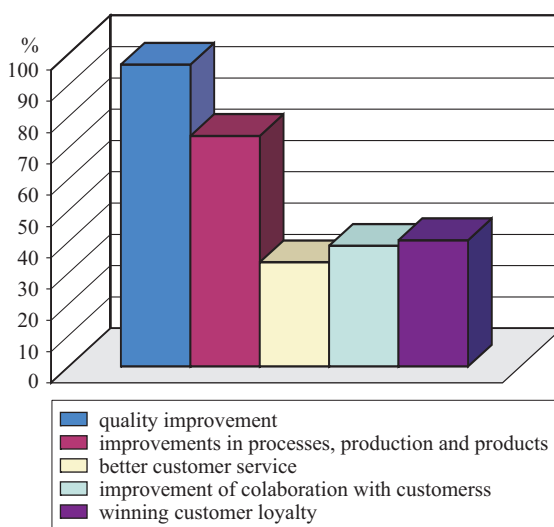


Fig. 3. Purpose for which customer satisfaction measurement results are used
Source: own work based on the results of questionnaire study.

During the study the group of factors that were influenced by customer satisfaction was determined (Fig. 4). The enterprises indicated: increasing the products quality level (over 81% of answers); better identification of customer needs (over 69% of answers); increase of sales (60% of answers); market position improvement (40% of answers) as the most important ones. Only around 3% of the enterprises covered believed that customer satisfaction level influenced work quality improvement, which can indicate that the level of knowledge concerning customer satisfaction among the employees of enterprises covered was low.

Customer satisfaction measurement in the respondent enterprises covered mainly the current buyers (ca. 98% of answers) followed by employees (ca. 46% of answers), potential customers (ca. 39% of answers) and intermediaries (ca. 35% of answers). Customer satisfaction measurement is carried out systematically by ca. 62% of the enterprises covered, occasionally by ca. 28% of them and rarely by ca. 10% of organizations covered.

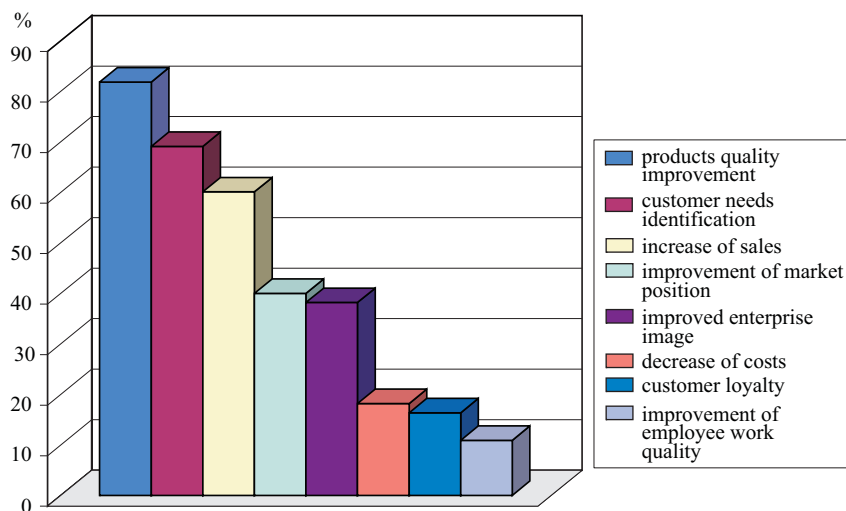


Fig. 4. Factors that were influenced in enterprises covered by the customer satisfaction level
Source: own work based on the results of questionnaire study.

The enterprises covered apply a number of customer satisfaction measurement methods (so-called complementarity of measurement), which is in agreement with the principle of correctness in conducting customer satisfaction studies (Fig. 5) (SUDOŁ et al. 2000). The most frequently indicated measurement methods were: analysis of claims and complaints (ca. 91% of answers), followed by sales level, market share or return on investment monitoring (ca. 84% of answers), questionnaire based studies (ca. 74% of answers) and benchmarking (ca. 57% of answers). Further down the ranking the enterprises also indicated other, both direct and indirect, measurement methods.

Around 64% of the covered enterprises employed specialists dealing with customer satisfaction measurement, which can be considered a good result. In other cases, i.e. roughly 36% of enterprises there were no special positions/employees dealing with customer satisfaction measurement. The enterprises indicated the following employees as responsible for customer satisfaction measurement: marketing specialist (ca. 55% of answers), sales specialist (ca. 12% of answers), quality specialist (ca. 9% of answers) and other positions (ca. 24% of answers).

The covered enterprises indicated the following as important barriers to customer satisfaction measurement:

- resistance of employees and fear of consequences of lack of customer satisfaction (63% of answers),
- excessive load of current activities on the employees (48% of answers),

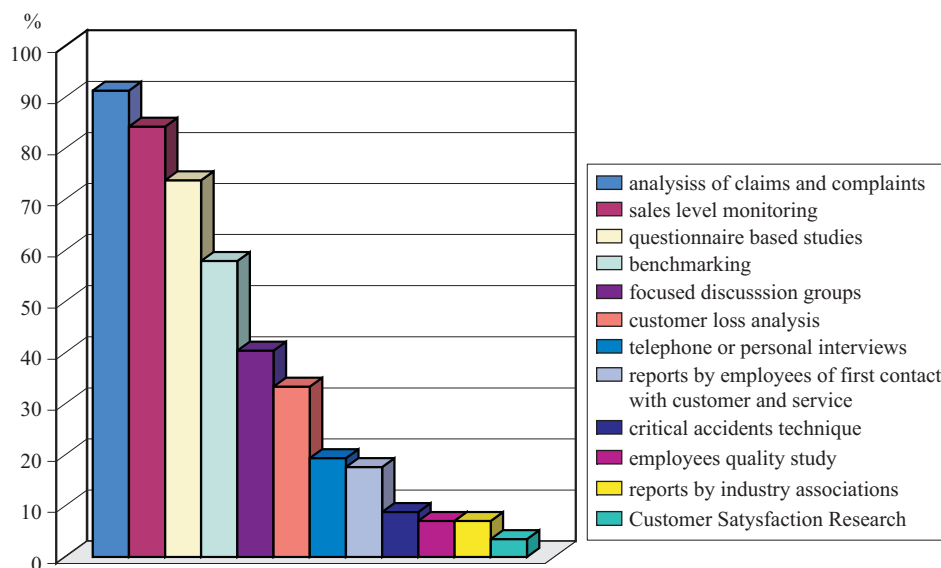


Fig. 5. Customer satisfaction measurement methods applied in the covered enterprises

Source: own work based on the results of questionnaire study.

- lack of funds for conducting the studies (45% of answers),
- lack of knowledge on the subject (37% of answers).

Over 90% of enterprises covered indicated that there is evidence showing product quality influence on customer satisfaction level. They observed that relation mainly in the form of an increase of sales, decreased number of complaints, in the results of their own studies, in the letters from customers and in the direct contacts with the customers.

The enterprises generally reported that they did not carry studies on the relation between customer satisfaction increase and enterprise profitability. However, it should be stressed that studies on that relation are one of the main activities in evaluation of customer satisfaction measurement effectiveness (DEREK 2004).

According to the ISO 9001:2000 standard, each process should be subject to evaluation. As a consequence, the managements of enterprises covered were asked whether they have a system for evaluation of customer satisfaction measurement (customer satisfaction measurement should be treated as an important process in activities of the enterprise). Thanks to such evaluation errors of the measurement itself, and later errors of results interpretation could be avoided.

The study showed, however that 80% of enterprises covered possessed no procedure for customer satisfaction measurement system evaluation while

only 12% of enterprises reported conducting evaluation of their measurement systems. That is a situation that requires a quick change involving mainly development of the measurement methodology, which, as indicated by the results of the study, is quite limited at the moment (Fig. 5). Only 7% of the covered enterprises declared implementation of customer satisfaction measurement system evaluation procedure (Fig. 6).

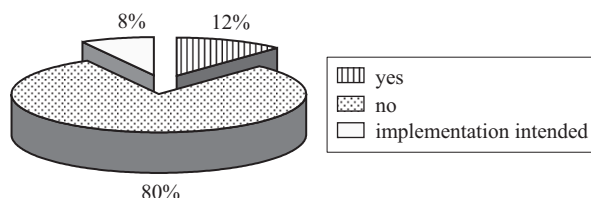


Fig. 6. Availability of specified customer satisfaction measurement system evaluation procedure in covered enterprises

Source: own work based on the results of questionnaire study.

In most cases customer satisfaction measurements were carried for 1 to 3 years. That answer was given by ca. 48% of enterprises while 30% of the enterprises covered conducted such studies for longer than 3 years while ca. 21% of enterprises indicated that in their case such studies were carried out for less than 1 year. It must be stated that this is a relatively short period during which such studies were carried out. The reason is also that the new ISO standard became effective quite recently² while it is the main reason for conducting such studies in the enterprises covered.

The covered enterprises declared that they measured customer satisfaction on their own (ca. 82% of answers) and that they commission the task to specialized organizations (ca. 50% of answers).

Conclusion

Currently, measurement of customer satisfaction is becoming an absolute necessity for Polish food industry enterprises to achieve effective competitive advantage in the contemporary market. That issue is even more important as Polish food industry products possess attractive characteristics that are increasingly appreciated at the international markets. Product quality improvement processes have become an excellent tool supporting and forcing enter-

² The new ISO 9001:2000 standard became effective as of 15.12.2000.

prises to certain behaviors in the area of continuous customer focus and conducting customer satisfaction studies.

The results of study presented in this paper allowed concluding that the vast majority of the respondent food industry enterprises carried customer satisfaction measurements only as a consequence of the ISO 9000 standard requirement and not out of market necessity. Lack of understanding of the issue by employees is the main barrier to conducting customer satisfaction measurements. The respondent enterprises have a very limited methodology base for conducting customer satisfaction measurement. This situation results in absence of systems for evaluation of customer satisfaction measurements that could allow avoiding errors of the measurement and, as a consequence, errors in interpretation of the results.

Attention should be drawn to the motivational and educative importance of quality management systems according to which enterprises carry out their business activities on undertaking the customer satisfaction measurement. The studies allow concluding that analyzed Polish food sector enterprises start treating customer satisfaction measurement as an important factor of competitiveness conditioning enterprise operation effectiveness.

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THE APPLICATION OF METHODS FOR EVALUATING INVESTMENT EFFECTIVENESS BY ENTERPRISES

Jolanta Roston, Wiesława Olkowska

Department of Enterprise Economics
University of Warmia and Mazury

Key words: material investments, methods of evaluating effectiveness, small and medium enterprises.

Abstract

An investment decision should be based on properly carried out economic calculations. Calculation of the effectiveness of a given investment project includes several steps. The most important of them include preparation of data and assessing the cost-effectiveness of the investment, analysing the level of risk related to its realization, as well as making an investment decision on this basis.

This paper presents the results of research into the application of methods for evaluating investment projects by entrepreneurs. The research included non-discounting (PB, ARR, BEP) and discounting decision tools (NPV, IRR, DPB), as well as methods for assessing risk exposure (scenario analysis, sensitivity analysis, simulations). Discounting methods for examining investment effectiveness were verified using specific numerical data (a case study).

WYKORZYSTANIE METOD OCENY EFEKTYWNOŚCI INWESTYCJI PRZEZ PRZEDSIĘBIORSTWA

Jolanta Roston, Wiesława Olkowska

Katedra Ekonomiki Przedsiębiorstw
Uniwersytet Warmińsko-Mazurski w Olsztynie

Słowa kluczowe: inwestycje rzeczowe, metody oceny efektywności, małe i średnie przedsiębiorstwa.

Abstrakt

Podjęcie decyzji inwestycyjnej powinno być oparte na właściwie przeprowadzonym rachunku ekonomicznym. Rachunek efektywności przedsięwzięcia inwestycyjnego obejmuje kilka działań. Do najważniejszych z nich należą: przygotowanie danych i sporządzenie oceny opłacalności

inwestycji, analiza poziomu ryzyka związanego z jej realizacją oraz podjęcie na tej podstawie decyzji inwestycyjnej.

W artykule zaprezentowano wyniki badań dotyczące wykorzystania przez przedsiębiorców metod oceny projektów inwestycyjnych. Badania obejmowały niedyskontowe (PB, ARR, BEP) i dyskontowe narzędzia decyzyjne (NPV, IRR, DPB) oraz metody oceny ekspozycji na ryzyko (analiza scenariuszowa, analiza wrażliwości, symulacje). Dyskontowe metody badania efektywności inwestycji zweryfikowano konkretnymi danymi liczbowymi (studium przypadku).

Introduction

Comprehensive and reliable assessment of the economic effectiveness of an investment is one of the crucial elements which influences developmental decisions made by enterprises. Under market economy conditions, people depart from intuition and instinct in the assessment of investment projects. Potential investor-entrepreneurs, already at the stage of a feasibility study, should answer the question: *Will the realization of a specific material investment be cost-effective and what profits will it bring?* (OLKOWSKA 2004, p. 64).

The effects of wrong decisions concerning an investment can be significant for the company, and in particular, for its future financial condition. Therefore, each investment decision must be based on properly carried out economic calculations, which require proper selection and application of methods for evaluating the economic efficiency of an investment (GRANOSIK, PRZEKOTA 2006, p. 8).

Both business theory and practice confirm that there are no universal methods which could be regularly used while making developmental decisions. The character of applied methods depends on the scale and the type of the investment, the specificity of a given industry, the country of the investment project, sources of financing the project, etc.. Economic calculations, particularly in the case of long-term and risky investment undertakings, should be prepared on the basis of several methods of assessment (TOWARNICKA 2003, pp. 94-95). The most accurate decision criteria are discounting methods, which take into consideration the fact that the value of money changes over time.

Before using any specific mathematical formulas for calculating the cost-effectiveness of material investments, certain values should be defined that determine this effectiveness. They include: the lifetime of the project, investment expenditures, net profit, financial surplus and discount rate (NOWAK, PIELICHATY, POSZWA 1999, pp. 240-241).

The aim of this paper is to present the results of research concerning the level of usage and of the usefulness of methods for assessing the effectiveness

of material investments from the point of view of business practice. This paper presents the results of a survey. The analysis of a case study provides further examination of the issue. The case study was intended to show the value of a pragmatic approach of investors to the profitability of the project and the effectiveness of the capital involved. The case study was used for presenting a cost-efficiency calculation for a joint venture undertaking.

Methods and characteristics of the community under analysis

The survey was conducted in 97 small and medium enterprises in north-eastern Poland. This group included investing entities and those planning to invest in projects that create or extend material investments. Entrepreneurs participating in the study represented companies situated in the area of the province of Warmia and Mazury.

The survey concerned the extent to which methods of assessing investment projects are applied by entrepreneurs. Research included non-discounting (PB, ARR, BEP) and discounting decision tools (NPV, IRR, DPB), as well as methods for assessing risk exposure (scenario analysis, sensitivity analysis, simulations).

The survey was anonymous and its results were verified as to the completeness of the provided answers, as well as the reliability and repetitiveness of indications in various groups of questions.

Depending on the type of conducted business activity, there were seven groups of enterprises distinguished:

- construction engineering (10.3%),
- industry (12.4%),
- transportation (8.2%),
- trade (17.5%),
- hotels, restaurants (7.2%),
- other services (28.9%),
- mixed activity (15.5%).

Small companies (with no more than 49 employees) were the dominant group in the examined community; they constituted over 60% of the total population under analysis. The length of business experience of the companies participating in the survey was various. About 55% of companies started their activity in the period of 1991-1998. Almost 31% companies were entities that began their operations before 1991 (mostly in industry and construction engineering fields). Among the entities with the shortest market experience (1999-2004), the prevailing ones were enterprises providing other

services (insurance, veterinary, hairdressing, cosmetics, plumbing, and health care).

The dominant group in the examined sample was composed of individual persons running a business (40.2%). Subsequent positions were occupied by joint-stock companies, partnerships, cooperatives and entities with other organizational and legal forms.

The practical usefulness of methods for assessing cost-effectiveness of investments is presented based on a specific example. A case study was prepared with this aim, concerning the calculation of economic effectiveness of material investments in the company. The results obtained formed the basis for answering the fundamental question as to whether the realization of a given investment project is justified from the point of view of cost-effectiveness.

The assessment of the economic effectiveness of an investment was carried out based on dynamic (discounting) criteria for selecting a project: NPV, IRR and DPB.

The following calculation formula was used for establishing NPV:

$$NPV = \sum_{t=0}^n NCF_t \cdot \frac{1}{(1+i)^t} - \sum_{t=0}^n I_t \cdot \frac{1}{(1+i)^t}$$

where:

- NPV – net present value,
- NCF_t – net cash flow in subsequent years,
- i – discount rate,
- $t = 0, 1, 2, \dots, n$ – subsequent year of calculation period,
- I_t – capital investments in subsequent years of calculation period.

Internal rate of return (IRR) was determined by the following relation

$$IRR = i_1 + \frac{PV \cdot (i_2 - i_1)}{PV + |NV|}$$

where:

- IRR – internal rate of return,
- i_1 – level of discount rate at which $NPV > 0$,
- i_2 – level of discount rate at which $NPV < 0$,
- PV – level of calculated on the basis of i_1 ,
- NV – level of calculated on the basis of i_2 .

Another decision criterion was discounted payback period (DPB). With this aim, the following formula was applied (ROGOWSKI 2004, p. 146):

$$DPB = \frac{PVI}{\sum_{t=m+1}^n \frac{NCF_t^+}{(1+i)^t}}$$

where:

- PVI – net present value of investment expenditure,
 NCF_t^+ – discounted positive net profits in subsequent periods
 $t=m+1$ to n life cycle of investment venture,
 i – discount rate.

Results

The results of the research revealed the extent to which measures for assessing investment profitability are applied in the analysed enterprises. The research proved that entrepreneurs saw the need to apply specific calculation formulas which could enable them to assess the accuracy of developmental decisions.

Table 1

Methods for assessing economic effectiveness applied by the examined enterprises
 (% indications)*

Methods for assessing economic effectiveness	Classes of enterprises, as regards size	
	small	medium
<i>Static (non-discounting) methods</i>		
Accounting rate of return (ARR)	9.1	14.2
Payback period (PB)	45.5	33.6
Break even point (BEP)	36.4	26.1
<i>Dynamic (discounting) methods</i>		
Discounted payback period (DPB)	3.6	11.9
Net present value (NPV)	9.1	38.2
Internal rate of return (IRR)	3.6	35.9

Source: results of a survey

* Entrepreneurs could indicate more than one method for assessing effectiveness.

The survey revealed that the most often used method for assessing economic effectiveness in small enterprises was payback period (PB). This was the decision criterion that was the most appealing to investors' imagination. Among medium enterprises, the method that was most often used was

NPV, which “is the most accurate one in theory”. Internal rate of return (IRR) and payback period (PB) proved to be slightly less popular.

The research revealed that a relatively large percentage of companies used only one method of investment profitability assessment or a combination of two methods.

Each business decision is based on the forecast of future operating conditions. Therefore, it is based on predictions that are always charged with a certain dose of uncertainty (SIERPIŃSKA, JACHNA 2003, p. 232). Assessing the full reliability of the results of calculating the profitability of the developmental investment venture requires taking into consideration the risk associated with the planned investment.

The results of empirical research indicated that respondents included the issue of risk into their calculations of cost-effectiveness of investment ventures only to a small extent. The most popular technique of including risk into effectiveness calculation proved to be scenario analysis, which was indicated by 11 surveyed enterprises (11.3%). Ten respondents (10.3%) mentioned sensitivity analysis, which is a quite simple analytic product, consisting in examining the effects of future changes in the development of basic variables of the venture on its effectiveness. One enterprise (about 1%) applied the Monte Carlo simulation method. None of the entities under examination carried out risk analysis based on the theory of probability (probability and statistical methods). Entrepreneurs did not use the method of risk-adjusted discount rate. The most frequently applied combination of investment risk analysis was sensitivity analysis with scenario analysis.

Discounting methods of examining investment effectiveness were verified using specific numerical data. A case study was prepared with this aim, concerning calculation of economic effectiveness of material investments.

The object of the analysis was a company with a majority share of foreign capital. The examined company “Z”, operating as a limited liability company, was established as a *joint venture company* on the basis of specified legal procedures (OLKOWSKA, ROŚLON 2005, p. 406).

The investment project included the construction of manufacturing plant and the purchase of specialist technological lines.

One of the stages consisted in the identification of financing sources for the investment (financial engineering). The following activities were taken into consideration while preparing financial engineering:

- estimating own means of investors,
- determining total investment expenditures,
- establishing the difference between free cash flow and total investment expenditures,
- determining proportions of means from various sources of financing (Fig. 1).

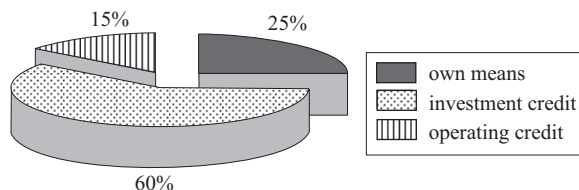


Fig. 1. Sources of financing capital expenditures

Source: own work on the basis of business plan data of the company "X" Ltd.

An assessment of the effectiveness of the venture was conducted for the case study, based on discounting methods (NPV, IRR, DPB).

The method of net present value (NPV) provides the most universal and objective assessment of investment projects. Net present value is the difference between discounted incomes and expenditures related to a given undertaking.

Table 2 presents the numerical data that are necessary to calculate net present value (NPV) of the investment.

Table 2

Net present value of investment joint venture

Years	Investment expenditures (PLN)	Free cash flow (PLN)	Discount coefficient for $i=12\%$	Discounted net cash flows (PLN)
2004	- 1,250,000		1.0000	- 1,250,000.0
2005	- 4,939,000	1,376,283	0.8928	- 3,180,793.7
2006		2,336,767	0.7972	1,862,870.6
2007		2,719,381	0.7118	1,935,655.3
2008		3,594,759	0.6355	2,284,469.3
2009		3,564,097	0.5674	2,022,268.6
Total NPV				3,674,470.1

Source: own work.

Estimated NPV of the investment, at 12% rate, was PLN 3,674,470.1, which allows to regard it as profitable ($NPV > 0$). Positive NPV level means that the investment profitability rate is higher than the minimal threshold rate determined by the discount rate assumed in the calculation.

Another applied measure for assessing the effectiveness of investment was internal rate of return (IRR). This is a discount rate, compensating the present value of expected financial streams from the venture and the net value of expenditures associated with its realization.

Table 3 presents values that are necessary to establish the internal rate of return for the investment.

Table 3
Values used to determine internal rate of return for an investment project

Years	Net cash flows (PLN)	Discount coefficient for i=39%	Discounted net cash flows (PLN)	Discount coefficient for i=40%	Discounted net cash flows (PLN)
2004	- 1,250,000	1.0000	- 1,250,000.0	1.0000	- 1,250,000.0
2005	- 3,562,717	0.7194	- 2,563,018.6	0.7143	- 2,544,848.7
2006	2,336,767	0.5176	1,209,510.5	0.5102	1,192,218.5
2007	2,719,381	0.3723	1,012,425.5	0.3644	990,942.3
2008	3,594,759	0.2679	963,035.9	0.2603	935,715.7
2009	3,564,097	0.1927	686,801.5	0.1859	662,565.6
Total			58,754.6	–	- 13,406.6

Source: own work.

IRR of the examined undertaking was precisely calculated, based on the above data.

$$\text{IRR} = 39 + \frac{58754.6 \cdot (40 - 39)}{58754.6 + |-13406.6|} = 39.8 (\%)$$

The internal rate of return was 39.8 %, which proves the high profitability of the joint venture project under analysis. This will cover the costs of foreign capital servicing, which was 12%. Additionally, this will provide significant profits for partners – investors, at the level of the difference between a threshold rate of return and calculated IRR.

Another decision criterion applied was payback period. In order to eliminate the drawback of this criterion (consisting in overlooking the effects of changes in money value in time) the method of discounted payback period was applied. The function of this criterion is identical as in standard payback period, but here cash flow is discounted (PLUTA et al. 2000, p. 63).

Discounted payback period was established by applying the proper formula:

$$\text{DPB} = 3 + \frac{632267.8}{1935655.3} \cdot 12 = 3.4$$

Discounted payback period was 3 years and 4 months. This will be shorter than the 4-year threshold period assumed by the investor. Therefore, another decision tool proves the profitability of the analysed investment.

Summary

Necessary conditions of achieving success by the company include maintaining financial liquidity and ensuring profits in the long-term perspective. Therefore, the choice of cost-effective investment projects is very important for company operations, particularly while establishing long-term developmental strategies.

On the basis of the research conducted, it is clear that entrepreneurs realized the need for applying specific calculation formulas to assess the accuracy of their developmental decisions. It should be emphasised that simple decision tools, such as payback period and break-even point were frequently used. Complex (discounting) methods were used mostly by medium business entities, related to foreign capital. Entrepreneurs employing no more than 249 persons most frequently used a universal decision tool – NPV. This criterion, in combination with IRR and DPB, formed the basis of a profitability assessment of a joint venture project (case study).

However, entrepreneurs quite rarely used risk analysis methods. Scenario analysis and sensitivity analysis proved to be popular techniques of taking risk into account in the effectiveness calculation. None of the examined entities used probability-statistical methods or the risk-adjusted discount rate method.

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PRICE DEVELOPMENT OF DAIRY PRODUCTS IN RETAIL OUTLETS IN OLSZTYN Part 2: Price positioning of retailers

Wojciech Kozłowski, Alina Połoszczak

Department of Market Analysis and Marketing
University of Warmia and Mazury in Olsztyn

Key words: price differences, distribution channels, price positioning.

A b s t r a c t

The paper presents the results of research in the terms of dairy products price development in retail trade network in Olsztyn. The price registration of chosen goods was carried out in November 2005 in 194 retail outlets representing traditional and modern forms of retail sales. Undertaken analyses indicate that there is direct relation between retail channels used and the level of prices offered. It also confirms notable price advantage of modern trade as compared to traditional one and that had a direct impact on attractiveness of purchasing baskets of dairy products in modern forms of retail sales.

KSZTAŁTOWANIE SIĘ CEN PRODUKTÓW MLECZARSKICH W OLSZTYŃSKIEJ SIECI HANDLU DETALICZNEGO

Część 2: Pozycjonowanie cenowe podmiotów handlowych

Wojciech Kozłowski, Alina Połoszczak

Katedra Analizy Rynku i Marketingu
Uniwersytet Warmińsko-Mazurski w Olsztynie

Słowa kluczowe: różnice cenowe, kanały dystrybucji, pozycjonowanie cenowe.

A b s t r a k t

W opracowaniu przedstawiono rezultaty badań nad poziomem cen produktów mleczarskich w sieci handlowej Olsztyna. Rejestrację cen wytypowanych do badań towarów przeprowadzono w listopadzie 2004 r. w grupie 194 podmiotów handlowych reprezentujących nowoczesne i tradycyjne systemy dystrybucji. Wyniki badań wskazują na istotny związek, jaki istnieje między poszczególnymi

kategoriami podmiotów handlowych a wysokością cen oferowanych produktów. Badania potwierdzają również przewagę konkurencyjną handlu nowoczesnego nad handlem konwencjonalnym, wyrażającą się niższymi cenami, co ma swoje bezpośrednie odzwierciedlenie w mniejszych wydatkach nabywców na zakup produktów mleczarskich w wielkopowierzchniowych podmiotach handlowych.

Introduction

Appearance of modern trade outlets in the market represented by hyper and supermarkets, discount shops and shopping centers is one of the best visible consequences of evolution in retail trade. The dynamic development of large area retailers leads not only to the increase of their importance and bargaining power in the marketing chain but also in expanding the service and product offer of the entire trade sector coupled at the same time with larger differences in prices of products sold between the traditional and modern forms of retail outlets, which leads to development of the price and service image of trade entities (KOZŁOWSKI 2005, SZUMILAK 2003, GRZESIUK 2003, KŁOSIEWICZ-GÓRCEKA 2002, *Sposoby na ceny*. 2000, *Cenne strategie*. 1999). Studies by Szumilak on development of FMCG – fast moving consumer goods – on the retail network of Kraków indicate a significant relation between individual categories of retail outlets and the level of prices for products offered. That relation manifests in the situation where FMCG prices in modern forms of retail outlets are significantly lower than the average market prices and prices offered by traditional outlets indicating the significant competitive advantage of that first group in the market (SZUMILAK 2003).

Price attractiveness of “new retailers” is a consequence of their active and frequently aggressive pricing policy. It involves implementation of the low prices strategy that has its background in using the sales volume effect, recovery of marketing costs, achieving favorable terms and conditions of goods purchase and use of modern trade and marketing techniques. As a consequence of economic and marketing conditions trade outlets representing traditional forms of sales cannot implement low price strategies and most frequently adjust the prices of products offered to the average level of market prices or sell the products at much higher prices (DOMAŃSKI 2001, PIN-DAKIEWICZ 2001. *Sposoby na ceny* 2000).

Methodological assumptions of the studies

This paper presents results of own studies concerning determination of the relation existing between the price level of products offered and the distribution channels used in selling them as well as assessment of the price offer to

buyers in the variety of retail outlets in Olsztyn. The studies aimed at verification of the following research theses:

1. Modern distribution channels enjoy competitive advantage over the traditional channels manifesting through lower prices.

2. The value of the baskets of goods purchased in modern distribution channels is more attractive for the buyers.

The studies of price development covered 11 selected dairy products representing the major segments of the dairy products market. Recording of prices for those products and their close substitutes was carried out at the representative group of 194 retail outlets.¹ In the empirical analysis of recorded prices the double-sided significance test for averages (test *t*) was applied. Also, the values of hypothetical purchase baskets were assessed and compared.

Significance of price differences was measured by comparing prices for covered products offered by identified categories of retail outlets and the average prices of those products calculated for the entire Olsztyn city market. The results of calculated statistics according to *t*-Student distribution allowed concluding which products are offered by which categories of retailers at prices significantly lower or significantly higher than the average market price. Analyzing the distribution of average prices for products offered in Olsztyn market the significance of the differences in prices were assessed between pairs of outlets immediately neighboring one another on the map of their price positioning. That assessment allowed showing whether a given category of retail outlets applies product prices significantly differing from the price offered in the same market by other outlet categories.

During assessment of price attractiveness of shopping in Olsztyn retail network the values of purchases baskets consisting of covered products and the values of baskets consisting of their close substitutes were assessed and compared. The assessment of monetary value of the baskets was based on average prices, lowest and highest prices recorded in November 2004 as well as the published data on consumption of dairy products converted to "purchase units" in the employee households. As a consequence of lack of data on the level of consumption for all the identified categories of products included, the studied baskets consist of 8 products (tab. 1). At the same time, to obtain the full picture of the baskets available in the retail networks to buyers and to allow comparisons, the values of the baskets were calculated for those categories of retail outlets that offered the full range of products covered and their substitutes i.e. hypermarkets and supermarkets, grocery shops, kiosks at markets and freestanding kiosks.

¹ The methodology of studies as concerns selection of dairy products and retail outlets for the study is presented in the paper: *Price development of dairy products in retail outlets in Olsztyn Part 1: Price differentiation on the dairy products market.*

Table 1

Estimated consumption level of dairy products per purchase (purchase volume)

Product category	Average monthly consumption per capita in employee household in 2003		Average monthly purchase per capita in employee household in 2003	
	Volume	Unit	Volume	Purchase unit
Milk	3.62	liter	3.62	Cardboard pack
Yogurt	0.41	liter	2.73	cup
Kefir	0.23	liter	0.58	cup
Cream	0.34	liter	1.70	cup
Cottage cheese	0.46	kg	0.46	kg
Ripening cheese	0.30	kg	0.30	kg
Blue cheese	0.01	kg	0.08	package
Butter	0.32	kg	1.60	cube

Source: Own calculations based on: own studies and *Popyt na żywność... 2004. Statistical yearbook. 2004.*

Results of studies

Relation between the category of trade entities and the price level of products offered

The initial comparison of product price levels offered by the identified categories of retailers indicates different price positioning concepts that could be assigned to them. They are the result of adjustment of retailers to price sensitivity on one hand and they are determined by the level and spread of prices in competitive retail outlets on the other. The numbers given in table 2 indicate that hypermarkets are the most attractive in price for the buyers (with the exception of a narrow range of dairy products available from the discount shops), which definitely differentiates their offer from the offers by other outlets and offers the source of competitive advantage. Higher average prices of products at super than hypermarkets are, as can be assumed, by the range and higher quality of service provided and they become the reference for prices offered by the grocery shops and freestanding kiosks.

The supermarkets network in Olsztyn is five times denser than the network of hypermarkets but its density is lower than that of grocery shops and as a consequence supermarkets offer a better alternative for shopping location as a consequence of additional costs of getting to price and product attractive offers of hypermarkets and discount shops. Low prices are also offered by kiosks located at markets, which could be explained by closeness of the competitor offer supportive for maintaining low price levels to attract the

Table 2

Average prices of studied dairy products in Olsztyn retail network (PLN/unit)

Product studied	Unit	City market	Categories of retail outlets						
			H	S	D*	SB	SP	KS	KT
"Łaciate" milk	1 liter	2.51	2.11	2.42	–	2.37	2.56	2.55	2.35
"Jogobella" yogurt	150 ml	1.09	1.01	1.04	–	1.09	1.10	1.10	1.06
"Sokółski" kefir	450 ml	1.50	1.56	1.51	–	1.45	1.49	1.51	1.40
"Piątnica" cream	200 g	1.44	1.33	1.37	–	-	1.45	1.47	1.36
"Bakuś" homogenized cheese	100 g	1.15	0.99	1.15	0.99	1.60	1.17	1.17	1.13
"Rama Creme Bonjour"	200 g	3.53	3.08	3.39	2.99	–	3.58	3.63	3.47
"Łukta" cottage cheese	1 kg	10.13	10.27	9.39	–	–	10.43	10.44	9.72
"Gouda" ripening cheese	1 kg	17.01	16.86	15.36	15.99	–	17.01	17.79	17.03
"Hochland" processed cheese	150 g	3.18	2.78	3.07	2.49	3.18	3.25	3.21	3.02
"Turek" blue cheese	120 g	3.60	3.12	3.64	–	–	3.67	3.60	3.34
"Masmak" butter	200 g	3.09	2.85	3.00	–	–	3.11	3.13	2.89

* Majority of products in discount networks is offered under own brands.

Source: own studies.

largest numbers of buyers possible (prices were studied at three small markets where a number of kiosks was available at each location). Grocery shops and freestanding kiosks set their prices at slightly higher levels, however, in case of the majority of products covered close to the accepted reference prices for the entire city market.

As could be assumed, in the same way as in the market of Kraków (SZUMILAK 2004), also in Olsztyn market convenience of shopping at traditional outlets resulting from their best location relative to the place of residence of the buyers favors implementation of pricing policies aiming at maximization of own profits through selling products at higher prices. Although it requires empirical confirmation, it also seems that price control level by suppliers of products is an important factor influencing the price level in this case. They often use their stronger position versus smaller merchants to maintain their sale prices at the levels satisfying for them.

The formulated general conclusions concerning different price positioning concepts of retail outlets find confirmation in the results of tests of significance of the differences in offered prices of products between categories of retail outlets and average prices of products for the entire retail network. The values of critical probability levels presented in table 3 indicate that among 11 products covered 8 products were offered at significantly lower prices in hyper and supermarkets and kiosks at markets, 4 in discount shops (all available) and one at filling station s ("Łaciate" milk). Above the average were the prices

of four products offered by freestanding kiosks (“Piątnica” cream, “Rama Creme Bonjour” cream cheese, “Gouda” ripening cheese and “Masmak” butter), 2 in grocery shops (“Łaciate” milk, “Hochland” processed cheese) and the price of “Bakuś” homogenized cheese sold at filling stations. The majority of dairy products available at grocery shops and freestanding kiosks are offered at prices corresponding to the average market prices, as the tested price differences in those cases were statistically insignificant.

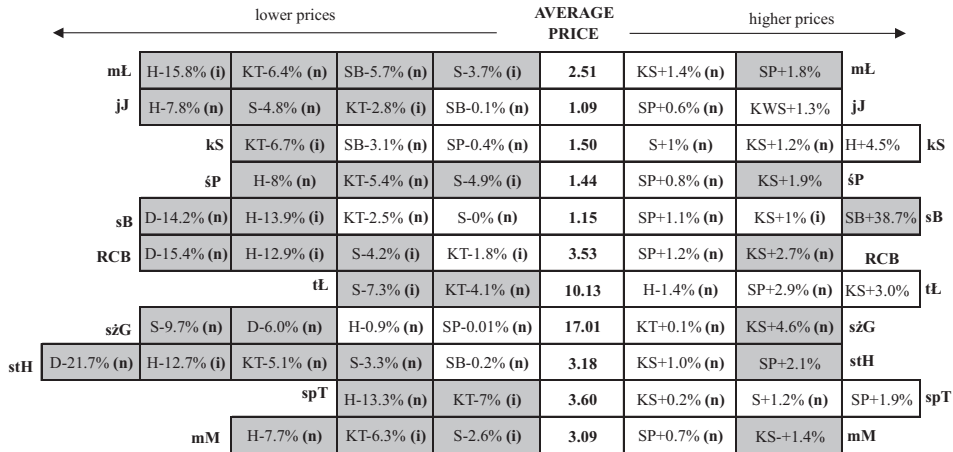
Table 3

Critical probability level for statistical calculations in *t*-Student distribution for double sided test

Products studied	City market VERSUS						
	H	S	D	SP	KWS	KT	SB
“Łaciate” milk	*1.3E-06	*2.6E-05	–	*0.0065	0.0567	*5.9E-06	*0.0038
“Jogobella” yogurt	*0.0017	*0.0197	–	0.1732	0.1294	*0.0008	0.9777
“Sokółski” kefir	0.1405	0.4670	–	0.6222	0.1212	*1.5E-05	0.5625
“Piątnica” cream	*0.0066	*0.0003	–	0.2470	*0.0039	*9.6E-05	–
“Bakuś” homogenized cheese	*0.0045	0.9929	*0.0034	0.4998	0.4561	0.4653	*8.2E-06
“Rama Creme Bonjour”	*0.0010	*1.2E-08	*0.0001	0.2498	*0.0309	0.1554	–
“Łukta” cottage cheese	0.8318	*0.0012	–	0.2850	0.3425	*0.0071	–
“Gouda” ripening cheese	0.8674	*8.3E-05	*7.4E-11	0.9952	*0.0069	0.9740	–
“Hochland” processed cheese	*0.0015	*0.0121	*4.5E-97	*0.0056	0.3369	*1.5E-05	0.9580
“Turek” blue cheese	*0.0003	0.3159	–	0.0766	0.9087	*1.1E-05	–
“Masmak” butter	*0.0078	*0.0020	–	0.3133	*0.0379	*1.2E-07	–

* product price differing significantly from the average market price at the significance level of $\alpha \leq 0.5$
Source: Own studies.

The full picture of prices in Olsztyn market is completed by significance measurement of price differences between pairs of retail outlets immediately neighboring with one another at the “map of price differences”. In that map illustrating the ranking of retail outlets according to prices of products offered from the lowest to the highest the outlet category symbol with subscript “i” informs about statistical significance and subscript “n” about insignificance of the difference between the average price of products offered by that category of outlets and the average price that is positioned closest to the right as a price higher from it (Fig. 1).



Goods: mŁ – “Łaciate” milk, jJ – “Jogobella” yogurt, KS – “Sokółski” kefir, śP – “Piątnica” cream, sB – “Bakuś” cheese, RCB – “Rama Creme Bonjour”, tŁ – “Łukta” cottage cheese, sZG – “Gouda” ripening cheese, stH – “Hochland” processed cheese, spT – “Turek” blue cheese, mM – “Masmak” butter; Gray shading means that product price offered by the outlet differs significantly from the average market price used as reference. ...-/+ ...% percent difference between product price offered by a given outlet and the average market price used as reference (– price lower; + price higher).

Fig. 1. Map of average price differences significance

Source: own studies.

Table 4
Distribution of studied dairy products prices offered by individual categories of outlets

Products studied	Prices				
	Lowest	Low	Average	High	Highest
“Łaciate” milk	H	KT, SB, S	KWS	SP	
“Jogobella” yogurt		H, S, KT	SB, SP, KWS		
“Sokółski” kefir		KT	SB, SP, S, KWS, H		
“Piątnica” cream		H, KT, S	SP	KWS	
“Bakuś” homogenized cheese		H, D	KT, S, SP	KWS	SB
“Rama Creme Bonjour”	D, H	S, KT	SP	KWS	
“Łukta” cottage cheese	S	KT	H, SP, KWS		
“Gouda” ripening cheese.		S, D	H, SP, KT	KWS	
“Hochland” processed cheese	D, H	KT, S	SB, KWS	SP	
“Turek” blue cheese		H, KT	KWS, S, SP		
“Masmak” butter	H, KT	S	SP	KWS	

Source: Own studies.

The overall presentation of results from both significance tests gives the grounds for classification of retail outlets according to the level of prices offered to 5 categories proposed by Szumilak (SZUMILAK 2004) i.e.: offering the

given product at a lowest price (e.g.: “Łaciate” milk – hypermarkets), low (e.g.: “Sokółski” kefir – kiosks at markets), average (e.g.: “Masmak” butter – grocery shops), high (e.g.: “Rama Creme Bonjour” cream cheese – freestanding kiosks) or the highest price (e.g.: “Bakuś” homogenized cheese – filling stations). The system of market prices prepared in that way reflects the pricing space that depends on the dairy product offered and the type of retail outlet. The narrowest scope for possible price alternatives occurs in case of “Jogobella” yogurt, “Sokółski” kefir and “Turek” blue cheese. Those products are sold in the retail network at average market prices or prices lower than average (Tab. 4).

Attractiveness of trade outlets as concerns the purchase value of products’ basket

The observed covered products price level differences between retail outlet categories are reflected directly in the value of purchased “baskets of products”. The synthetic image of the price offer in Olsztyn retail network was presented by determining and comparing the values of baskets of purchases made in individual retail outlets (Tab. 5, Fig. 2). Comparing the values of baskets appraised according to the highest and the lowest prices of products covered and their substitutes for individual retail outlets to the average value of the basket of covered products for the entire city market it was established that the extreme values of baskets composed of covered products were 85% (hypermarkets) and 116% (grocery shops and freestanding kiosks) while in case of baskets consisting of substitutes 63% (hypermarkets) and 151% (hypermarkets). That means that in November 2004 the buyer of the most expensive basket of dairy products paid almost PLN 10 more and in case of substitutes PLN 27 more than for the corresponding cheapest baskets of such products.

In 2004, the cheapest purchase baskets composed of covered products were calculated according to average prices offered by hyper and supermarkets. If the buyers made purchases at hypermarkets those baskets would be cheaper than the most expensive basket purchased in a freestanding kiosk by PLN 2.90 (10%), and in case of supermarkets by PLN 2.20 (almost 8%). It is interesting that the highest spread in monetary value of baskets is characteristic in case of grocery shops and freestanding kiosks. In grocery shops the basket calculated according to the maximum prices was more expensive by 32% and in case of freestanding kiosks by 29% than the cheapest baskets made in those outlets. The buyers searching for the cheap substitutes of covered products would also buy them at hypermarkets and those baskets would be cheaper by 43%

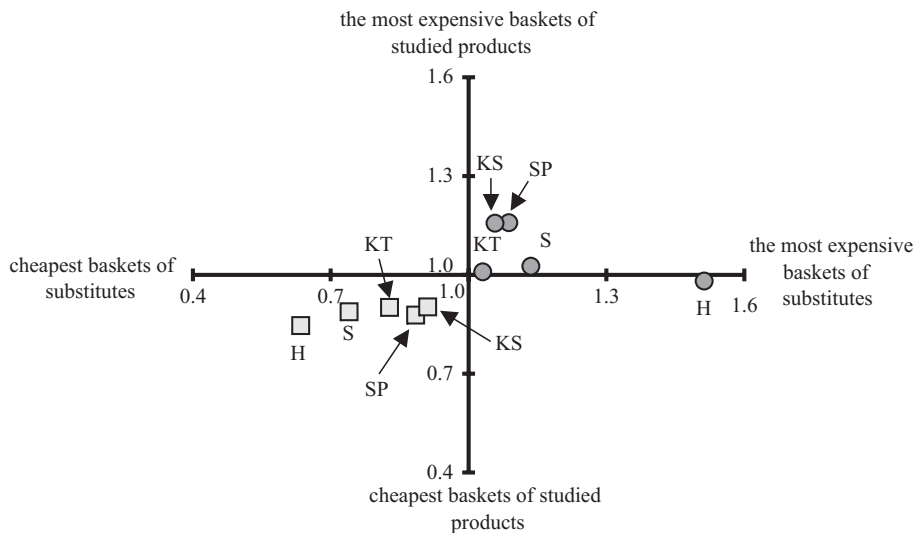
Table 5

Baskets of products studied and their substitutes purchased from Olsztyn retail outlets

Purchase baskets	Purchase basket value (PLN)						Differences between purchase baskets and city market basket assessed according to average prices				
	City market	H	S	SP	KS	KT	H	S	SP	KS	KT
Studied products (average price)	30.4	28.2	28.8	30.8	31.0	29.0	-2.2	-1.5	0.4	0.7	-1.4
Cheapest studied products	25.1	25.7	27.0	26.7	27.4	27.4	-4.7	-3.4	-3.7	-3.0	-3.0
Most expensive studied products	35.4	29.8	31.2	35.2	35.2	30.7	-0.6	0.8	4.8	4.8	0.3
Cheapest substitutes	26.0	19.3	22.5	26.9	27.7	25.1	-11.1	-7.9	-3.5	-2.7	-5.2
Most expensive substitutes	32.9	45.9	34.5	33.0	32.1	31.3	15.6	4.1	2.7	1.7	0.9

Source: Own calculations based on: own studies and *Popyt na żywność... 2004. Statistical yearbook 2004.*

(PLN 8.50) than the most expensive basket available from freestanding kiosks. Those willing to purchase more expensive substitutes would make their purchases cheap at markets and there they would pay PLN 14.60 less (47%) than in the hypermarket offering the most expensive substitutes for the covered products.

**Fig. 2.** Map of retail outlets positioning

Source: Own studies.

Position of hypermarkets in the right lower quarter of the “price positioning map” indicates that the most expensive covered products offered by them (baskets) do not exceed the average market prices while the substitutes are sold at the highest prices both as compared to the entire market and other categories of retail outlets. On the other hand position of hypermarkets furthest in the left lower quarter means that selling products at the lowest prices they assume the prices set by supermarkets and kiosks at markets for their reference base. Particular attention should be paid to the “cheapest” baskets purchased in freestanding kiosks and grocery shops and the closeness of the “expensive” baskets offered by those outlets. Positioning of those outlets the highest in the right upper quarter (the highest prices of substitutes and covered products) means that those outlets determine the pricing ceiling, which results from their convenient location for the buyers and implementation of the maximum profit strategy by applying high prices.

Conclusion

The results of studies presented in the paper confirm the influence of category of the retail outlet used for sales of dairy products on price level. They prove that each category of retail outlets applies a characteristic concept of price positioning in the market. The modern forms of retail outlets enjoy significant price advantage over the traditional outlets and as a consequence the baskets of products purchased there are the most “cost” attractive for buyers.

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RATING IN THE OPINION OF THE OLSZTYN INSURANCE COMPANIES

Elżbieta Kucka, Ryszard Stempel

Department of Insurance
University of Warmia and Mazury in Olsztyn

Key words: rating note, internal and external rating, insurance companies.

A b s t r a c t

The aim of studies was an attempt of giving the opinion about rating, its usefulness and a level of its using so far by the insurance companies from the city of Olsztyn.

The research was carried out in the year 2005 in the companies of I and II branch that had been operating on the market for more than 5 years. The research tool was a questionnaire put forward to the managers of 24 insurance companies who had given their assent for carrying out the research.

The study shows that more than a half of respondents consider rating to be a reliable and comprehensive source of evaluation. In the opinion of 92% out of the examined insurance companies, the possession of ranking note contributes to increasing investors' confidence, while only 17% think that it is not important for their clients. However, the high costs of external rating and fear of getting a low note are the barrier in using that type of tool by the insurance companies from Olsztyn.

RATING W OPINII OLSZTYŃSKICH FIRM UBEZPIECZENIOWYCH

Elżbieta Kucka, Ryszard Stempel

Katedra Ubezpieczeń
Uniwersytet Warmińsko-Mazurski w Olsztynie

Słowa kluczowe: ocena ratingowa, rating zewnętrzny i wewnętrzny, towarzystwa ubezpieczeniowe.

A b s t r a k t

Celem badań była próba wypracowania opinii na temat ratingu, jego przydatności, a także poziomu dotychczasowego wykorzystania przez towarzystwa ubezpieczeniowe z terenu Olsztyna.

Badania przeprowadzono w 2005 r. w zakładach działu I i II, działających na rynku ponad 5 lat. Narzędziem badawczym był kwestionariusz ankiety skierowany do dyrektorów 24 towarzystw ubezpieczeniowych, którzy wyrazili zgodę na przeprowadzenie badań.

Z przeprowadzonych badań wynika, że ponad połowa ankietowanych uważa rating za wiarygodne i kompleksowe źródło oceny. W opinii 92% badanych firm ubezpieczeniowych posiadanie noty ratingowej przyczynia się do zwiększenia zaufania wśród inwestorów, ale tylko 17% uważa, że ma to znaczenie dla ich klientów. Jednak wysokie koszty ratingu zewnętrznego oraz obawa uzyskania niskiej oceny są barierą w wykorzystaniu tego typu instrumentu przez olsztyńskie firmy ubezpieczeniowe.

Introduction and the aim of research

Along with a progress and still growing of complication level of financial market in Poland, including also the insurance sector, there is a need of working out the system of evaluation of financial institutions. Both complexity of financial decisions and risk, that is connected with that, cause the necessity of creating the opportunity of getting financial and economic evaluation of the financial market entities by the investors. Such evaluation should be depicted in a comprehensible and easily accessible way for the market participants. These are rating's abilities. The rating may be defined twofold: in wider meaning as a process of giving an evaluation note, and in narrower – as a result of that process that is established after carrying out the rating procedure by the rating agency.

The insurance rating is meant as an estimation of insurance companies' abilities to pay the policy liabilities – the economic guarantees of realness of insurance protection, including the period of their realisation – which is one of the main theoretical and practical problems in times when the growing complication level of the financial market makes necessity of developing better and better methods of evaluation of insurance companies and their products (MILEWSKI 2000).

The term "rating" is ambiguous and may be classified in many ways when taking as a criterion among others: a target of examination, time of analysis, the procedure goals or the range of used information. In the insurance line the following rating types can be separated:

1. Rating of insurance companies as issuers of debt securities (rating of short-term investment contracts, of debt securities, of short-term securities, of preferred stocks, of credit as well as dual instalments).
2. Rating of insurance companies as guarantors of insurance protection:
 - ratings of A.M.Best agency which are the opinion on the insurance company abilities to fulfil all liabilities towards the owners of insurance policies.
 - ratings of financial results – made by A.M.Best for newly arisen or small insurance companies after 3-year period of their activity.
 - ratings of financial power of insurer – the construction based on traditional models for debt securities payees

- ratings of abilities of considerations and compensations payments owing to the insurance agreements.
- ratings based on the public information given by Standard&Poor's agency without the order or company's assent basing on the numerical data obtained from the financial reports/ balances and other sources of information (ratings of solvency)

3. Ratings of insurance products.

Rating agencies are usually the economic entities – corporations that operate regardless of the entities evaluated on the commercial rules. They support the investors' decisive process and participate in a proper capital allocation. Currently, all over the world their number is estimated as high as 140-150 (MILEWSKI 2004). The rating agencies take fees for their services charging the market participants. The cost of such an evaluation is from a few dozens to a few hundred thousand dollars. The agencies operate on the national and international markets. In the year of 1996 the first rating agency was formed in Poland and Central Europe – the Central-European Centre of Rating and Analysis (CERA Co.). Its main founders and shareholders are: banks, insurance companies and brokerage offices, Polish Bank Association and the Stock Exchange in Warsaw (IGNATOWICZ 1996).

The advantages of CERA Co. in comparison with the foreign rating agencies operating on the Polish market are:

- very good knowledge on the Polish economy,
- lower costs of evaluation,
- shorter periods of evaluation preparation (PONIATOWICZ 2000).

The most important requirements in the rating evaluation are: rating topicality, adequacy and comprehensibility of the rating evaluation process, its independence and credibility, comparability, orientation on future and high precision of the rating evaluation process (JAWORSKI 2002).

In practice, the ratings have strict character so they are the judgement about the financial power of the insurance company. They usually show the position of the company in comparison with the market results or the results of other insurance companies.

Individual insurance companies are classified by the rating agencies, on the basis of the analysis results, to appropriate rating classes which are presented by means of letter symbols, often supplemented by a figure or signs + or –.

The opinions in form of marks, that are published by the rating agencies, standardise the risk by equating all debt instruments and organisations tools to one scale, comparative for all, in order to increase the safety level of transactions on the financial market. Rating is a dynamic category that referring to the future. A rating note is affected by, among other things: legal form, range of activity, competitive position on the market, quality of manage-

Table 1

Long-term rating marks of selected rating agencies

Description of the mark meaning	Moody's	Standard& Poor's	Fitch IBCA
Investment category			
Exceptional ability of delivering the taken financial liabilities	Aaa	AAA	AAA
Very high ability of delivering the taken financial liabilities	Aa1	AA+	AA+
	Aa2	AA	AA
	Aa3	AA-	AA-
High ability of delivering the taken liabilities while at the same time sensibility on unfavourable economic conditions and changes of currently existing conditions	A1	A+	A+
	A2	A	A
	A3	A-	A-
Sufficient ability of delivering the taken liabilities while at the same time higher sensibility on unfavourable economic conditions and changes of currently existing conditions	Baa1	BBB+	BBB+
	Baa2	BBB	BBB
	Baa3	BBB-	BBB-
Speculate category			
Less endangered in a short term but facing the high uncertainties that may have unfavourable consequences	Ba1	BB+	BB+
	Ba2	BB	BB
	Ba3	BB-	BB-
More exposed on unfavourable financial and economic conditions but currently is able to cover its financial liabilities	B1	B+	B+
	B2	B	B
	B3	B-	B-
Currently endangered and dependent on favourable financial and economic conditions so that its financial liabilities to be covered	Caa	CCC	CCC
Currently very endangered	Ca	CC	CC
The application for bankruptcy was applied or similar to that actions have been taken, however repayments and financial liabilities are continued	C	C	C
Deadline for paying off the financial liabilities is not kept	D	D	DDD,DD,D

Source: Self study on the basis of JAWORSKI (2002).

ment, company's financial situation. Each of the rating agencies has its own mark criteria that are selected individually depending on the analysed company.

In the situation of Poland, where the new insurance companies are arising on the market rapidly and the clearness of that market is decreasing, the ratings play an especially important part in order to warn about the unfavourable phenomena that occur in the individual companies and in the face of bankruptcy threats.

The aim of research is an attempt to develop an opinion about rating as a tool of the insurance company evaluation, its usefulness in the opinion of insurance market of Olsztyn, and also about its usage so far.

Methodology

The research was carried out in the year of 2005 among 24 insurance companies that operate in the city of Olsztyn. In the research the companies running business concerning the property insurance policies (II branch) and life insurance policies(I branch) took part. These were branches, inspectorate offices, branch offices, regional offices and agencies that had been operating on the market for more than 5 years and gave their assent on carrying out a questionnaire research. Among them there were companies possessing a rating note and also those who had none.

The research tool was a questionnaire containing the ordered set of 25 open and closed questions. Among the closed questions there were scaled questions placed. The collected source material was put forward to the comparative analysis. The results have been presented in a descriptive form, in tables and charts.

The results of research

All respondents, regardless of the fact if the insurance company possess a rating note or not, proved good knowledge about a tool of company's evaluation which is a rating. The most popular rating agency among the respondents was the Standard&Poor's agency – recognised by all examined. On the second place (with 25% of indications) was the Moody's agency, and on further places were the A.M.Best Company (8%), the Fitch Ratings (8%) and the CERA Co. (8%). While studying the sources from which the insurance companies take and analyse the information about the rating, it was claimed that the majority of the respondents had it from the scientific press (41%). 32% of respondents pointed the Internet as a main source of the knowledge in that subject while for 27% such a source were trainings.

Studying the opinion of the respondents about credibility and completeness of a rating note, the data pointing that a half of respondents considered them as reliable, comprehensive and complete were obtained; 42% had no opinion on that subject, and only 8% consider rating an unreliable source of evaluation.

The conclusion drawn from careful analysis is that among the respondents who consider the rating as a reliable and complete source of evaluation there

were 85% companies that possess a rating note. Therefore, one can suppose that their positive opinion about the rating is an effect of their better and stronger knowledge on that subject. The company's given rating note is more or less discussed during the trainings, the board meetings with investors, or even with clients. On a basis of such a rating note the board makes decisions about taking repair actions in these fields that may arise any dubiousness.

On the basis of the question "Is it worth trying to get an opinion of rating agencies?" all the respondents answered "yes". It can be supposed that the insurance companies are aware of rising interest among the clients interested in the realness of the insurance protection. As many as 58% of respondents claimed that possessing the rating note is dictated mainly by the competitors' activities and in some extent also by the economic reality, however 33% said that possessing that kind of a note is just essential. The insurance companies would like to have that kind of note and declare to initiate a procedure to get it. From among (about 30) companies working in the city of Olsztyn only a few possess a rating note given by an agency (the external rating).

Answering the question included in the questionnaire, about pointing the advantages of a rating note, for the 92% of respondents the most important was: detecting of weak points, increasing of the investors' trust and rating as a quality mark. For 83% of the companies the possibility of self-control was very important (Tab. 2).

Table 2

Value ranking of advantages in the rating note according to the respondents

Type of advantage	Importance acknowledgement of that advantage evaluated by the respondents		
	important	less important	no matter
Increasing investors' trust	22	2	0
Detecting/revealing the weak points	22	2	0
Rating as a "quality mark"	22	2	0
Possibility of self-control by the company	20	4	0
Comprehensiveness and professionalism of analysis	16	8	0
Permanent monitoring of the evaluation	16	8	0
Commonness – public announcing about a rating note	14	8	2
Supporting the deciding process	8	16	0

Source: Self study on the basis of pool.

Although the insurance rating seems to be a very good evaluation tool of insurance companies, it is not perfect. The most important disadvantages ascribed to the rating process are shown in the table 3.

Table 3

Value ranking of disadvantages in the rating note according to the respondents

Type of disadvantage	Importance acknowledgement of that disadvantage evaluated by the respondents		
	important	less important	no matter
High costs	24	0	0
Impossibility of the control correctness and lack of objectivity in the rating process	18	6	0
Rating note dependent on the analysts' competence	12	10	2
Subjectivity of some factors subjected to the evaluation	12	8	4
Subjectivity in giving weight to the individual factors	6	18	0
Limited access to procedures and data used by agencies	6	16	2
Delayed market reactions with relation to the time of giving (changing) the rating note	6	14	4
Complex procedures of evaluating	4	12	8

Source: Self study on the basis of pool.

Considering the data shown in the table 3 one can draw conclusions that high costs of giving the rating note are its most important disadvantage and the factor that significantly limits its accessibility. The second most important disadvantage of rating, that was pointed by 75% of the examined insurance agencies, is impossibility of control of correctness and lack of objectivity in the rating process. A rating agency chooses itself the fields of activities of a insurance company which are then evaluated by the agency analysts. The role of a company in the evaluation process of giving the note is limited to only delivering all essential documents and, in the final phase, to accepting the given rating note.

The next problem that was taken in the research was examining if the fact of possessing the rating note influences the increase of clients' and investors' trust, and when choosing an insurer are the clients guided by the fact of a rating note possession? In the opinion of respondents the high rating note influences favourably the investors' trust to the insurance company. The high rating note means that the insurance company is regarded as safe and solvent. The research shows, that so far clients have not taken into consideration the fact that the insurance company have the rating note while choosing the insurance company (83% of the respondents). They pay attention mostly for the common opinion about the insurance company and the height of an insurance premium.

The research gives also an answer to the question what type of rating (internal or external) is more important for the insurance company's activities.

All of the respondents considered the external rating – given by a rating agency more favourable for the insurance company's activities. However, in Poland the internal rating is most often applied in the companies because of the high costs of the external rating and the fears that getting a low rating note may affect unfavourably the further development of the insurance company. Such answers were given by 58% of the respondents. More than 2/3 of the examined companies claims that a low rating note or a lack of that note will cause in the future a decrease of the number in the potential clients and investors as well as a decrease in market share and consequently worsening the competitive position of these companies, while only 8% claim that it will not cause any negative changes for the company's future.

Summary

The research which was carried out shows that all respondents have knowledge about the subject of rating. The most popular rating agency is the Standard&Poor's agency.

More than a half of the respondents consider rating as a reliable, comprehensive and complete source of evaluation. 58% of respondents think, that it is worthy trying to obtain the rating agency's opinion (external rating) and 1/3 of them claim that it is just essential.

As basic advantages of the rating note 92% of respondents pointed the possibility of finding weak points of a company and increasing the investors' trust. The most important disadvantage is high costs of getting the external rating note.

In the opinion of respondents the rating note affects favourably a trust of the insurance company investors. The high rating note means that the insurance company is regarded as safe and solvent. The clients, however, so far have not paid much attention for the rating note possession while choosing the insurance company (83% of respondents).

In spite of the awareness of the external rating advantages, its high costs and the fear about getting the low rating notes cause that only a few insurance companies in the city of Olsztyn have such a note.

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