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RELATIONSHIP ENDING IN THE CONCEPT OF CUSTOMER RELATIONSHIP MANAGEMENT

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K e y W o r d s: relationship ending, customer relationship management – CRM, professional services.

A b s t r a c t

The paper discusses the problems of fading and ending of business relationships in the sphere of professional services i.e. the phase of a relationship dissolution resulting from a client's or a firm's decision to end it. This phase includes, among others, determining the causes of the relationship dissolution and drawing conclusions for the future in order to prevent losing the most lucrative clients. Both in theory and in practice, relationship ending is perceived as something stretched in time i.e. consisting of numerous stages and influenced by numerous factors and events.The aim of the present paper is an analysis of the modern literature on the causes and mechanisms of business relationships termination in the sphere of professional services as well as indicating some possibilities of a more effective and efficient management of these relations.

ISTOTA KOŃCZENIA RELACJI W ŚWIETLE KONCEPCJI ZARZĄDZANIA ZWIĄZKAMI Z KLIENTEM

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S ł o w a k l u c z o w e: kończenie relacji, koncepcja zarządzania związkami z klientem (Customer Relationship Management – CRM), usługi profesjonalne.

A b s t r a k t

Artykuł dotyczy problematyki wyciszania i kończenia relacji biznesowych w sferze usług profesjonalnych, tj. fazy kończenia relacji na skutek decyzji klienta lub firmy o ich przerwaniu. Faza ta obejmuje m.in. ustalenie przyczyn kończenia relacji i wyciągnięcie wniosków na przyszłość, aby nie dopuścić do utraty najbardziej rentownych klientów. Zarówno w teorii, jak i praktyce, kończenie relacji postrzega się jako rozciągnięte w czasie, tzn. takie, które mają wiele etapów i na które wpływa wiele czynników i zdarzeń. Celem artykułu jest analiza współczesnej literatury dotyczącej przyczyn i sposobów kończenia relacji biznesowych w sferze usług profesjonalnych oraz wskazanie możliwości bardziej efektywnego i skutecznego zarządzania tymi relacjami.

Introduction

Taking into consideration the constantly growing turbulence of the business environment, it can be claimed that there exists the necessity of application of an adequate strategy for its better operation. The strategy of satisfaction might be one of such strategies, not only customer satisfaction but also the satisfaction of all the interested entities – stakeholders (among others in ANDRUSZKIEWICZ et al. 2014). In the present study we are going to regard business partners as the interested entities, the ones to whom the strategy, the operational processes and business functions are to be adjusted so that the objectives of maintaining and making the relationship more attractive may be realized and long-term profits – optimalized. Thus, the point is, among others, to distinguish and individualize an approach to a particular business partner and accomodate the firm's offer to his needs. It is, therefore, a continual process during which firms establish long-term bonds – relations with their potential and current business partners which are to result in achievement of common objectives. The life cycle of a relationship with business partners consists of phases, the final one of which is the relationship termination phase. In this phase the partners decide whether or not to continue their relationship, basing on their experiences so far.

Processes of communication in professional services marketing differ from actions performed on the quickly-rotating markets of goods. In the case of professional services, the partner looks most frequently for assistance in problem solving, in searching and developing the paths of growth and in getting objective consultancy, and different partners may have different expectations with regard to what they see as advantage in connection with the same kind of service. It is therefore quite important to recognize what is crucial for a given partner.

The problem of relationship exit appeared already in the works of Hirschman and Dwyer in 1970s and 80s. This subject matter started to be explored more deeply only in 2nd half of 1990s, and the relationship dissolution theory started to be developed in the Nordic school of relational marketing, where it is still under study. In the Polish literature of the subject these problems are undertaken only in a fragmentary manner, and they usually refer to the studies conducted abroad. This subject constitutes a research area still explored, important both from the point of view of the theory of relational management and from the practical perspective. In the literature devoted to it there are still only few studies based on empirical results concerning the causes and ways of business relations termination in the sphere of professional services. The aim of this article is an analysis of the modern literature devoted to identification of the causes and ways of business relationships termination in the sphere of professional services, insight into which might allow to work out more effective and efficient methods of these relations management.

Theory on Relation Ending

The problem of relationship ending has existed in the professional literature for over 40 years. It appeared for the first time in the works of HIRSHMAN (1970), where it is still perceived in terms of point, as the moment of client exit from the relationship. A dozen or so years later DWYER, SHUR and OH (1987, pp. 19, 20) described the relationship dissolution at its final stage as a process, emphasising the need of gettomg more knowledge about it. In the course of a lush development of relational marketing academics and practitioners focused mainly on establishing and developing relationships. It is reflected in the fact that only very rarely have the definitions of relational marketing included in their scope a reference to their termination. The definition of GRÖNROOS (1997, p. 407) is a notable exception here. Among marketing operations the author has listed identification, creation, maintaining, improvement and, if necessary, termination of a relationship with clients and other partners. Optimal realisation of the process of exiting the relationship in the first place diminishes the losses resulting from separation for both the partners and the environment. It also leaves the door open for future restoration of the cooperation.

In the overseas literature there are many terms used to refer to the phenomenon of relationship ending. Most frequently the following ones are used: relationship ending, relationship dissolution, relationship termination and relationship exit, and they are often used interchangeably. In the Polish language it is acceptable to refer to the phenomenon in question as the phenomenon of customer resignation, customer exit, customer switching behaviour or loss of a customer. In these notions there is a definite tendency to treat the termination of a relationship as a point, making the possibility of relationship ending dependent only on the decision of the customer. Thus, they do not include the possibility of full management of these relations by both parties. In Poland these problems are still treated in a fragmentary manner, in comparison to the volume of studies published on the subject abroad.

The fact that there can be found numerous definitions of the phomenon constitutes the evidence of the multiplicity of approaches. The authoress of one of the mildest definitions is Steward, who claims (with respect to a relationship with an individual customer) that it is: „an economic phenomenon of a customer ceasing patronage of a particular supplier" (STEWARD 1998, p. 235). The definition of business relationship formulated by Tahtinen represents the other extreme. It reads as follows: „A business relationship is dissolved when all the activity links are broken and no resource ties or actor bonds exist between the comapnies. [...] A business relationship has entered a dissolution phase when at least one patner no longer views the relationship a continuing or the interdependency has otherwise critically decreased" (TÄHTINEN 2001, p. 46). In the face of the breach of all the bonds linking the enterprises, none of the parties expects their restoration in the future.

The development of the theory of relationship ending illustrates, among others, the transition from the perspective of perception of the phenomenon in terms of point to the perspective of a process approach. It means that relationship ending is perceived as stretched in time i.e. as an entity composed of numerous stages and influenced by numerous factors and events. Process approach has been adopted from the psychological research on human relationship dissolution conducted mainly by Steve Duck at the beginning of the 1980s. In economic sciences the widest description of business relationship dissolution has been presented by Jaana TÄHTINEN (2001, pp. 56–69), who has distinguished the stages of: assessment, decision-making, dyadic communication, disengagement, network communication, and aftermath. She has also inlcuded in the process the restoration of the relationship stage in the case when the exiting partner has decided to repair the inadequacies of the relation. Moreover, it should be noted here that neither the process nor its stages are linear in character. Considering the great number of people involved in it and the variety of tasks realised there simultaneously, it can run along more than one path (TAHTINEN 2002, p. 332).

The range of relation ending is treated in an equally varied manner. The widely documented approach of Tahtinen concerned the death of relationship; in practice, however, such overall and irrevocable termination happens very rarely; more frequently, the relation becomes faded, sleeping or simply neglected. HAJDUK-KASPROWICZ (2013, p. 34), when studying business relations in professional services, distinguished 3 ranges of their termination, taking into consideration the state of ties between the partners and, in the first place, the change of volume of the current cooperation and willingness to restore it in the future. Thus, there are such terminations:

– full (activity links, resources ties and actor bonds are cut with no intention to revive),

– remaining or residual (cooperation between partners is limited to the extent allowed by the earlier-made contracts and law; restoration of cooperation is not taken into consideration),

– partial (some participants from the party commissioning on behalf of the customer have cut cooperation completely with at least some executors on the part of the service provider, and they definitely do not intend to restore it.)

In literature also other kinds of relationship terminations are distinguished. HOCUTT (1998, p. 196) divides them according to the source of the termination decision (customer's, seller's or mutual decision). ROSS (1999, pp. 77, 78) observes that processes of relationship ending may eventually be open or not to the prospect of cooperation restoration. FINALLY, HALINEN and TÄHTINEN (2002, pp. 166–168) note that the type of relationship from before the initiation of the termination decision may affect the way of its termination, from natural ending, through predetermined, chosen, to forced and desired.

The processes themselves were divided with regard to:

– process length (long, short) and reaction strength (strong, weak) (ROOS, STRANDVIK 1997, pp. 629, 630),

– kinds of trigger, commitment level, character of the process, revocability (MICHALSKI 2004, pp. 985–994),

– interdependency in a relationship, power balance, relationship formality, relationship structure (TÄHTINEN et al. 2007, pp. 238–242),

– kind of precipitating events and factors, level of risk for success of projects conducted with a partner, using voice strategy, number of management levels of the involved actors, desire to reactivate the relationship, state of interpersonal ties, activity links and resources ties, including relationship energy (cooperation attractiveness, inter-partner trust and involvement in relationship) (HAJDUK-KASPROWICZ 2013, pp. 169–171).

Numerous factors and events have influence on the course of the relationship termination process. Among the numerous ways of their division found in the literature, the most exhausting one is probably that proposed by TÄHTINEN (2001). She has distinguished:

– factors predisposing to exit (they have existed from the very beginning of the relationship, increasing its vulnerability to termination),

– precipitating events (they appear in the course of relationship and provoke and strengthen the desire to end it),

– attenuating factors and events (they attenuate the impact of the predisposing and precipitating factors and events in a way constituting barriers to relationship ending).

Among the predisposing factors the strongest ones may be such as: multitude of alternative partners on the market, incompatibility of goals, characters, cultural differences or divergent directions of activity. Among the factors and events triggering and strengthening the process, the following may transpire to be the key ones: unsuccessful cooperation, staff changes, changes of the conditions of cooperation. Attenuating factors and events may be connected among others to the positive outcomes of efforts undertaken in order to improve the relationship, the high costs of relation exit or, finally, the liabilities following from the contracts binding the partners. Besides, events and factors influencing the process of relationship ending may be divided in yet another manner:

– actors-related (related to persons and organizations influencing the relationship directly and indirectly),

– relationship-related,

– task-related,

– related to the environment and network, in which the partners and the relationship itself exist.

Among all those factors and events the most turbulent ones are those related to the participants. It is the people, their reactions, the activities undertaken by them and their decisions that determine the course of the process of relationship ending most decisively. ALAJOUTSIJÄRVI et al. (2000, p. 1274), basing on the scientific achievements of psychologists concerning human relationships dissolution, have elaborated on a typology of various strategies of quitting the business partner, assumed by the parties of the relationship. Two dimensions have been taken into consideration: communication (direct, indirect), and self– and other-orientation. Indirect communication is a withdrawal from cooperation without any explicit signal of the intention to leave. The other-oriented, out of consideration for the partner, will at most declare a weakening of cooperation, or gradually decrease the volume or frequency of the exchange. The self-oriented will rather try to frighten the partner away, increasing cooperation costs, or will freeze the relationship atmosphere. They may also declare their intention to quit to other participants of the network of relationships e.g. to the media – rather than to the directly involved party. Direct communication is expressed in clear messages concerning the problems occurring in the relationship, the need of change in the relationship, and even an irrevocably coming termination. And in such kind of communication the other-oriented seek understanding, they care for the interests of the other party in the course of the process, thus diminishing the damages resulting from the breach of cooperation. The self-oriented may suddenly change their behaviour, try to impose their own vision of events, and even put the blame for the exit on the partner. Such atmosphere provokes conflicts, which has a detrimental effect on the relationship, on all the partners, and not unfrequently also on the network itself. According to ALAJOUTSIJÄRVI et al. (2000, p. 1282), one shoud strive each time at a „beautiful ending" i.e such an ending during which no harm is done to the leaving party, to the abandoned party or to the environment in which the relationship has been functioning so far.

Significance of Business Relation Dissolution for Enterprises

Having the skill of establishing long-term and stable relationships is necessary for growth of an enterprise. And the ability to end a relationship proves some maturity, as it reflects the awareness of the fact that:

– there exist situations when a relationship is developing in the direction of termination regardless of any attempts undertaken to save it (EGAN 2008, p. 64, GUMMESSON 2008, p. 264). PING (1999, p. 238), when conducting research in the branch of computer equipment sales, in which relationships with the main supplier are typically long-term (44% of the tested relationships lasted for 10 years and more), observed that 7% of enterprises are more or less determined to neglect the relation with their main supplier (leading to its weakening, and eventually to ending), 19% are planning a relationship termination;

– it may be agoogidea to end the relations with customers or other partners which adversely affect the business. For instance, the research of various branches conducted by HELM et al. (2006, p. 374) has shown that 17% of enterprises estimate that less than half of their relationships with customers are profitable, and the subsequent 21% of enterprises estimate that they incur losses from 25–50% of their relationships).

Nowadays the fact of a relationship termination is perceived negatively by managers as it is usually asociated with failure (loss of a customer – an important partner). Sothey admit to it reluctantly and do not want to make it worse. Very often the enterprise treats such information as confidential, which makes studying this issue difficult. Nevertheless, the insight into it brings a lot of profits, including:

– diagnosing the partner's intention to leave,

– identification of the reasons, allowing for their elimination or at least minimalization, and thus strengthening the existing relationships,

– proper management of the process of relationship ending with a business partner (unassisted initiation of relationship termination, minimalization of the negative outcomes for the partners and relational network, increasing the openness of the relationship to renovation or reactivation), getting to know the market and the competitors basing on ex-business partners' migrations directions.

The very fact of relationship dissolution may have both positive and negative outcomes. The positive aspects may include such situations when it is synonymous with the fulfilment of the originally assumed objectives e.g. in a joint venture (PICK 2010, pp. 98, 99). It can also be advantageous to release resources and create opportunities of their alternative use in other projects, and with other partners, including customers. Additionally, the change may become a motivator to improve the performance (TÄHTINEN 2002, p. 350). The analysis of the experiences will, in the first place, allow to deal with similar situations better in the future (HAVILA et al. 2001, pp. 14, 15). A range of negative outcomes may have very far-reaching consequences, the more so, the less skillfully the process of relationship ending will be handled. And as HOLMLUND and HOBBS (2009, pp. 282, 283) have emphasised, managers are usually not able to identify all the losses resulting from an ended relationship. Its participants are at risk of a stress, especially if it is happening in the atmosphere of conflict, of defeat, in which they lose energy. If they change their job as a result, it may largely impair the possibility of the relationship restoration in the future (TÄHTINEN et al. 2007, p. 233). In the case when attempts have been made to adapt to the conditions of cooperation with the exiting partner, a reorganization may prove to be necessary. Besides, it will be necessary to start search for a new partner, which will involve entering into negotiations and incur costs put on the new cooperation (TÄHTINEN, VAALAND 2006, pp. 15–17). Breaking a relationship with a customer results in a detriment to turnovers – the bigger, the more profitable the customer has been (TÄHTINEN 2002, p. 334). ALAJOUTSIJÄRVI et al. (2000, pp. 1284, 1285) have also drawn attention to the fact that a relationship dissolution may result in the firm's bad reputation in the environment. An enterprise which quits its partners may expect distrust, or even fear on the part of its current partners. It may also have to face difficulties in establishing new relations if it is perceived as „unstable in commitments". Such situations may be used by competitors in order to frighten away and take over both the customers and the suppliers. In extreme cases, an unfortunate relationship termination may become a subject for the media, which will adversely affect the enterprise's overall image.

Taking into consideration the big number of possible negative consequences of a non-optimal relationship dissolution for all the entities involved, it is essential not only to establish and foster relationships, but also to look more closely at the manner in which they are ended in a given enterprise. For there exists a need of strategical planning of the involved operationst. The „traditional" approach does not take this aspect into account. It manifests itself in typical questions posed by managers concerning the possibility of increasing the market share or the volume of sales. The self-imposing, natural answer here is to increase the number of customers. The fact that enterprises sometimes monitor retention indices as part of relational management and that they also undertake efforts to recognise the reasons of the customer leaving is a positive phenomenon. Unfortunately, the phenomenon of relationship ending is perceived too often in terms of point, which limits its understanding. The change of the traditional approach through paying attention to the inevitability of that final stage of a relationship and to the necessity of managing it, especially with respect to the customer, should express itself in the efforts to find answers to the following questions (HAVILA et al. 2001, p. 14):

– How and why does the enterprise lose its customers?

– How, if ever, should the enterprise actively end relationships?

– How can the enterprise predict which relationships are about to fade? How can the segments of customers important for the enterprise be formed so that their inclinations to leave might be easier cognised?

– What are the financial consequences of the current retention index and how does the current management of relationship ending affect it?

– How does the enterprise identify terminated relationhips and what do ex-customers do to satisfy their needs better? Does the enterprise know to which competing enterprise the client has moved?

– In what manner, if ever, should the enterprise contact its former clients?

– What is happening inside the enterprise when the relationship is ending or has ended?

– Does the enterprise know which competitor the leaving customers are considering as their potential new service provider? How can that be established and to what ends?

Moreover, relational management should also include other business partners, or even wider groups of interested entities.

Relationship termination management constitutes quite a challenge. According to the research (HOLMLUND, HOBBS (2009, p. 272) managers usually find it difficult to carry out this process. In enterprises there is a shortage of adequate procedures or at least some general strategies of dealing with the problem. Therefore, the decision-makers usually base their actions on their own experiences and intuition. They are not ready to share their experiences with other people in the firm and find it difficult to assess the losses of their firm generated as a result of a relation termination. Even when there exist reasonable motives inclining to initiate the process of a given relation dissolution, this process is termed as calling for courage, and is very often accompanied with a feeling of personal defeat. Such pressure gets enhanced if the number of the firm's clients is small and the cost of establishing new cooperation – high.

GEERSBRO and RITTER (2013, pp. 44–46) have identified 3 competences connected with relation ending:

– identification of undesirable clients (relation with whom is not profitable, in which respect one should take into consideration not only financial critieria but also indirect ones, such as: innovation, access to information, motivation),

– ability to select the best time to end the relationship,

– realisation of the process.

The more precisely are the customers undesirable for the enterprise defined, the more developed the above competences are. That is why routine supporting operations in relation ending have been elaborated on for managers, and they are rewarded for dissolving relations with unwanted clients.

Conclusion

The study of the course of business relationships ending processes and in particular the search for the factors which constitute reasons for business partners' resignation as well as for those which encourage a continuation of the relationhips in question in spite of the fact that a change of the service provider is being taken into consideration, is important both from the theoretical and practical point of view. A dissolution of a relation between two firms means a process during which all the resources ties or the bonds resulting from once commonly conducted activity of the cooperating firms get limited, tending to stop completely as far as possible. At the same time, in the course of the process interpersonal contacts at the level of these firms' representatives fade and at least one of or all the parties do not expect this relationship restoration in the future. However, a complete termination of these relationships in this shape happens extremely rarely on the market. More often the relationship becomes sleeping or is simply neglected. In the case of professional services, relational management is particularly important due to the key role played in it by people, which means a long-term interaction engaging both parties (which makes the relationhip an integral part of service evaluation), and the fact that they are individualized from the very beginning. It affects the intensity and complex structure of the relation. The knowledge of the most important factors determining the partner's decision to terminate the relation and of the variety of its ending processes, including relationship dissolution by the service receiver, allows those managing this type of cooperation to consciously create the conditions favouring their effective continuation, preventing at the same time their termination, or to conclude the cooperation in a manner open to its restoration in the future and and helpful in minimalization of the losses involved on the part of participants.

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References

Alajoutsijärvi K., Möller K., Tähtinen J. 2000. *Beautiful exit: how to leave your business partner*. European Journal of Marketing, 34(11/12): 1270–1289.

ANDRUSZKIEWICZ K., NIEŻURAWSKI L., ŚMIATACZ K. 2014. *Role i satysfakcja interesariuszy w sytuacji kryzysowej*. Marketing i Rynek, 8: 18–24.

DWYER F.R., SCHURR P.H., Oh S. 1987. *Developing Buyer-Seller Relationships*. Journal of Marketing, 51(2): 11–27.

EGAN J. 2008. *Relationship Marketing. Exploring relational strategies in marketing*. Ed. 3. Harlow, England: Pearson Education Limited.

GEERSBRO J., RITTER T. 2013. *Antecedents and consequences of sales representatives; relationship termination competence*. Journal of Business and Industrial Marketing, 28(1): 41–49.

GRÖNROOS C. 1997. *Value-driven Relational Marketing: from Products to Resources and Competencies*. Journal of Marketing Management, 13(5): 407–419.

GUMMESSON E. 2008. *Total Relationship Marketing. Marketing management, relationship strategy, CRM, and a new dominant logic for the value-creating network economy.* 3rd edition. Oxford: Butterworth-Heinemann.

HAJDUK-KASPROWICZ E. 2013. *Doctoral dissertation under the title: Uwarunkowania zmiany dostawcy usług profesjonalnych przez klientów biznesowych na przykładzie branży badań rynku i opinii.* Nicolaus Copernicus University, Toruń.

HALINEN A., TÄHTINEN J. 2002. *A process theory of relationship ending*. International Journal of Service, 13(2): 163–180.

HAVILA V., HOLMLUND-RYTKÖNEN M., STRANDVIKx T., TÄHTINEN J. 2001. *Problematising the phenomenon of relationship dissolution, the contribution of a workshop.* Oulu University Press, Oulu.

HELM S., ROLFES L., GÜNTER B. 2006. *Supliers' willigness to end unprofitable customer relationships. An exploratory investigation in the German mechanical engineering sector.* European Journal of Marketing, 40(3/4): 366–383.

HIRSCHMAN A.O. 1970. *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States.* Harvard University Press, Cambridge.

HOCUTT M.A. 1998. *Relationship dissolution model: antecedents of relationship commitment and the likelihood of dissolving a relationship*. Interenational Journal of Service Industry Management, 9(2): 189–200.

HOLMLUND M., HOBBS P. 2009. *Seller-initiated relationship ending. An empirical study of professional business-to-business services*. Managing Service Quality, 19(3): 266–285.

MICHALSKI S. 2004. *Types of Customer Relationship Ending Processes*. Journal of Marketing Management, 20(9/10): 977–999.

PICK D. 2010. *Never Say Never – Status Quo and Research Agenda for Relationship Termination in B2B Markets*. Journal of Business Market Management, 4(2): 91–108.

PING Jr. R.A. 1999. *Unexplored Antecedents of Exiting in a Marketing Channel*. Journal of Retailing, 75(2): 218–241.

ROGOZIŃSKI K. 1998. *Nowy marketing usług.* Poznań Academy of Economics Editing House, Poznań.

ROGOZIŃSKI K. 2006. *Wpisanie relacji w marketingowy kontekst*. In: *Zarządzanie relacjami w usługach*. Ed. W.K. Rogoziński. Difin, Warszawa, pp. 13–43.

ROOS I. 1999. *Switching Processes in Customer Relationships*. Journal of Service Research, 2(1): 68–85.

ROSS I., STRANDVIK T. 1997. *Diagnosing the Termination of Customer Relationships*. AMA Proceeding of the New and Evolving Paradigms: The Emerging Future of Marketing. Conference from June 12–15. AMA, Dublin, pp. 617–631.

STEWARD K. 1998. *The Customer Exit Process – A Review and Research Agenda*. Journal of Marneting Management, 14(4): 235–250.

TÄHTINEN J. 2001. *The dissolution process of a business relationship. A case study from tailored software business*. PhD Dissertation. Taken on 02 22, 2011 from the following website: http://herkules.oulu.fi/isbn9514265300/.

TÄHTINEN J. 2004. *The Process of Business Relationship Ending – Its Stages and Actors*. Journal of Market-Focused Management, 5(4): 331–353.

TÄHTINEN J., VAALAND T. 2006. *Business relationships facing the end: why restore them?* Journal of Business and Industrial Marketing, 21(1): 14–23.

TÄHTINEN J., BLOIS K., MITTILÄ T. 2007. *How the Features of Business Relationships Influence Their Endings*. Journal of Business Market Management, 1(3): 231–247.

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IMMIGRANTS IN THE LABOUR MARKET IN POLAND

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Key words: immigrants, labour migration, dual labour market.

Abstract

Labour immigrants play an increasingly important role in balancing the situation on labour market in Poland. Given the low demographic growth rate, pessimistic forecasts, mass labour emigration and structural maladjustment of the labour market, Poland faces the huge challenge of preventing a collapse of the pension system and public finance. A solution to the problem could be, for example, an inflow of foreign workers.

The character of this paper is both theoretical and practical. The purpose of the article is to analyse the phenomenon of labour immigration in Poland (legal regulations governing employment of foreign workers, scale of immigration) and to present the opinions of employers concerning the employment of foreigners and the obstacles associated with it. The results of surveys conducted among employers in Warmian-Masurian voivodeship will be used for this purpose.

According to the respondents, the main advantages of employing immigrants are lower costs (28%) and filling the gaps in the labour market (21%), whereas the biggest obstacle concerns complicated legal regulations (29%).

IMIGRANCI NA RYNKU PRACY W POLSCE

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Słowa kluczowe: imigranci, migracje zarobkowe, dualny rynek pracy.

Abstrakt

Imigranci zarobkowi odgrywają coraz większą rolę w równoważeniu sytuacji na rynku pracy w Polsce. Wobec niskiego przyrostu demograficznego, niekorzystnych prognoz, masowej emigracji zarobkowej oraz niedopasowania strukturalnego rynku pracy Polska stoi przed ogromnym wyzwaniem jakim jest zapobieżenie załamaniu systemu emerytalnego i finansów publicznych. Rozwiązaniem tej sytuacji może być m.in. napływ pracowników z zagranicy.

Praca ma charakter teoretyczno-praktyczny. Celem artykułu jest analiza zjawiska imigracji zarobkowej w Polsce (regulacje prawne zatrudnienia cudzoziemców, skala imigracji), a także przedstawienie opinii pracodawców na temat zatrudniania obcokrajowców, określenie korzyści i przeszkód z tym związanych. Posłużą do tego wyniki badań ankietowych przeprowadzonych wśród pracodawców z woj. warmińsko-mazurskiego.

Według respondentów największe korzyści z zatrudniania imigrantów to niższe koszty (28%) i możliwość uzupełnienia niedoborów na rynku pracy (21%), największą zaś przeszkodą są zawiłe regulacje prawne (29%).

Introduction

The term migration derives from the Latin word *migratio*, and it means displacement. Foreign immigration means the inflow of foreign nationals to a State in order to live there permanently or stay for a specific period of time. According to the definition of the Central Statistical Office of Poland (GUS), immigration means „arrivals from abroad in order to settle (for permanent residence) or for a temporary stay associated with a change of the country of residence". Short-term immigration is when the country of residence is changed for a period longer than 3 months but shorter than 12 months, except in the case of recreational, health-related or business trips, visiting friends or relatives, or pilgrimages. Long-term immigration is when the country of residence is changed for at least 12 months (GÓRNY, KACZMARCZYK 2003).

Compared to the other EU Member States, Poland is one of the few countries with a negative migration balance. Immigration to Poland is a relatively new phenomenon, and it started together with the political transformation. The first immigrants were asylum seekers, but later our country started playing an important role in the route of international dealers and seasonal workers (mainly from the former USSR). Other events that stimulated immigration were Poland's integration into the European Union and EU accession in 2004, as well as accession to the Schengen area in 2007. This made Poland a country of destination for immigrants, rather than only a transit country (KACZMARCZYK, LESIŃSKA 2012). Presently, the main purpose of immigration is labour. Our country is one of the leading EU Member States in terms of the number of temporary stay permits issued to non-EU nationals.

Accordingly, the purpose of the article is to discuss issues associated with the development of the labour market where foreign nationals work, explain the interdependencies resulting from this phenomenon as seen by employers, and present legal regulations relevant to the employment of foreign nationals. Also, the paper explores data concerning the scale and trends of labour immigration to Poland.

Laws governing the employment of foreign nationals in Poland

The economic development of our country, as well as demographic processes resulting in the ageing of societies, stimulate the development of labour immigration. Legislative work associated with the access of foreign nationals to the Polish labour market started in 1991, and it covered four areas: determining the rules of the movement of persons, developing a labour market information system, coordinating social security systems, and the problem of accepting professional qualifications (ADAMCZYK 2012).

Currently, foreign nationals may choose from three forms of legal employment:

– without a work permit (if it is not required);

– after obtaining a work permit;

– on the basis of an employer's declaration of the intention to employ a foreign national (since 2006) (KUBICIEL-LODZIŃSKA 2012).

Work permits are not required in Poland in the case of nationals of the EU Member States, the European Economic Area and Switzerland, holders of a valid Polish Card, persons with refugee status or covered by additional protection in Poland, and others – as detailed in the Act and Regulation (Ustawa z 20 kwietnia 2004 r. o promocji zatrudnienia i instytucjach rynku pracy, tekst jedn., DzU z 2013 r., poz. 674, Rozporządzenie ministra pracy i polityki społecznej z 20 lipca 2011 r. w sprawie przypadków, w których powierzenie wykonywania pracy cudzoziemcowi na terytorium Rzeczypospolitej Polskiej jest dopuszczalne bez konieczności uzyskania zezwolenia na pracę, DzU z 2011 r., nr 155, poz. 919). Also, non-EU nationals who are staying in Poland based on a permanent stay permit or an EU long-term resident permit are not required to have any additional documents to undertake and perform work.

Non-EU nationals who wish to legalise their stay on the basis of new or continued employment in Poland are required to obtain a temporary stay and work permit (the same procedure). This regulation was introduced in the new Foreign Nationals Act, which entered into force on 1 May 2014. Until then, the employer had to apply for a work permit for a foreign national, and when it was issued the foreign national applied for a stay permit. The work-only permit procedure continues to apply. Non-EU nationals who are legally staying in Poland based on a visa, Schengen visa, temporary stay permit or non-visa movement must have a work permit in order to work in Poland. The permit is issued by a voivode at the request of the employing entity. The document is issued with the name of the holder and has a limited validity (no more than 3 years, but with the possibility to renew the permit), and it specifies the job and type of work performed. A work permit is issued pursuant to an employment contract as well as civil-law contracts. In Poland, there are five types of work permits for foreign nationals (types: *A*, *B*, *C*, *D* and *E*) (as defined in the Regulation – Rozporządzenie ministra pracy i polityki społecznej z 29 stycznia 2009 r. w sprawie wydania zezwolenia na pracę cudzoziemca, DzU z 2009 r., nr 16, poz. 84).

Ukrainian, Belarusian, Moldovan, Russian, Armenian and Georgian nationals (who have a permit to stay in Poland) are exempted from the obligation to hold a work permit if they work on the basis of an employer's declaration for a period of up to 6 months within the subsequent 12 months, regardless of the number of entities that employ them. The simplified procedure requires the employer to submit to the relevant poviat labour office a declaration of the intention to employ a foreign national (the declaration must specify the job, the place and period of work, and gross wages). If a foreign national is staying outside Poland and does not have legal stay documents, the employer may register his declaration and send it to the foreign national, who can then apply for a visa, which will be issued to him or her based on this document. Employment on the basis of such a document in the future may result in applying for a work permit. This form of seasonal employment is the most commonly used in two industries: agriculture and construction.

The scale of labour immigration in Poland

According to the Polish census of 2011 (NSP 2011), approx. 57,500 foreign nationals were permanently living in Poland in 2011; another 40,100 were staying for a period of more than 3 months, of which 27,000 were staying for at least 12 months, and 7,000 of these were labour immigrants. However, it turns out that these data are underestimated and approximate only, due to the complicated nature of migration, the complexity of the study (circulation of immigrants), different systems used for recording migration flows in respective countries, and discrepancies in the definitions of the term „migrant"

The territorial distribution of persons registered for temporary stay is very uneven, due to the differences in labour markets in respective voivodeships (e.g. unemployment level, average pay, structure of the regional economy). Of the 80,778 foreign nationals who arrived in Poland in 2013 for a period of more than 3 months (7,854 persons more than in 2012), the most (28,229 persons – 34.95%) stayed in Mazowieckie voivodeship and the fewest in Świętokrzyskie voivodeship (1,006 persons – 1.25%) and Warmian-Masurian voivodeship (1,279 persons – 1.58%). Foreign nationals usually stayed in cities (78.37% of all the arrivals).

The number of work permits issued to foreign nationals (Fig. 1) in 2013 was 39,078 (66 permits fewer than the year before). The most permits were issued to Ukrainians (20,416). Quite a lot of work permits were also granted to Chinese, Vietnamese and Belarusian nationals. The most work permits were issued in Masovian voivodeship (21,548) and the fewest in Warmian-Masurian voivodeship (268), which probably means that the labour market in this region is not particularly attractive to foreign nationals.

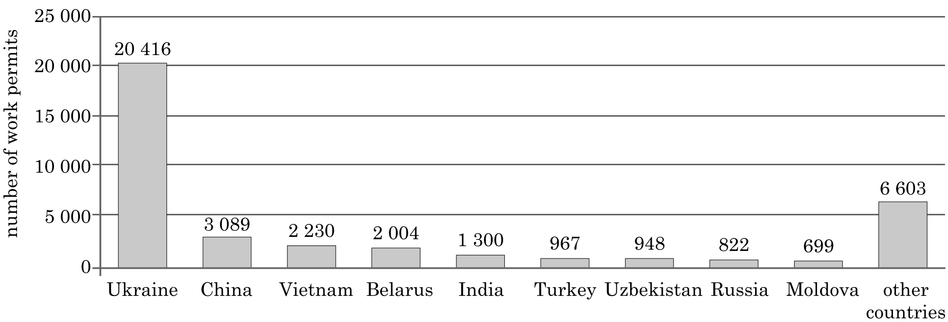

Fig. 1. Number of work permits issued in 2013 to foreign nationals in Poland by country of origin
Source: Author's own analysis based on data from Rocznik Demograficzny of the Central Statistical Office of Poland.

In 2013, the simplified procedure to employ immigrants on the basis of the employer's declaration was used by 235,616 (8,120 fewer than in 2012). According to the data of the Ministry of Labour and Social Policy, the most declarations were issued in the agriculture (118,480) and construction (29,734) industries. Employment was usually based on a contract to perform a specific task (53.74%). Declarations were mostly issued for a period of between 3 and 6 months (94.18%). In terms of nationality, in 2013, the simplified procedure was the most often used by workers from Ukraine (217,571 – 2013); 9,248 such permits were issued to Moldova nationals, 5,194 – to Belarus nationals, 1,260 – to Russia nationals and 2,343 – to Georgia nationals. The most declarations were registered in Mazowieckie voivodeship – 130,959, of which as many as 121,097 were issued to Ukrainians, and the fewest – in Warmian-Masurian voivodeship – 865 (671 to Ukraine nationals, 111 – to Moldovan nationals, 38 – to Russian nationals, 32 to Belarusian nationals and 13 – to Georgian nationals) and Podlaskie voivodeship – 1,123 (808 to Ukraine nationals).

Methodological assumptions of the survey and characteristics of the sample

The goal of the survey of employers from Warmian-Masurian voivodeship was to find out what they think about employing immigrants. The specific objectives were to get to know the criteria of employment and the related advantages and obstacles, as well as evaluation of legal regulations and actions taken by the State in association with labour immigration. Questionnaires were sent to 160 employers from Warmian-Masurian voivodeship (in Olsztyn, Elbląg, Ostróda and Ostróda poviat) between September to December 2013. This particular voivodeship was chosen as it offered an opportunity to determine the actual obstacles to employing immigrants, since, as the above information suggests, compared to other regions of Poland, very few foreign nationals come to work here.

Employers were defined as persons who employ others to work for them for money, but not necessarily based on a formal employment relationship. The respondents represented the following industries: manufacturing, construction, agriculture, lodging and catering, trade, education, household (housekeeping and care) and other (transport, healthcare, culture, finances).

Most of the surveyed companies were SMEs (2 to 9 employees – approx. 41%, and 10 to 49 employees – approx. 36%).

Of all the respondents, 18 employ or employed an immigrant (broken down by industry: education – 5 persons; agriculture – 4 persons; trade, manufacture, construction, household – 2 persons each, lodging and catering – 1 person), Most of the foreign employees were Ukrainians (12 persons), but there were also workers from Belarus (3 persons), Russia (1 person), Moldova (1 person) and Canada (1 person), and they were usually employed for a period of between 3 and 6 months – 61% (the simplified employment procedure), whereas the least common was employment for a period between 1 to 3 years – 5.5%.

Employer's opinion about labour immigrants

In countries with a high unemployment level, a part of the society is negatively disposed to the employment of foreign nationals, who are thought to deprive the citizens of a given country of jobs. According to many authors, the causes of unemployment are associated with the supply and demand side of the labour market (SZCZEBIOT-KNOBLAUCH, KISIEL 2012). It is forecast that in a few years, demographic processes (especially the ageing of the society) and mass emigration may result in a shortage of workers. A solution to this problem will be employing foreign labour forces.

Employer's opinion about the presence of foreign nationals in the Polish labour market covered two aspects: evaluation of the immigration policy (legal regulations, actions undertaken by the State) and the criteria, advantages and obstacles associated with the employment of foreign nationals.

According to almost 60% of respondents, the procedures related to the stay and employment of foreign nationals in Poland are very complicated. A large number of the respondents (approx. 40%) thought positively about the actions undertaken by the State in order to help foreign nationals communicate, establish social contacts or find employment. This is very important as it proves tolerance and high awareness of the need for integration, which is an indispensable part of the immigration policy of the State.

Asked whether labour immigrants were needed in Poland, approx. 30% respondents said yes and 25% said no, which means that the attitude of Polish employers to immigration is not so negative. Also, 62% of respondents are of the opinion that foreign nationals are good workers, and less than 13% think the opposite. It should be noted that more than 51% of respondents declared that the authorities should allow for the inflow of foreign nationals to Poland on the condition that there is work for them.

Interestingly, to every question there were very many „I don't know" responses (approx. 40%). The reason why respondents chose this answer was not so much their actual indifference to the inflow of foreign nationals to the Polish labour market (a limited scale), but instead the fact that they wanted to avoid expressing a negative opinion, so they purposefully claimed to be indifferent.

When deciding to employ a foreign national, the employer takes into consideration certain criteria and premises, which differ between industries. The criteria selected by respondents are presented in Figure 2 (a maximum of 3 answers could be chosen). For the respondents, the most important criterion affecting the decision to employ a foreign national was professional experience (20% of all responses). This response was mostly chosen by employers from the lodging and catering industry, where immigrants are most typically employed as cooks and chefs. Respondents identified professional experience with specific skills, rather than education, which was chosen by almost 15% of respondents, especially from the education sector (19 out of 20 persons chose this particular answer).

Another crucial criterion was Polish language skills (approx. 18% of all choices). This skill was chosen mainly by employers from the education sector. Here, foreign nationals work mainly as native speakers, i.e. teachers of foreign languages (their own mother tongues), but they should know the language of the country where they migrate well enough to be able to communicate with students. Polish language skills are equally important in trade. None of the respondent groups entirely omitted this condition.

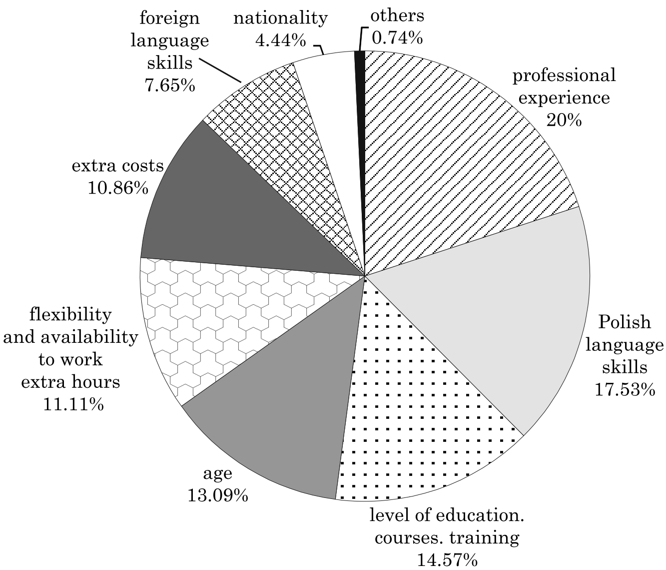

Fig. 2. Criteria considered by employers when deciding to employ an immigrant
Source: own studies.

The high position of the age criterion is also worth noting (approx. 13% of all responses). This criterion was mainly chosen by employers from the construction and agriculture industries. In both sectors, the physical strength of an employee is important, resulting in a demand for healthy and fully capable workers, especially men.

Other important criteria considered by employers when deciding to employ a foreign national are: possible extra costs and flexibility of the employee. In particular, they are important for the representatives of agriculture, household and construction industries. For employers, extra costs were mainly associated with the costs of living and ensuring accommodation (apartment or hotel).

The least important criteria were foreign language skills (approx. 8% of all choices) and nationality (approx. 4.5% of all choice).

Every employer, when deciding to employ workers, considers not only certain criteria but, more importantly, possible benefits and losses. Employing a foreign national in Poland means certain difficulties for employers (Fig. 3; no more than 3 answers could be selected).

According to the respondents, the major obstacle to employing foreign nationals were complicated legal regulations (more than 29% of all choices). In all areas of activity, except education and other activities, this factor was considered the most problematic.

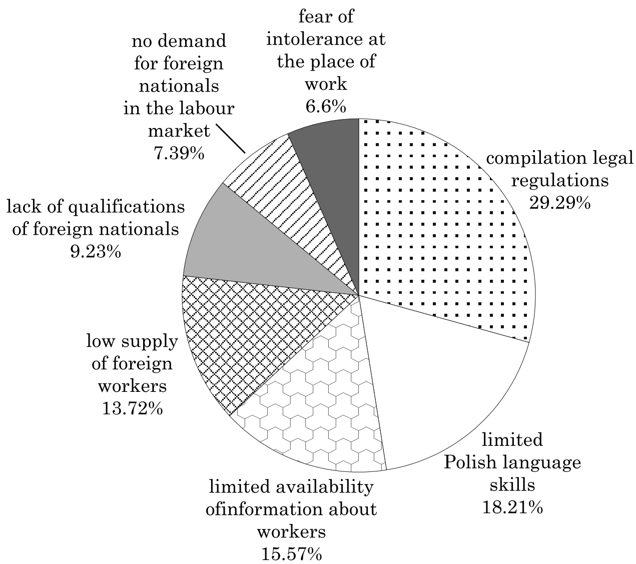

Fig. 3. Obstacles to employing immigrants

Source: own studies.

Another major hindrance, mainly for representatives of the manufacturing, trade and construction industries, was poor knowledge of Polish language (approx. 18% of all choices). Not knowing the language of a country, as well as different culture and origin, may be a source of intolerance, especially in a place of work. Work in these industries is associated with the presence of many people in one place, which may lead to conflicts often caused by prejudices, stereotypes and faulty communication.

Another obstacle to employing immigrants in Poland highlighted by the respondents was limited availability of information about workers (almost 16% of all choices). This concerns knowledge about the availability of potential workers and their professional profiles. As a result, employers most often rely on personal contacts (approx. 31%) and recommendations from others (especially other employers – almost 31%). The owners of small and medium-sized companies in Poland rarely use professional labour agencies, and if they do, they only penetrate so-called foreign labour markets.

A low supply of foreign labourers was considered to be an obstacle by nearly 14% of respondents, mainly from the group of other activities (culture, finance, healthcare, transport). Also, representatives of this group most often chose the lack of demand for foreign workers in the market, which suggests that low demand for foreign workers causes their low supply. Low supply of work was considered the least problematic by representatives of trade and households.

Low market demand for foreign workers was not an obstacle for most respondents from the construction and agriculture industries. This means that in these two industries there is a high demand for foreign workers. According to the dual labour market theory, the demand for immigrant workers in the two industries mentioned above is associated with the structural maladjustment of the labour market in Poland. The ageing of the society, outflow of Polish workers abroad and the falling number of vocational school graduates, while the number of university graduates is growing, cause a gap in the labour market. Labour forces are insufficient, especially in the sectors that do not offer attractive wages and are not prestigious, such as agriculture, construction or manufacturing. Numerous businesses in Poland have been confronted with this problem, which hinders the development of many companies (JOŃCZY 2010).

When employing a worker, the employer must decide whether to engage a local or foreign worker. Every decision must be supported by calculating the profit and loss. The most important benefits that make Polish employers employ foreign workers are presented in Figure 4 (respondents could choose no more than 3 answers).

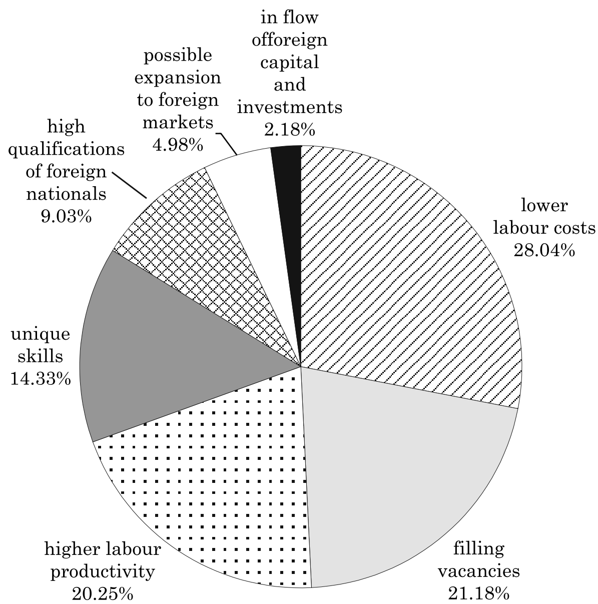

Fig. 4. Benefits of employing foreign nationals

Source: own studies.

For the respondents, the most important advantage of employing a foreign national was lower labour costs (approx. 28% of all choices). This is a situation when immigrants agree to work for a wage that local workers refuse to work for.

This advantage was most often selected by employers from the construction, agriculture and manufacturing industries. The above sectors belong to the so-called secondary (second-class) labour market, which mainly engages unqualified workers whose wage expectations are much lower than those of local workers.

This phenomenon is reflected by surveys concerning the wage expectations of legal foreign workers in Opole voivodeship, where immigrants were asked about the minimum net salary they would work for in Poland (immigrant minimum wage – IMW). The average amount indicated by employees in the primary labour market was PLN 5,303.85, while in the secondary labour market – PLN 2,933.66. The lowest expected wages were in agriculture (IMW at the level of PLN 1,587.50). It should also be noted that labour costs incurred by employers are much lower if foreigners are employed illegally, especially in jobs requiring low qualifications (KUBICIEL-LODZIŃSKA 2013).

Another important factor was that foreign workers filled vacancies (approx. 21% of all choices) and offered higher labour productivity (approx. 20%). Higher labour productivity was mainly chosen in manufacturing, construction and agriculture. Filling the gaps in the labour market proved to be the main advantage in the case of agriculture and construction, which is associated in particular with the structural maladjustment of the Polish labour market to the needs of employers, and the unwillingness of local workers to work in these industries.

Conclusions

The role of labour immigration is growing in the entire European Union, including in Poland. The contribution to the welfare of the country of accepting foreign workers is most typically analysed as the impact of a growing number of foreign nationals on the changing level of wages, financial transfers or brain circulation (brain drain). Labour immigration is beneficial for employers, but the inflow of foreign workers to a labour market is feared by local workers. However, according to experts, the limited scale of immigration to Poland will not result in the replacement of Polish workers with foreign nationals (it is only possible in minor segments of the labour market). Other consequences of the inflow of immigrants to a labour market are, for example: labour market segmentation and the development of niches and ethnic enclaves. The state benefits from labour immigration only if foreigners are legally employed (taxes).

The following conclusions were formed based on the content and results of the survey:

1. The largest percentage of immigrants in the Polish labour market are Ukrainians. Of all the permits issued in 2013, 52.24% were for Ukrainian nationals, and they also used the simplified procedure the most often – 92.34%.

2. The labour market in Poland (covering foreign nationals) is divided into the primary and secondary markets. The first consists of highly qualified employees who work in well-paid sectors (financial services, insurance market), and the other – of low qualified and low paid workers (agriculture, construction, household).

3. The major obstacle to employing foreign nationals concerns complicated legal regulations and lengthy procedures (29%), whereas the main advantages of employing immigrants are lower costs (28%) and the possibility to fill the gaps in the local labour market.

4. Warmian-Masurian voivodeship, despite its geographic proximity to East European countries, is the region of Poland where the fewest foreign nationals work and live.

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References

Adamczyk A. 2012. *Społeczno-polityczne implikacje imigracji do Polski w latach 1989-2007*. Wydawnictwo Naukowe Wydziału Nauk Politycznych i Dziennikarstwa UAM, Poznań.

Analizy i raporty Ministerstwa Pracy i Polityki Społecznej. http://www.mpips.gov.pl/analizy-i-raporty/cudzoziemcy-pracujacy-w-polsce-statystyki/ (access: 14 grudnia 2014 r.)

Górny A., Kaczmarczyk P. 2003. *Uwarunkowania i mechanizmy migracji zarobkowych w świetle wybranych koncepcji teoretycznych*. Prace Migracyjne, 49. OBM UW. Instytut Studiów Społecznych UW, Warszawa.

Jończy R. 2010. *Emigracja zarobkowa jako czynnik zwiększający popyt na pracę cudzoziemców – prawidłowości teoretyczne*. In: *Zatrudnienie obcokrajowców w województwie opolskim (w kontekście niedopasowań strukturalnych na opolskim rynku pracy)*. Eds. R. Jończy, S. Kubiciel. Politechnika Opolska, Pro Media Sp. z o.o., Opole.

Krajobrazy migracyjne Polski. 2012. Eds. P. Kaczmarczyk, M. Lesińska. OBM UW, Warszawa.

Kubiciel-Lodzińska S. 2012. *Zatrudnienie obcokrajowców w Polsce (ze szczególnym uwzględnieniem województwa opolskiego) a polska polityka migracyjna*. In: *Regionalne uwarunkowania rynku pracy*. Ed. A. Organiściak-Krzykowska. IPiSS i UWM, Warszawa-Olsztyn.

Kubiciel-Lodzińska S. 2013. *Wynagrodzenia cudzoziemców pracujących legalnie w Polsce (na przykładzie badań z województwa opolskiego)*. In: *Zróżnicowanie sytuacji na rynku pracy – ujęcie regionalne, krajowe, międzynarodowe*. Ed. D. Kotlorz. Studia Ekonomiczne – Zeszyty Naukowe Wydziałowe. Wydawnictwo UE w Katowicach, Katowice.

Rocznik Demograficzny 2013. GUS, Warszawa. http://stat.gov.pl/obszary-tematyczne/roczniki-statystyczne/roczniki-statystyczne/rocznik-demograficzny-2013,3,7.html.

Rocznik Demograficzny 2014. GUS, Warszawa. http://stat.gov.pl/obszary-tematyczne/roczniki-statystyczne/roczniki-statystyczne/rocznik-demograficzny-2014,3,8.html.

Rozporządzenie ministra pracy i polityki społecznej z 20 lipca 2011 r. w sprawie przypadków, w których powierzenie wykonywania pracy cudzoziemcowi na terytorium Rzeczypospolitej Polskiej jest dopuszczalne bez konieczności uzyskania zezwolenia na pracę, DzU z 2011 r., nr 155, poz. 919.

Rozporządzenie ministra pracy i polityki społecznej z 29 stycznia 2009 r. w sprawie wydania zezwolenia na pracę cudzoziemca, DzU z 2009 r., nr 16, poz. 84.

Szczebiot-Knoblauch L., Kisiel R. 2012. *Podaż na rynku pracy na obszarach wiejskich w Polsce*. Oeconomia Copernicana, 1.

Ustawa z 20 kwietnia 2004 r. o promocji zatrudnienia i instytucjach rynku pracy, tekst jedn., DzU z 2013 r., poz. 674.

Ustawa z 12 grudnia 2013 r. o cudzoziemcach, DzU z 2013 r., poz. 1650.

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SPATIAL DIVERSIFICATION OF THE UNEMPLOYMENT RATE BY PROVINCE AND DISTRICT IN POLAND BETWEEN 2008 AND 2013

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K e y w o r d s: unemployment, unemployment rate, province, district.

A b s t r a c t

One of the characteristic features of unemployment in Poland is a strong spatial diversification of that phenomenon. The main objective of this paper is to illustrate changes in the unemployment rate in provinces as well as (urban and rural) districts between 2008 and 2013. A thorough analysis has confirmed a dramatic difference in the intensity of unemployment in the individual districts of the country. The unemployment rate in urban districts in 2013 differed by over 24 percentage points, while in rural districts in the analysed period that spread amounted to 30%. The analysis shows that the growth of the unemployment rate in Poland was profoundly affected by the global economic crisis and other factors. The research has confirmed that unemployment is a major social problem which affects all regions of the country to a varying extent.

PRZESTRZENNE ZRÓŻNICOWANIE STOPY BEZROBOCIA W POLSCE W LATACH 2008–2013 WEDŁUG WOJEWÓDZTW I POWIATÓW

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S ł o w a k l u c z o w e: bezrobocie, stopa bezrobocia, województwo, powiat.

A b s t r a k t

Jedną z cech bezrobocia w Polsce jest silne zróżnicowanie przestrzenne tego zjawiska. Głównym celem referatu jest ukazanie zmian stopy bezrobocia w skali województw i powiatów (grodzkich oraz ziemskich) w latach 2008-2013. Wnikliwa analiza potwierdziła ogromną różnicę nasilenia zjawiska bezrobocia w poszczególnych powiatach kraju. Rozpiętość stopy bezrobocia w powiatach miejskich wynosiła w 2013 roku ponad 24 punkty procentowe. W powiatach ziemskich natomiast w okresie analizy różnica wynosiła ponad 30%. Z analizy wynika, że światowy kryzys gospodarczy i inne czynniki miały ogromny wpływ na wzrost stopy bezrobocia w Polsce. Badania potwierdziły, że bezrobocie jest ogromnym problemem społecznym, który z różnym nasileniem dotyka wszystkie regiony kraju.

Introduction

In 1989, the processes of adaptation of our economy to the market system was launched which brought about, among other things, a phenomenon that was new to the Polish society and had particularly severe economic and social consequences, namely open unemployment.

The phenomenon of unemployment is not a new problem; it was registered in the countries of Western Europe earlier. Until the 1990s it referred to the capitalist system. However, in Poland, in the socialist system, it was essential to create a structural balance between vacancies and those in search for employment. According to Latuch, there were periodic discrepancies but they were never of mass character (LATUCH 1985, p. 299). During the PRL (Polish People's Republic) period, unemployment existed in at least two forms (frictional and concealed one), however, it was hidden behind the so-called full employment policy, which, to some extent, was social in nature. But the political transformation and economic restructuring resulted in making the structure and size of employment more realistic. Therefore, since the nineties of the 20th century unemployment has constituted one of the most essential problems of the Polish economy. It consists in the fact that a proportion of population able to work and declaring willingness to take up work fails to find a job. So unemployment is a consequence of a failure to adjust the supply and demand on the labour market.

Unemployment is a social phenomenon whose effects are painful for the unemployed person and their family. From the psychological perspective, it is a phenomenon which consists in a loss of income, loss of voluntary exchange of privileges and obligations, loss of institutional dependency and loss of contractual work. It brings the risk of social exclusion, and constitutes a threat to the health of those affected (KOWALCZYK 2008, p. 22).

Unemployment is one of the largest social problems not only in Poland; it also affects most countries in Europe. Poland is in the top ten of the EU countries in terms of the size of the unemployment rate. In most European countries the unemployment rate grew even more in the last few years, and this was mainly due to the financial and economic crisis, low demand on the labour market and the imbalance between supply and demand for various skills (*Skills mismatch: more than meets the eye* 2014). As described by

Kwiatkowski, the fact that unemployment is such a crucial problem is a consequence of economic, social and political importance of this phenomenon. Unemployment not only affects the standard of living of the population and the dynamics of the economic development, but it also substantially determines the public mood and popularity of the government (KWIATKOWSKI 2005, p. 7). Due to all these factors unemployment is of interest to the representatives of various scientific disciplines, state government and local government institutions, as well as non-government organizations. Various conclusions are formulated, programmes implemented and actions taken to limit the size of this phenomenon. Despite all these efforts, unemployment is consistently at a too high level and therefore it constantly attracts attention of many authors and a number of scientific disciplines. That is why so much has been written about the various aspects of unemployment. However, the works written do not exhaust any of the analysed aspects of this phenomenon, as the size and structure of unemployment, as well as certain features shared by the unemployed, show considerable variability in time and space.

Unemployment is analysed by means of various measures. One of the commonly used indicators is the unemployment rate. Its great advantage is the fact that it facilitates comparative analysis from two perspectives: time and space.

The discussion shows that unemployment is quite a complex issue. It cannot be described in a comprehensive manner in the limited scope of the paper. The authors had to, therefore, make a selection of specific issues and time frames. They decided to present a summary analysis of the unemployment rate as a synthetic indicator of this phenomenon, and the dynamics of changes which it undergoes in time and specific spatial systems.

Hence, the basic aim of the paper is to show changes in the unemployment rate from June 2008 to December 2013, and disclose provinces and districts with extreme values of the unemployment rate. In addition, an attempt was made to establish a potential sustainability of indicators in the different territorial units of the country. Due to the limited scope of the study, only selected half-yearly time frames were applied, which showed the indicator level during a period of intervention and public works (June) carried out as part of subsidized employment, and after their completion (December).

At the same time, the authors captured the period when the unemployment rate was relatively low, at less than 10%, and then its increase in subsequent months, quarters and years (*Bezrobocie rejestrowane*... 2011, p. 30). These values were compared against changes in the scale of individual provinces and districts. A little more attention was paid to the situation in the districts of Western Pomerania. A variety of information sources, studies and publications were used as shown in the references appearing at the end of the paper.

However, the studies of the Central Statistical Office of Poland, especially in the series entitled *Bezrobocie rejestrowane* [Registered Unemployment], were of fundamental importance, as they included necessary data for the specific periods in the analysis. They enabled the authors to apply the observation method, comparative analysis and descriptive statistics which demonstrate quite considerable changes in the unemployment level occurring in a specified period of time and in individual spatial units.

Changes in the unemployment rate in provinces

The performance of comparative analysis is facilitated by the detailed statistical data contained in the tables (Tab. 1, Tab. 2). When analysing information about the country, it can be seen that the value of the indicator in June each year is smaller than that at the end of the year. A similar trend can be observed for the unemployment rates in most provinces. An exception from this rule can be noticed only in the Łódź, Mazovia, Pomerania and Silesia Provinces, and this only in 2008. In the subsequent years all provinces follow the national trend (Tab. 1).

It is worth emphasising that the indicators provided for June and December do not represent extreme values at all. The extreme values of the unemployment rate were usually recorded in other months, for example, in 2010 the maximum value was noted in February (13.2%), while the minimum value – in August (11.4%) (*Bezrobocie rejestrowane*... 2011, p. 30). However, the indicators recorded in June and December are similar.

The analysis shows that the number of the unemployed correlates with the economic situation of the region (Tab. 2). The lowest unemployment rate can be found in the Wielkopolska, Małopolska, Mazovia and Silesia Provinces. These regions are relatively best developed economically, with an absorbent and diversified labour market. The highest unemployment rate, on the other hand, was found in the Warmia-Mazuria, West Pomerania, Kujawy-Pomerania and Lubskie Provinces. These are relatively less developed regions, where State Agricultural Farms and collectivized agriculture prevailed until the 1990s. It should be added that labour resources in these regions are usually characterized by a relatively lower level of education and quite limited professional qualifications. A worrying aspect, however, is the fact that these people are often not interested in taking up a job; they prefer social assistance from the state. What is also alarming is that such an attitude of the parents is often inherited by the next generation.

Table 1

Changes in the unemployment rate by province

Description	June 2008	Dec. 2008	June 2009	Dec. 2009	June 2010	Dec. 2010	June 2013	Dec. 2013
Poland	9.4	9.5	10.6	11.9	11.7	12.3	13.2	13.4
Lower Silesia Province	9.8	10.2	11.3	12.5	12.7	13.0	13.2	13.2
Kujawy-Pomerania Province	13.0	13.4	14.3	15.8	15.5	16.6	17.7	18.1
Lublin Province	11.0	11.3	11.5	12.8	12.1	13.6	13.9	14.4
Lubuskie Province	11.5	12.4	14.4	15.9	15.2	15.6	15.4	15.7
Łódź Province	9.6	9.2	10.4	11.6	11.9	12.1	14.1	14.1
Małopolska Province	7.3	7.6	8.6	9.7	9.6	10.4	11.4	11.6
Mazovia Province	7.6	7.3	8.1	9.0	9.0	9.4	11.0	11.0
Opole Province	9.5	9.9	11.0	12.6	12.4	13.1	14.0	14.3
Podkarpackie Province	12.6	13.1	14.0	15.5	15.0	15.8	15.6	16.4
Podlasie Province	9.1	9.8	10.9	12.6	12.2	13.2	14.6	15.1
Pomerania Province	8.7	8.4	10.0	12.0	11.8	12.2	13.2	13.3
Silesia Province	7.3	6.9	8.2	9.2	9.6	9.9	11.2	11.2
Świętokrzyskie Province	13.4	13.9	13.8	14.7	14.5	14.7	15.6	16.5
Warmia-Mazuria Province	15.7	16.8	17.8	20.2	18.8	20.0	20.4	21.7
Wielkopolska Province	6.2	6.4	7.8	9.1	8.9	9.2	9.6	9.6
West Pomerania Province	13.2	13.4	14.1	16.5	15.9	17.4	17.2	18.0

Source: *Bezrobocie rejestrowane. I–IV kwartał 2008* (2009, p. 45), *Bezrobocie rejestrowane. I–IV kwartał 2009* (2010, p. 45), *Bezrobocie rejestrowane. I–IV kwartał 2010* (2011, p. 45), *Bezrobocie rejestrowane. I–IV kwartał 2013* (2014, p. 47).

Also salient is the fact that spatial configuration of the unemployment scale is quite stable. The first place is invariably occupied by the Warmia-Mazuria Province, while the second place usually belongs to the Western Pomerania Province. Less frequently the second position is taken by the Świętokrzystkie or Lubuskie Provinces, and the third place is usually held by the Kujawy-Pomerania Province.

Diversification of the unemployment rate in urban districts

There is a widespread perception that, as a rule, in cities with district rights unemployment is at a considerably lower level than in other cities. In order to confirm or reject that proposition the entire set of districts (380 administrative units) was divided into urban (66 districts) and rural (country) ones (314 districts) and analysed. In both groups of districts several administrative units with the lowest and the highest level of the unemployment rate were separated and subjected to a more detailed comparative analysis.

Table 2

Provinces with the lowest and the highest unemployment rate

June 2008	Dec. 2008	June 2009	Dec. 2009	June 2010	Dec. 2010	June 2013	Dec. 2013
Provinces with the lowest unemployment rate							
Wielkopolska Province 6.2	Wielkopolska Province 6.4	Wielkopolska Province 7.8	Mazovia Province 9.0	Wielkopolska Province 8.9	Wielkopolska Province 9.2	Wielkopolska Province 9.6	Wielkopolska Province 9.6
Małopolska Province 7.3	Silesia Province 6.9	Mazovia Province 8.1	Wielkopolska Province 9.1	Mazovia Province 9.0	Mazovia Province 9.4	Mazovia Province 11.0	Mazovia Province 11.0
Silesia Province 7.3	Mazovia Province 7.3	Silesia Province 8.2	Silesia Province 9.2	Silesia Province 9.6	Silesia Province 9.9	Silesia Province 11.2	Silesia Province 11.2
Provinces with the highest unemployment rate							
Warmia-Mazuria Province 15.7	Warmia-Mazuria Province 16.8	Warmia-Mazuria Province 17.8	Warmia-Mazuria Province 20.2	Warmia-Mazuria Province 18.2	Warmia-Mazuria Province 20.0	Warmia-Mazuria Province 20.4	Warmia-Mazuria Province 21.7
Świętokrzyskie Province 13.4	Świętokrzyskie Province 13.9	Lubuskie Province 14.4	West Pomerania Province 16.5	West Pomerania Province 15.9	West Pomerania Province 17.4	Kujawy-Pomerania Province 17.7	Kujawy-Pomerania Province 18.1
West Pomerania Province 13.2	Kujawy-Pomerania Province 13.4	Kujawy-Pomerania Province 14.3	Lubuskie Province 15.9	Kujawy-Pomerania Province 15.5	Kujawy-Pomerania Province 16.6	West Pomerania Province 17.2	West Pomerania Province 18.0

Source: see Table 1.

Table 3

Cities with district rights with the lowest and the highest unemployment rate

June 2008	Dec. 2008	June 2009	Dec. 2009	June 2010	Dec. 2010	June 2013	Dec. 2013
urban districts with **the lowest** unemployment rate							
Sopot 1.6	Poznań 1.7	Poznań 2.4	the capital city of Warsaw 2.8	Poznań 3.3	the capital city of Warsaw 3.4	Poznań 4.4	Poznań 4.1
Poznań 1.7	Katowice 1.9	Sopot 2.4	Poznań 3.2	the capital city of Warsaw 3.4	Poznań 3.5	Sopot 4.7	the capital city of Warsaw 3.4
Gdynia 1.8	Sopot 1.9	the capital city of Warsaw 2.4	Sopot 3.3	Katowice 3.5	Sopot 3.8	the capital city of Warsaw 4.8	Sopot 4.9
Katowice 2.1	the capital city of Warsaw 1.9	Katowice 2.6	Katowice 3.3	Sopot 3.6	Katowice 3.8	Katowice 5.4	Katowice 5.4
urban districts with **the highest** unemployment rate							
Radom 20.1	Radom 19.7	Grudziądz 20.7	Grudziądz 22.4	Grudziądz 21.7	Radom 22.5	Złotoryja 26.4	Złotoryja 28.3
Grudziądz 17.8	Grudziądz 17.8	Radom 20.3	Radom 21.5	Radom 20.8	Grudziądz 20.8	Radom 22.7	Radom 22.6
Przemyśl 16.3	Przemyśl 16.3	Przemyśl 17.9	Przemyśl 19.4	Przemyśl 19.4	Przemyśl 19.2	Grudziądz 21.9	Grudziądz 20.7
Chełm 15.1	Chełm 14.3	Włocławek 15.4	Włocławek 17.3	Włocławek 17.7	Włocławek 18.7	Bytom 20.5	Bytom 20.7

Source: *Bezrobocie rejestrowane. I–IV kwartał 2008* (2009, p. 75–84), *Bezrobocie rejestrowane. I-IV kwartał 2009* (2010, p. 75–84), *Bezrobocie rejestrowane. I–IV kwartał 2010* (2011, p. 75–84), *Bezrobocie rejestrowane. I–IV kwartał 2013* (2014, p. 78–87).

In this subchapter the urban districts were analysed and the data necessary for the analysis were presented in Table 3. The detailed analyses show that relatively lowest values of the unemployment rate can be found in urban districts. In 2010 they exceeded 3% (Poznań, the capital city of Warsaw), and earlier, e.g. in 2008, they did not even reach 2% (Sopot, Poznań). Also in 2013 in many other cities with district rights they are relatively low and amount to 4-5%.

However, at the same time there is a group of urban districts where the unemployment rate exceeds 20%. These are primarily Radom and Grudziądz (and, lately, also Bytom and Złotoryja), and they take the first or second place interchangeably. Other cities that appear in this group of districts, such as Przemyśl and Włocławek (and earlier also Chełm) do not reach the level of 20% any more. So generally it can be assumed that the number of districts of this kind is relatively small, and the rates recorded there do not belong to the highest ones (as compared with rural districts).

Changes in the unemployment rate in rural districts

In this group of territorial division units one can notice a more significant diversification of the unemployment rate. On the one hand, even in this set we can see districts with a very low value of this indicator, fluctuating around just under 4% or only slightly exceeding 5%. This group includes: the poznański and bieruńsko-lędziński districts in the Silesia Province, as well as the wrocławski district in the Lower Silesia Province (Tab. 4). Earlier, e.g. in 2008, this group of units included also the kępiński, pszczyński, gdański, grodziski, nowotomyski, wolsztyński and wrocławski districts. It is worth adding here that in 2008 the unemployment rate in the poznański district was below 2%.

On the other hand, in this set of territorial units there are districts with a very high unemployment rate, exceeding 30%. At the end of 2010, this group included: the szydłowiecki district in the Mazovia Province and as many as three districts in the Warmia-Mazuria Province, i.e. the piski, bartoszycki and braniewski districts. A similar value of the indicator, exceeding 29%, was shown in two more districts: the radomski district (29.6%) in the Mazovia Province and the białogardzki district in the West Pomerania Province (29.4%). The aforementioned group of units was joined in 2009 by the łobeski and pyrzycki districts. With only minor exceptions (the szydłowiecki district), all the other districts with the highest unemployment rate are located in the Warmia-Mazuria and West Pomerania Provinces. As you can remember, these are typical post State Farm regions. One should note that in 2013 the value exceeding 30% was also shown by the rates for the nowodworski and wałbrzyski districts.

Table 4

Rural districts with the lowest and the highest unemployment rate

June 2008	Dec. 2008	June 2009	Dec. 2009	June 2010	Dec. 2010	June 2013	Dec. 2013
Rural districts with the lowest unemployment rate							
Poznański 1.7	poznański 1.8	poznański 2.5	poznański 3.5	poznański 3.7	poznański 3.6	poznański 4.8	poznański 4.6
Kępiński 2.7	bieruńsko-lędziński 3.1	bieruńsko-lędziński 4.0	kępiński 4.5	bieruńsko-lędziński 4.7	bieruńsko-lędziński 5.1	wrocławski 5.4	kępiński 5.1
Pszczyński 3.8	kępiński 3.1	warszawski zachodni 4.3	bieruńsko-lędziński 4.6	kępiński 5.3	wrocławski 5.3	kępiński 5.6	wrocławski 5.3
Gdański 4	wrocławski 3.6	kępiński 4.5	wrocławski 5.0	wrocławski 5.4	kępiński 5.3	bieruńsko-lędziński 6.0	wolsztyński 5.8
Rural districts with the highest unemployment rate							
Szydłowiecki 30.2	szydłowiecki 31.2	bartoszycki 32.4	szydłowiecki 35.3	szydłowiecki 33.7	szydłowiecki 35.1	szydłowiecki 37.3	szydłowiecki 38.9
Bartoszycki 29.0	bartoszycki 30.9	szydłowiecki 31.2	bartoszycki 33.8	piski 30.1	piski 31.5	wałbrzyski 31.6	piski 32.7
Braniewski 28.9	braniewski 29.5	braniewski 28.9	braniewski 32.9	bartoszycki 30.0	bartoszycki 31.0	piski 30.2	wałbrzyski 32.0
Białogardzki 28.1	białogardzki 28.4	piski 27.1	łobeski 30.5	radomski 28.3	braniewski 30.9	kętrzyński 28.1	nowodworski 30.7

Source: see Table 3.

Diversification of the unemployment rate in the districts of the West Pomerania Province

The authors' place of residence gave rise to the fact that slightly more attention has been paid to the unemployment level in West Pomerania. It is worth noting already at the beginning of this subchapter that in this area there are no districts (either urban or rural) included among the units with the lowest indices, on the contrary, the West Pomerania Province has second highest unemployment rate in the country, after the Warmia-Mazuria Province.

A relatively low unemployment level can only be observed in urban districts and in the kołobrzeski district. However, at the end of 2010, a relatively lower value was recorded only in the urban district of Szczecin, although it was close to 10% (precisely 9.6% – Table 5). In all other districts, both urban and rural ones, the unemployment rate exceeded 10%. In December 2013, not even one district had the rate of below 10%.

Relatively lowest unemployment rate was recorded in the urban districts of Szczecin and Świnoujście. In most cases, the city of Koszalin shares the third or the fourth place interchangeably with the kołobrzeski district, although at the end of 2010, it took the second position, and in 2013 – the third.

Among the rural districts (with the exception of the kołobrzeski district) the lowest unemployment rate was achieved by the following districts: myśliborski (16.4%), policki (17.3%), goleniowski (18.5%), wałecki (19.2%) and stargardzki (19.9%). These are, however, not substantial differences as compared with the other territorial units, although at the end of 2010 all other districts of the West Pomerania Province showed an unemployment rate of above 20%. Similar values were recorded for the indices at the end of 2013.

The least favourable results are usually found in the białogardzki, łobeski, choszczeński and pyrzycki districts. Moreover, these districts belong to the group of districts with the highest unemployment rate in the country. This disgraceful list includes: the drawski, szczecinecki and świdwiński districts. Not much better results have been recorded in the case of (not included in Table 5) kamieński (26.3%), koszaliński (25.6%) and gryficki (24.4%) districts. Slightly better results were obtained at the end of 2010 by the sławieński (21.4%) and gryfiński (21.9%) districts, and in 2013 by the goleniowski and policki districts.

Most generally, it can be said that the unemployment situation in the West Pomerania Province, like in the Warmia-Mazuria Province, is unfavourable. The analyses conducted prove that the West Pomerania Province has a great social capital which has not been utilised. Therefore, the main goal of the economic policy of the state and of the local authorities should be to increase

Table 5

Districts of the West Pomerania Province with the lowest and the highest unemployment rate

June 2008	Dec. 2008	June 2009	Dec. 2009	June 2010	Dec. 2010	June 2013	Dec. 2013
Districts with the lowest unemployment rate							
The city of Szczecin 4.5	the city of Szczecin 4.2	the city of Szczecin 6.4	the city of Szczecin 8.1	the city of Świnoujście 6.7	the city of Szczecin 9.6	the city of Świnoujście 8.7	the city of Świnoujście 10.6
The city of Świnoujście 7.2	the city of Świnoujście 8.1	the city of Świnoujście 6.9	the city of Świnoujście 9.8	the city of Szczecin 9.4	the city of Koszalin 10.7	kołobrzeski 10.8	the city of Szczecin 10.6
Kołobrzeski 8.0	the city of Koszalin 8.2	kołobrzeski 8.5	the city of Koszalin 9.9	kołobrzeski 9.7	the city of Świnoujście 11.2	the city of Szczecin 11.1	the city of Koszalin 12.2
The city of Koszalin 9.0	kołobrzeski 9.6	the city of Koszalin 8.7	kołobrzeski 11.0	the city of Koszalin 10.5	kołobrzeski 11.9	the city of Koszalin 12.4	kołobrzeski 13.0
Districts with the highest unemployment rate							
Białogardzki 28.1	białogardzki 28.4	białogardzki 26.7	łobeski 30.3	łobeski 25.4	białogardzki 29.4	białogardzki 28.0	białogardzki 29.6
Łobeski 24.1	łobeski 23.9	choszczeński 23.9	choszczeński 27.9	pyrzycki 25.3	łobeski 28.3	łobeski 27.4	koszaliński 28.7
Choszczeński 22.5	szczecinecki 23.3	drawski 23.3	białogardzki 27.9	choszczeński 24.9	pyrzycki 27.2	choszczeński 26.6	choszczeński 28.7
Choszczeński 22.5	świdwiński 23.2	szczecinecki 22.9	pyrzycki 26.9	drawski 24.7	świdwiński 27.1	koszaliński 26.2	pyrzycki 28.0

Source: *Bezrobocie rejestrowane. I–IV kwartał 2008* (2009, p. 84), *Bezrobocie rejestrowane. I–IV kwartał 2009* (2010, p. 84), *Bezrobocie rejestrowane. I–IV kwartał 2010* (2011, p. 84), *Bezrobocie rejestrowane. I–IV kwartał 2013* (2014, p. 87).

the professional activity of the population through increasing the activity of the regions with respect to the economic and social policy. The authorities of individual districts meet with various levels of success in limiting the size of unemployment. It also depends on the overall economic mode, general social and economic development level and more or less diverse labour market. Usually, urban districts and those located in the coastal belt (e.g. the kołobrzeski district) get much better results in combating this phenomenon. In that area, there is a relatively greater diversification and demand on the labour market (not only in tourist season). Much more difficult situation exists in the following districts: białogardzki, choszczeński, łobeski, pyrzycki and świdwiński.

Conclusion

The discussion, analyses and assessments conducted show that unemployment is one of the most acute problems of our time experienced by a large part of the population of our country as well as that of Europe. Despite visible signs of improvement on the labour market, especially as compared with the early years of this century, the unemployment rate is still high (*Bezrobocie rejestrowane. I–IV kwartał 2010.* 2011, p. 30). The rates quoted in the paper prove that it is still at a two-digit level.

Another important observation is that the unemployment level shows a great spatial diversification, in particular in individual districts. However, even provinces show a dramatic difference. In the Wielkopolska Province, unemployment rate at the end of 2010 amounted to 9.2%, while in the Warmia--Mazuria Province it was 20%. So the spread of the index was 10.8 percentage points. By the end of 2013 it had grown up to 12.1 points.

Nearly twice as large spread was recorded in urban districts. During the same period, unemployment rate in the capital city of Warsaw was at the level of 3.4%, while in Radom it reached 22.5%. The amplitude between the extreme values of the index exceeded 19.1 percentage points, and by the end of 2013 it grew even further to 24.2 points.

Even more considerable diversification can be observed in the group of rural districts. Extreme values of the unemployment rate have been recorded in the poznański (3,6%) and szydłowiecki (35,1%) districts. Hence, the spread is very large, as it amounts to as much as 31.5 percentage points. By the end of 2013 it had decreased to 24.3 points.

Much smaller index spreads can be found in the districts of the West Pomerania Province. The difference between the cities of Szczecin (9.6%) and Świnoujście (11.2%) is only 1.6 point, while between the rural białogardzki

(29.4%) and kołobrzeski (11.9%) districts it is 17.5 percentage points. These values were recorded in 2010; three years later they amounted to 1.6 and 16.6 percentage points respectively. This does not mean, however, that the unemployment situation in this province is more favourable than in most other regions and on average throughout Poland; this is because both in urban and rural districts the unemployment rate is far higher than in other provinces.

The research demonstrates one conclusion: there is a continuing need to combat, or at least partially and gradually alleviate, the size of this phenomenon. Various programs are implemented to limit the scale of unemployment, but they do not produce the expected results.

The situation on the market dispels any doubts as to the necessity to undertake a range of measures aimed at substantially limiting the size of unemployment and the problems which it causes, both in the macro- and micro scale. Therefore, the government authorities, the local government and other units face huge challenges. The recovery of economic processes and combating different pathologies should be of interest to all concerned: the government, local government, non-government organizations, the existing enterprises and the unemployed themselves. The unemployed need not only more financial resources (for training and self-employment), but also more determination, entrepreneurship and innovative thinking, as there have been cases reported where job offers were accepted only reluctantly or even rejected, while many of the unemployed take up work on the so-called grey market.

Meeting these demands, while applying active instruments to combat unemployment by the employment services, may enable those who are really in search for a job to return to the labour market.

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References

Analiza efektywności aktywnych form przeciwdziałania bezrobociu realizowanych w województwie zachodniopomorskim w latach 2007–2008. 2011. Ed. R. Błasiak-Grudzień. WUP, Szczecin.

Bezrobocie rejestrowane. I–V kwartał 2008. 2009. Główny Urząd Statystyczny, Warszawa.

Bezrobocie rejestrowane. I–V kwartał 2009. 2010. Główny Urząd Statystyczny, Warszawa.

Bezrobocie rejestrowane. I–V kwartał 2010. 2011. Główny Urząd Statystyczny, Warszawa.

Bezrobocie rejestrowane. I–V kwartał 2013. 2014. Główny Urząd Statystyczny, Warszawa.

Cedefop. European Centre for the Development of Vocational Training. Briefing note. *Skills mismatch: more than meets the eye*, www. cedefop. europa.eu/ EN/publications.aspx (access: March 2014).

Kabaj M. 2000. *Program przeciwdziałania ubóstwu i bezrobociu*. IPiSS, Warszawa.

Knapińska M. 2008. *Transformacje zasobów pracy w Polsce w latach 1990–2006*. Polityka Społeczna, 2.

Kowalczyk E. 2008. *Człowiek wobec bezrobocia*. Przegląd Organizacji, 4.

Kryńska E. 2000. *Polityka gospodarcza państwa a zapobieganie i zwalczanie bezrobocia*. Polityka Społeczna, 1.

KWIATKOWSKI E. 2005. *Bezrobocie. Podstawy teoretyczne.* PWN, Warszawa.

LATUCH M. 1985. *Demografia społeczno-ekonomiczna.* Państwowe Wydawnictwo Ekonomiczne, Warszawa.

TYROWICZ L., WÓJCIK P. 2007. *Konwergencja bezrobocia w Polsce w latach 1999-2006*. Gospodarka Narodowa, 10.

WOJCIECHOWSKI W. 2008. *Skąd się bierze bezrobocie?* Zeszyty FOR, 2.

ZAKRZEWSKI W. 2003. *Bezrobocie oraz formy aktywizacji bezrobotnych w województwie warmińsko-mazurskim*. Wiadomości Statystyczne, 2.

ZDROJEWSKI E.Z. 2011. *Zmiany w poziomie bezrobocia rejestrowanego w Polsce*. In: *Regionalne aspekty rynku pracy.* Ed. A. Organiściak-Krzykowska. UWM, IPiSS, Warszawa – Olsztyn.

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METROPOLITAN AREAS IN POLAND – STATE OF DEVELOPMENT AND ITS BARRIERS

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Key words: metropolis, metropolitan area, regional development, metropolitan area management.

Abstract

Metropolitan areas are increasingly often regarded as the key drivers of economic growth and the main targets of social and economic development strategies. Those processes are fraught with numerous limitations and barriers. The aim of this study was to identify major problems in the development of Polish metropolitan areas. The key issues were characterized based on a review of the available literature. Attempts were made to propose general solutions to selected problems. In Poland, the identification of metropolitan areas poses a problem, which lowers the effectiveness of management strategies for those regions. Polish urban agglomerations have weakly developed metropolitan functions, which compromises their status in European rankings and European metropolitan area networks.

OBSZARY METROPOLITALNE W POLSCE – STAN ROZWOJU I JEGO BARIERY

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Słowa kluczowe: metropolia, obszar metropolitalny, rozwój regionalny, zarządzanie obszarem metropolitalnym.

Abstrakt

Obszary metropolitalne uznaje się coraz częściej za bieguny wzrostu całej gospodarki i na nich się koncentruje, wskazując strategie rozwoju społeczno-gospodarczego kraju. W praktyce napotyka się tu wiele ograniczeń i barier. Celem opracowania jest identyfikacja głównych problemów rozwojowych obszarów metropolitalnych w Polsce. Dokonano w tym celu przeglądu literatury i scharakteryzowano najważniejsze z nich. Próbowano też wskazywać sposoby lub chociaż kierunki ich rozwiązywania. Zauważono, że problemem w Polsce jest już samo wyłonienie i zidentyfikowanie obszarów metropolitalnych. To rodzi problemy związane ze skutecznym zarządzaniem takimi obszarami. Niedorozwój funkcji metropolitalnych w polskich obszarach metropolitalnych powoduje, że plasują się one bardzo nisko w europejskich rankingach, mają więc słabą pozycję w europejskiej sieci powiązań metropolitalnych.

Introduction and Methodological Assumptions

The global economy is witnessing dynamic metropolization processes. Large metropolitan areas are expanding their functions and scope of influence. Metropolitan areas form a dense network of connections with the surrounding regions, and they are becoming the key drivers of economic growth in a globalizing world. Metropolitan areas play the role of knowledge and innovation hubs that are essential for the achievement of high levels of social and economic growth on the global scale. The growing role of cities and metropolitan areas has been recognized by the Lisbon Strategy which emphasizes the importance of metropolitan regions for global and local growth (MŁODAK 2012, p. 21). In the „Poland 2030. Development Challenges" report developed by the Team of Strategic Advisors to the Prime Minister, metropolitan areas were recognized as Poland's greatest incentive for investors, and the polarization-diffusion model, in which metropolitan areas are the key drivers of economic growth, has been recommended as the most effective model of development (IZDEBSKI 2010, p. 64). The main goal of the „National Strategy of Regional Development 2010–2020: Regions, Cities, Rural Areas" is to reinforce the metropolitan function of Poland's largest urban centers. At present, the main focus is on metropolitan areas as functional entities, rather than on individual cities or municipalities which do not constitute sufficiently large reference points for analyzing urban development policies (LACKOWSKA 2010, p. 29).

This article identifies and evaluates the main barriers to the development of metropolitan areas in Poland. This goal was achieved through critical assessment of the relevant literature. The paper reviews various definitions of cities and metropolitan areas and identifies the most pressing problems faced by Polish metropolitan areas. Developmental problems are evaluated based on the author's knowledge and market observations, but a more comprehensive assessment would require in-depth analyses of selected issues which are hinted in the article.

Definition of a Metropolitan Area

Metropolitan areas and metropolises have various definitions in the literature. A metropolis is generally defined as a city with a population of more than one million. This threshold is often lowered to 500,000, in particular in Poland. A metropolitan area is characterized by high population density, and it is a center of industry, administration, market services, educational, scientific, cultural, recreational and medical institutions (MŁODAK 2012, p. 20).

A metropolitan area is also defined based on its qualitative features. It should have well-developed exogenous functions that make it a part of the network of global connections with other cities. Metropolitan areas act as transportation hubs and centers of communication between manufacturers, trading companies, banks and other financial institutions (SMĘTKOWSKI et al. 2009, p. 53). Metropolitan areas have a specific organizational structure and comprise an urban core, suburbs and contiguous municipalities within a radius of up to several dozen kilometers. The progressing separation of residential districts and business areas in metropolitan areas results from fragmentation of urban space. Retail trade is concentrated mainly in shopping centers, and retail outlets in the urban core are being replaced with banks, restaurants and entertainment facilities. Cities are divided into districts and neighborhoods based on the social status or even ethnicity of their residents.

In Poland, the definition of a metropolitan area is provided by the Act of 27 March 2003 on spatial planning and development (Journal of Laws, 2003, No. 80, item 717, as amended). A metropolitan area is defined as a major city with its functionally linked surroundings, as indicated in the National Spatial Development Concept. This definition incorporates both quantitative and qualitative aspects. In another definition, a metropolitan area is an urban settlement system characterized by spatial continuity and combining separate settlement units, which covers the territory of a large city or a dense urban agglomeration as the core (nucleus) of the system with a functionally linked urban zone where social, economic and spatial conflicts are prevalent (NOWAK 2010, p. 20). According to yet another definition, a metropolitan area is an urban settlement system (monocentric or polycentric, comprising numerous settlement units and highly urbanized areas):

– with a directly linked functional zone and areas with prospects for development,

– where metropolization processes are observed, and where auxiliary activities and services complement the metropolitan functions of the urban core,

– characterized by a high degree of functional integrity,

– with a well-developed transport network (MARKOWSKI 2006, p. 14).

Other authors have proposed the concept of a metropolitan center as a city within its administrative boundaries, whereas the metropolitan area integrates the neighboring municipalities identified based on development and growth rate indicators. A metropolitan center and a metropolitan area form a metropolis. A metropolitan region combines the remaining non-metropolitan municipalities in a region (GORZELAK, SMĘTKOWSKI 2005, pp. 43–45). For the needs of this article, a metropolitan area will be defined as a major city with its functionally linked surroundings, delimited in line with the territorial division of the country into municipalities, with a minimum population of 500,000, directly linked to international transportation, communication or service networks (NOWAK 2010, p. 26). In this definition, a metropolitan area is divided into two parts: the urban core and less-populated surrounding territories. The political, administrative, business, social and cultural functions of hinterland complement the metropolitan functions of the urban core.

In line with the cited definitions, a metropolitan area is characterized by (NOWAK 2010, p. 19):
– high quality of services, institutions and infrastructure,
– high levels of innovation,
– highly competitive production and specialist services,
– strong internal economic, social and institutional cooperation,
– tight connections with other metropolises,
– local uniqueness.

Metropolitan areas are major transportation hubs, seats of political, administrative, financial, industrial and service institutions, research and development centers, innovation hubs and leading markets (KISIAŁA, STĘPIŃSKI 2013, p. 29).

Major Development Issues in Polish Metropolitan Areas

The expansion of large cities and metropolitan areas produces increasingly complex urban organisms with vast surrounding territories, and it calls for new urban management methods. Polish metropolitan areas face numerous development problems, including (SMĘTKOWSKI et al. 2009, s.71):
– chaotic development which compromises spatial order,
– absence of an effective management model,
– traffic bottlenecks that disrupt functional cohesiveness of transportation systems,
– environmental degradation.

The first problem surfaces already at the stage of identifying a metropolitan area because this unit of spatial classification, defined by the Act on spatial planning and development, is not recognized by the National Spatial Development Concept. In 2005, the Government Center for Strategic Studies delimited metropolitan areas in Poland, but the resulting report has never been granted the status of a legally binding document. Metropolitan areas are sometimes delineated by regional authorities. As a result, metropolitan areas and metropolises are not clearly marked on the map. In Poland, the problem is addressed by the Union of Polish Metropolises. Various attempts have been made to create a formal category covering metropolitan areas in the spatial planning system. The proposed nomenclature included (MŁODAK 2012, p. 23):

– Extended Territorial Unit,
– Functional Urban Region,
– Extended Urban Zone.

The latter solution seems to be most appropriate because it relies on the scope of functional influence exerted by a large city. In practice, however, reliable information for describing the scope of that influence may be difficult to obtain. In consequence, an Extended Urban Zone does not cover the entire metropolitan area. According to the Union of Polish Metropolises, there are 12 metropolitan areas in Poland: Warsaw, Łódź, Kraków, Wrocław, Poznań, Gdańsk, Katowice, Szczecin, Bydgoszcz, Białystok and Rzeszów. Based on the quantitative criterion, we can identify six metropolises which, together with their functionally linked suburbia, create metropolitan areas. They are Warsaw, Kraków, Łódź, the Tricity, Wrocław and Poznań. If a metropolitan area is defined as an urban agglomeration with population higher than 500,000, there are nine metropolitan areas in Poland: Bydgoszcz-Toruń, Kraków, Poznań, Silesia, Szczecin, the Tricity, Warsaw and Wrocław. In line with this concept, Białystok, Lublin and Rzeszów are regarded as urban centers of prospective metropolitan areas. Ideally, metropolitan areas should be delineated by the Council of Ministers by way of a resolution. This approach would eliminate many problems associated with their identification and management. The Faculty of Law and Administration of the University of Silesia in Katowice has developed a draft regulation on metropolitan counties (DOLNICKI 2014, pp. 9–17). The document preserves Poland's three-tier system of territorial administration but proposes to add a new category of counties. In addition to rural and urban counties, Poland would also feature metropolitan counties with somewhat different functions. Selected responsibilities, which are performed by cities as part of municipal unions or supra-local projects of key importance for the entire urban agglomeration, would be transferred to municipal counties (DOLNICKI 2014, pp. 10, 11). The draft of the so-called Metropolitan Act is controversial with respect to provisions regarding the property of metropolitan poviats. New units of local government could acquire property via transfer of assets from communes forming a part of a metropolitan poviat. In other words, currently operating communes would be expropriated for the benefit of metropolitan poviats. This would constitute a significant breach of independence of local government units at the communal level. In this place, it is necessary to mention that as of the moment of establishment of poviats pursuant to the Act of 1998, they were provided with property provided it did not constitute the property of any commune (KIEŁBUS 2014). The developed drafts for establishment of a metropolitan poviat are criticized by local government organizations and the Council of Ministers.

Another barrier for development of metropolises in Poland is underdevelopment of metropolitan functions. Determination of sources of income of metropolitan poviats is equally controversial. Polish metropolitan areas comply with the qualitative requirement (population higher than 500,000), but not all of them have fully developed metropolitan functions, in particular business functions. The following metropolitan functions should be developed (KUĆ-CZAJKOWSKA 2009, pp. 78–89):

– business hubs,

– business space (office, storage, retail space),

– science, training and educational centers (research and development centers, specialist training centers, science parks, congress centers, universities offering international study programs),

– transportation hubs (expansion of freeway systems, high-speed rail systems, international airports operating direct and frequent flights to major cities in Europe and in the world).

Disparities in development levels are often noted in the same region, where different counties and municipalities lag behind in respect of their exogenous functions. Metropolitan areas should be characterized by sufficient availability of services that complement the metropolitan functions of the urban core. Polish metropolitan areas still have a lot of catching up to do in this respect.

The difficulties associated with the identification of metropolitan areas lead directly to management problems. Metropolitan areas are not managed by territorial self-governments. The responsibility for managing large cities and their suburbia divided among municipalities (which are burdened with most functions), regions and, least of all, counties (NOWAK 2010, p. 18). Municipalities have to cooperate and develop common policies in order to effectively manage metropolitan areas. This process is exacerbated by globalization, it involves many public institutions and, increasingly often, nonpublic entities. The key problems in metropolitan management stem from the diversity of entities, their various tasks, goals and conflicts of interest. Effective management requires coordination of all functions at the metropolitan level, which remains problematic in Poland. Metropolitan functions are managed at the local level, which does not always contribute to the achievement of shared goals at the metropolitan level. Constituent municipalities may have mutually exclusive goals that are not consistent with the metropolitan management concept. There are no institutions responsible for identifying metropolitan areas, developing, coordinating and monitoring metropolitan strategies, and motivating municipalities to cooperate rather than compete. The Metropolitan Area Coordination Team was created in 2007. Municipalities were advised to create task-oriented municipal unions for pursing common goals. Unfortunately, Polish municipalities have a strictly competition-oriented approach (by competing for investors, tourists, etc.), and they fail to recognize the benefits of cooperation within the metropolitan area. The term „metropolitan problem" often appears in the literature, and it refers to organizational and functional issues that are encountered in metropolitan areas due to conflicting interests of public and private institutions (LACKOWSKA 2008, p. 6).

The debate on creating a legal framework for metropolitan areas continues in Poland. Experts differ in their opinions and cite various international experiences. Metropolitan areas with urban cores in Toronto, Winnipeg and Montreal were created in Canada after World War II. They were quickly dissolved due to numerous conflicts. The Metropolitan Corporation of Barcelona was also disbanded. In Germany, only several regions decided to create a legal framework for metropolitan areas. The best metropolitan management practices can be found in Hannover and Stuttgart. The Portland Metropolitan Area, popularly referred to as the Metro, is the only directly elected metropolitan planning organization in the United States (LACKOWSKA 2010, pp. 5–8). Examples of good metropolitan management practices can also be found in London where the Metropolitan Board of Works, a principal instrument of London-wide government, was created already in 1833. The Government Office for London, an administrative agency representing the Greater London Authority (GLA), was established in 1986. The GLA, which consists of the Mayor of London and an elected 25-member London Assembly, is responsible for public transport, local development, planning, waste management, environmental protection and culture in the metropolitan area. Its decisions are open to public consultation. Despite much success, the GLA has been criticized for focusing on the needs of London rather than the entire metropolitan area (GAWŁOWSKI 2014, pp. 18–29).

Metropolitan management and coordination of policies in constituent municipalities pose numerous problems not only in Poland. Those difficulties are barriers to metropolitan development around the globe. Nonetheless, the future belongs to metropolitan governments, units of territorial administration that can effectively mobilize human and material resources and increase the region's competitive advantage in an era of economic globalization (JAŁOWIECKI 2002, p. 225). This is a difficult challenge because effective and easy to implement methods of metropolitan management have not yet been developed by any country. The discrepancy between local and metropolitan functions often poses a barrier to the development of metropolitan management methods. Social, economic and planning issues and their mutual interactions give rise to conflicts of interest (DOLNICKI 2014, p. 6). Public tasks where voluntary cooperation would suffice as well as projects that require the supervision of metropolitan authorities should be clearly identified. Relatively flexible management methods are preferred.

Public transport is also a pressing issue in Polish metropolitan areas. Poland lags behind other European countries in terms of both domestic and international transportation. There is a scarcity of public funds for the development of world-class transport infrastructure. Transportation and easy access to metropolitan areas are the prerequisites for growth, and metropolitan functions will not be sufficiently developed unless progress is made in this area. Development of a metropolis depends on its position in the network of metropolitan links. A world network of cities functions globally (with centres in New York, Tokyo or London). Polish cities are slightly outside of this network on account of a weakly developed network of transport connections. The junctions in this network are large cities which connect the domestic economic environment with the global economy. Determination of large cities as a complementary network and separation of world cities from this group is attributed to J. FRIEDMAN (1986), who formulated the „World City Hypothesis", relying on the following premises:

– the form and the scope of integration of a city with the world economy and functions ascribed to the city within the scope of global division of work determine structural changes occurring in the city;

– cities are used by trans-national capital as basic junctions for spatial organization of production and as outlet markets. The capital is concentrated primarily in world cities. The resulting network of connections leads to the shaping of a hierarchical network of world cities;

– world cities are the destination of international and domestic migration (SMĘTKOWSKI et al. 2001, p. 87).

Subsequently, the concept of a global city has been developed, whose originator, S. Sassen (1991), drew attention to cities as:

– decision-making centres of world economy;

– most important locations of companies;

– leading locations of innovations;

– outlet markets for the most modern products and innovations (SMĘTKOWSKI et al. 2001, p. 88).

It is also worth paying attention to the theory of a global city by M. CASTELLS (1998). This is a theory of the „space of flows"; this new space consists of the following layers according to the author (CASTELLS 1998, p. 412–416):

1. Technical layer: network of flows of electronic impulses (the structure of the space of flows is not determined by places, but by the network of mutual connections);

2. Spatial layer: junctions of flows (the world network of cities has a hierarchical character – some of the junctions are superior and others only organize the local environment);

3. Social layer: spatial organization of elites managing the network (development of a metropolitan class, which influences the processes that shape the economy, the society and the space).

The basis of this theory is an assumption that the society is focused around flows of capital, information, technology, flows organizing interactions, flows of images, sounds and symbols. The space of flows replaces or absorbs the hitherto traditional space of places.

Referring to Castells' theory, it is necessary to note that Polish cities are only at the stage of being included in the world network of metropolitan links; none of them has and none of them is going to have a superior position in the spatial layer in the near future; due to the low position of Polish metropolises in the network of global links, there are no representatives of elites that manage such a network in Poland. The highest position in the network of metropolitan links is occupied by Warsaw. Next to the capital, such cities as Poznań, the Tri-city, Cracow and Wrocław are frequently listed.

Other problems faced by metropolitan areas include growing levels of environmental degradation, decreasing quality of life, fast-paced and stressful lifestyle, communication noise, traffic congestion, social inequality, loneliness and anonymity of big city residents. Those issues are a direct consequence of high population density, and they contribute to social and psychological problems.

The urban cores of metropolitan areas are strategically obliged to share the profits stemming from their rapid growth with the surrounding areas. This is a developmental challenge that creates social conflict. Smaller cities and towns in a metropolitan area should draft their own development strategies that are internally cohesive and constitute an integral part of the metropolitan strategy. They should be able to take advantage of the urban core's potential. Unfortunately, Polish towns and municipalities choose to compete rather than follow a shared path towards socioeconomic development. A metropolitan area should have a single development strategy that encourages all constituent units to cooperate and generate mutual benefits. According to popular belief, however, metropolitan municipalities profit from their location but generate only losses for the urban core. Effective cooperation in a metropolitan area is determined by numerous factors, including (GROCHOWSKI 2010, p. 30):

– clear division of tasks and a legible mechanism of planning and managing development,

– common goals and interests shared by municipalities and other entities,

– strong leadership, clear development goals and effective management,

– positive experience of working with municipalities,

– political role of cooperation, ability to reach common ground and develop shared solutions,

– abandoning municipal goals in the common interest of the metropolitan area,

– special mechanism of financing operations in metropolitan areas,

– legal incentives, such as additional powers for the most cooperating municipalities.

Urban cores can hamper the development of hinterland regions by importing qualified employees from less developed peripheral municipalities. This phenomenon has been termed as the „backwash effect" by Myrdal or as the „polarization effect" by Hirschmann (KISIAŁA, STĘPIŃSKI 2013, p. 30). Urban cores can promote the growth of metropolitan areas and the entire economy only when their wealth spills over to the surrounding communities and creates new opportunities in those localities („spread effect" in Myrdal's theory and „infiltration" in Hirschmann's theory).

According to the literature, metropolitan areas are fraught with many other problems that stall their development. They include (HERBST 2010, p. 48):

1. Local vision and strategy frequently change when new authorities are elected;

2. The citizens;, rather than institutions;, potential for development remains untapped;

3. The role played by culture, multiculturalism and competitive education in development is underestimated;

4. Uncontrolled development and lack of sustainable planning regulations pose numerous threats:

– chaotic development due to weakly coordinated planning measures,

– dominant status of private property and weak status of common areas,

– lack of reference models and good practices relating to urban life,

– scarcity of funding for the construction of transport routes, road networks and local streets;

5. The knowledge of social problems in metropolitan areas and the regional labor market remains limited.

Citizens should play an active part in the process of drafting a metropolitan area's development strategy. Social debates addressing metropolitan problems could point to new directions for change and local growth. Various instruments can be deployed in the process of managing a metropolitan area, including civic partnerships, business partnerships, partnerships with investors (public-private) and financial institutions (HERBST 2010, p. 50). Positive examples of public-private partnerships include Fraport, the owner of the Frankfurt airport, which actively participated in the process of promoting the Frankfurt/Rhein-Main Region as an attractive international destination, or BASF which lobbied for an institutional reform in the Rhein-Neckar Region (LACKOWSKA 2010, p. 30).

Polish metropolitan areas are also weakly linked to the global network of big cities. Warsaw is the only Polish city with fully developed metropolitan functions. Other leading cities are metropolises with a domestic impact, and they do not play important roles in the global economy. The ESPON project 1.4.3 Study on Urban Functions identified Functional Urban Areas (FUA) and Metropolitan European Growth Areas (MEGA). Warsaw was classified as the only prospective European metropolis in Poland. Seven urban agglomerations of Cracow, Katowice, the Tricity, Poznań, Wrocław, Łódź and Szczecin were identified as weakly developed metropolises (*Koncepcja przestrzennego*... 2011, p. 67). The remaining metropolitan areas were not included in the classification. Warsaw ranks relatively low in European classification systems, and it is regarded as a city with weakly developed metropolitan services and international functions, as well as low levels of accessibility. Metropolitan functions include industry, services and higher-order services such as education and science with at least a domestic impact, but mostly a supranational reach. Metropolitan functions in the domestic, supranational, European and global arena should performed by the entire metropolitan area, and not only its urban center. In the global network, Warsaw is only a prospective European metropolitan area. Its advantage over other Polish metropolises can be attributed to its status of Poland's capital city which contributes to the development of metropolitan functions. The Union of Polish Metropolises was founded in Cracow on 11 October 1990 with the aim of developing a network of connections between former Soviet block cities and urban centers in Western Europe and the world. The Union brings together Poland's 12 largest cities which are also members of the Eurocities network. The representatives of the Union of Polish Metropolises are also members of the European Union;s Committee of the Regions.

According to the GaWC (Globalization and World Cities) classification, there are over 120 world cities with the rank of global metropolises around the world. This classification differentiates four categories of world cities: alpha (leading), beta (major), gamma (secondary) and D – developing world cities. The alpha (leading) category includes London, Paris, New York, Tokyo, Chicago, Milan and Los Angeles. The beta category encompasses San Francisco, Sydney, Toronto, Madrid, Mexico, Moscow, Seoul and Brussels. The gamma (secondary) category includes, for example, Amsterdam, Boston, Prague, Johannesburg, WARSAW, Stockholm, Copenhagen and Istanbul. In 2008, the GaWC classification was extended onto new categories. The classification of world cities from 2008 differentiates the following categories: alpha++, alpha+, alpha, alpha- (leading cities), beta+, beta, beta- (major cities), gamma+, gamma, gamma- (secondary cities) and so-called high sufficiency (highly sufficient cities – satisfactory) and so-called sufficiency (sufficient cities – satisfactory). The entire classification encompasses 207 cities which can be called world cities. It is worth paying attention to the fact that the sufficiency category includes such cities as Torino, Strasbourg, Cracow, Belfast, Reykjavik, Dresden and Seville. According to the GaWC classification, only Warsaw and Cracow are noticed in the global network of metropolitan links.

It is worth emphasizing the fact that the functioning of a city in a global space of flows leads to partial independence from the local environment. In Poland, no intense weakening of regional links has been observed so far. The role of the region would be limited to performing residential and recreational functions for the inhabitants of a metropolis.

This article highlights only selected barriers to the development of Polish metropolitan areas. An in-depth analysis of other functional areas in urban agglomerations would undoubtedly reveal more obstacles. Elimination of those barriers would promote economic growth in regions and increase their competitive advantage. Integration of metropolitan functions in an urban agglomeration could generate the following benefits (SMĘTKOWSKI et al. 2009, p. 72):

– economies of scale due to an increase in market size,

– greater specialization of growth centers in metropolitan areas, which would increase the complementarity of metropolitan areas and contribute to economic diversification,

– improved efficiency of projects initiated by local authorities,

– reduced environmental pollution due to greater availability of public transport and less private-vehicle commuting,

– reduced unemployment in hinterland through the creation of alternative employment opportunities for farmers,

– improved quality of and access to public services.

The authorities and urban planning experts should search for new ways of overcoming barriers to development and reinforcing the status of Polish metropolitan areas in the global network. Metropolitan areas should be regarded as growth poles whose development will trigger economic growth in the entire country.

Conclusions

The aim of the article was to identify the main barriers to the development of metropolitan areas in Poland. Various definitions of a metropolitan area were reviewed. The population criterion differed across definitions, ranging from 500,000 to 1 million. Those discrepancies create problems already at the stage of identifying and delimiting metropolitan areas in Poland and in other countries. The number of metropolitan areas has been defined at 12 or only nine, depending on the report and the adopted statistical method. According to European reports, Warsaw is the only metropolitan area or, rather, a prospective metropolitan area with weakly developed metropolitan functions in comparison with European urban centers. The Polish definition of a metropolitan area should be updated and harmonized to minimize ambiguity in the delimitation process.

There is a general scarcity of effective metropolitan management models in Poland and in other countries. Polish urban planners are searching for new methods of managing metropolitan areas. One of the proposed solutions relies on the concept of metropolitan counties that would assume selected responsibilities at the local and supra-local level that are vital for the development of the entire metropolitan area. The management structure of a metropolitan area is vague, and the division of powers and responsibilities is unclear. The goals and functions of municipalities and institutions in a metropolitan area are not mutually complementary or cohesive. Polish municipalities choose to compete rather than cooperate, which probably poses the greatest obstacle to the development of metropolitan areas.

Metropolitan functions are weakly developed in Polish urban agglomerations, mainly because the existing transportation networks and transport infrastructure do not meet modern standards and current needs. By definition, metropolitan areas should be strongly connected to the global network. Deficient transportation systems and infrastructure hamper the development of metropolitan areas in Poland and prevent them from becoming a stable element of the global network. Freeway networks and air links to cities around the world should be expanded to enhance the metropolitan functions of Polish urban agglomerations.

In Poland, metropolitan areas exert a negative impact on the surrounding zones, which can be partly attributed to the absence of comprehensive management solutions covering the entire urban agglomeration. Urban cores attract investors, inhabitants and labor, and they are able to develop rapidly at the expense of contiguous municipalities. Big cities are reluctant to share the resulting profits with the remaining members of the metropolitan area. This discourages hinterland municipalities from collaborating with the metropolis.

Knowledge about the challenges faced by metropolises and the methods for approaching those problems is insufficient. The citizens' (rather than institutions') potential for solving those issues remains untapped. Maintenance of spatial cohesion is not regarded as an important goal in the rapid urbanization process. As a result, urban development is often chaotic and lacks a shared vision. Environmental degradation resulting from high density of business and other entities that serve the same area, as well as the ensuing social problems are also frequently disregarded aspects of metropolitan development.

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References

DOLNICKI B. 2014. *Koncepcja powiatu metropolitalnego*. Samorząd Terytorialny, 7–8.

GAWŁOWSKI R. 2014. *Metropolia londyńska – rozwiązania prawne i praktyka*. Samorząd Terytorialny, 7–8.

GORZELAK G., SMĘTKOWSKI M. 2005. *Metropolia i jej region w gospodarce informacyjnej*. Scholar, Warszawa.

GROCHOWSKI M. 2010. *Samorząd na obszarach metropolitalnych*. Samorząd Terytorialny, 6.

HERBST K. 2010. *Problemy strategii w rozwoju metropolitalnym*. Samorząd Terytorialny, 6.

IZDEBSKI H. 2010. *Zadania metropolitalne i instytucjonalne sposoby ich realizacji*. Samorząd Terytorialny, 6.

JAŁOWIECKI B. 2002. *Zarządzanie rozwojem aglomeracji miejskich*. Wydawnictwo Wyższej Szkoły Finansów i Zarzadzania, Białystok.

KISIAŁA W., STĘPIŃSKI B. 2013. *Rola obszarów metropolitalnych w rozwoju regionalnym w opinii władz samorządowych*. Samorząd Terytorialny, 10.

Koncepcja przestrzennego zagospodarowania kraju 2030. 2011. Ministerstwo Rozwoju Regionalnego, Warszawa.

KUĆ-CZAJKOWSKA K. 2009. *Funkcje metropolitalne Warszawy, Pragi i Budapesztu*. Studia Regionalne i Lokalne, 1(35).

LACKOWSKA M. 2008. *Zarządzanie metropolitalne – spojrzenie teoretyczne*. Samorząd Terytorialny, 9.

LACKOWSKA M. 2010. *Nowe interpretacje teoretyczne polityki wiekomiejskiej*. Studia Regionalne i Lokalne, 2(40).

MARKOWSKI T., MARSZAŁ T. 2006. *Metropolie. Obszary metropolitalne. Metropolizacja. Problemy i pojęcia podstawowe*. KPZK PAN, Warszawa.

MŁODAK A. 2012. *Statystyka metropolii polskich – problemy i perspektywy*. Studia Regionalne i Lokalne, 2(48).

NOWAK M. 2010. *Polskie obszary metropolitalne – problemy definicyjne*. Samorząd Terytorialny, 3.

SMĘTKOWSKI M., JAŁOWIECKI B., GORZELAK G. 2009. *Obszary metropolitalne w Polsce*. Studia Regionalne i Lokalne, 1(35).

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SYNCHRONISATION OF REGIONAL BUSINESS CYCLES OF EASTERN POLISH PROVINCES WITH THE NATIONAL CYCLE IN THE CONTEXT OF REGIONAL ECONOMIC STRUCTURES

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K e y w o r d s: region, business cycles, structural changes.

A b s t r a c t

The objective of the article is to determine the degree of regional variation among provinces located in so-called Eastern Poland. The criterion for such variation is the structure of the generated GDP and the course of fluctuations in business cycles related to it. The analysis of economy structures in such provinces, as well as application of band-pass filters, used for separating the course of cyclical fluctuations, enabled the evaluation of the degree of structural discrepancies and business cycle discrepancies in five examined provinces. The analysis of cycle morphology in a regional perspective confirmed significant discrepancies in the course of the business cycle fluctuations in comparison to the cycle for Poland in general. The relation between the structure of the generated regional product and its co-convergence with the reference cycle is also visible. Regions characterised by a much higher or much lower share of agriculture in the GDP show different sensitivity to business cycle changes. Furthermore, these regions of Eastern Poland which have industries with a clearly pro-export nature (Warmia and Mazury, Podlasie and Podkarpackie) retain their separate character in the course of the fluctuations of the business cycle, differing from other regions included in the examined area of the country.

SYNCHRONIZACJA REGIONALNYCH CYKLI KONIUNKTURALNYCH WOJEWÓDZTW POLSKI WSCHODNIEJ Z CYKLEM KRAJOWYM W KONTEKŚCIE REGIONALNYCH STRUKTUR GOSPODARCZYCH

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S ł o w a k l u c z o w e: region, cykle koniunkturalne, zmiany strukturalne.

Abstrakt

Celem artykułu jest określenie stopnia zróżnicowania regionalnego województw zaliczanych do tzw. Polski Wschodniej. Kryterium tego zróżnicowania stanowi struktura wytworzonego PKB oraz związany z tym przebieg wahań koniunkturalnych. Analiza struktury gospodarek tych województw oraz zastosowanie filtrów pasmowo-przepustowych służących wyodrębnieniu przebiegu wahań cyklicznych umożliwiły ocenę stopnia rozbieżności strukturalnych i koniunkturalnych pięciu badanych województw. Analiza morfologii cykli w ujęciu regionalnym potwierdziła znaczne odstępstwa przebiegu wahań koniunkturalnych od cyklu dla Polski ogółem. Widoczny jest także związek między strukturą wytworzonego produktu regionalnego a jego zbieżnością z cyklem referencyjnym. Regiony charakteryzujące się znacznie wyższym bądź niższym udziałem rolnictwa w PKB wykazują odmienną wrażliwość na zmiany koniunkturalne. Ponadto te regiony Polski Wschodniej, w których są zlokalizowane branże przemysłu o wyraźnie proeksportowym charakterze (warmińsko-mazurskie, podlaskie, podkarpackie), zachowują odrębność w przebiegu wahań koniunktury gospodarczej – jest on inny niż pozostałych regionów zaliczanych do badanego obszaru kraju.

Introduction

Eastern Poland is the most significant problem area of national importance. Historical, social and economic determinants, system transformation and location along the external border of the European Union have determined the development of this area. It is commonly accepted that the area of five provinces of Eastern Poland is characterised by a low level of economic consistency (measured by the Gross Domestic Product per inhabitant), as well as low social and territorial consistency. Differences in the level of economic development of eastern regions of Poland are also reflected in the course of business cycles, which are also a derivative of the economic structure. A relatively lower degree of industrialisation in comparison to the average value for Poland, and a relatively greater share of agriculture in the GDP, as well as greater significance of trade contacts with the neighbouring countries (the so-called local border traffic) determine the basis for differences in the course of business cycle fluctuations in these regions.

Theoretical Bases of Regional Business Cycles

The issue of regional business cycles is significant for at least two reasons. The first of them is the issue of the subjectivity of regions as independent economic entities within national states. Familiarity with the current status of the economic situation via indications of a regional business cycle barometer provides the regional authorities with a basis for making economic decisions at a regional level. The second reason for the significance of undertaking the issue of regional business cycles is the impact of the fiscal policy conducted at the national level and the monetary policy conducted at the supra-national level[1]. Lack of coordination between the above-mentioned policies and the course of regional business cycles may lead to the emergence of so-called asymmetric shocks and a negative impact of economic policy on the situation in individual regions.

The literature, with respect to the issues discussed in the article, is not uniform in relation to processes occurring within national states or economically integrated areas. ARTIS and ZHANG (1997) claim that the European business cycles became more synchronised among more developed EMU members (ARTIS, ZHANG 1997, p. 6, BARRIOS, LUCIO 2003, p. 4). Furthermore, there is a process of cyclical convergence among EMU members in comparison to the European periphery (BEINE et al. 2003, p. 229). It was noted that in certain „peripheral" countries, the degree of synchronisation of business cycles increased (MARELLI 2006, p. 158). At the same time, there was an increase in the level of cyclical convergence of the border regions of member states, which is related to the implementation (between 1979 and 1992) of the ERM, whereas the level of regional synchronisation within the scope of the EU member states was lowered (FATAS 1997, p. 6).

The presented results of studies conducted by other authors indicate that there is no uniform evidence with respect to a correlation of cyclical fluctuations in a regional perspective (HARDING, PAGAN 2001, p. 31). An example in this case may be provided by Greek regions, which show a decreasing degree of synchronisation in time (MONTOYA, DE HAAN 2007, p. 12).

The problem of asymmetry of economic shocks experienced by the regions is also one of the optimum currency area criterion. In the literature it is pointed, that business cycles across countries (regions) within an „optimum" currency area should not be out of phase (MCKINNON 2002, p. 343). The aspect of asymmetry of economic shocks, after creating the euro-zone have been studied among euro area member states. The issue of symmetry business cycle fluctuations is important in the context of supra-regional (and national) monetary policy. Moreover, if fiscal policy is subject to strict controls and harmonization at a supranational level, according to the theory of optimum currency areas the effects of the use of such instruments should be predictable and similar to across the common currency area (FRENKEL, NICKEL 2002, p. 6).

From the point of view of the theory and criteria of the OCA, as important as the fact of shock it is the way to respond to any disruption, as determined by effectiveness of the union economic policy instruments. If in one country the

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[1] Even though this does not yet refer to Poland, which is still outside of the euro-zone, this issue should be taken into account in the perspective of the introduction of the European currency.

effects of the shock will be positive, otherwise negative, harmonization of economic policies would be senseless (WEIMANN 2003, p. 4).

In the literature on the subject there are two trends in view with respect to the international and intra-regional effects of intensifying economic integration. The first tendency is represented by Marelli, who claims that economic integration leads to symmetrical changes which, in turn, result in more synchronised business cycles, both in the national and in the regional perspective (MARELLI 2006, p. 176). The second concept derives from the work of P. KRUGMAN (1991), who expresses the view that economic integration entails an increase in the regional concentration of industrial activity, which, in turn, leads to sectoral or even regional shocks, increasing the probability of asymmetric shocks and divergent business cycles (CAMACHO et al. 2006, pp. 17–19, KRUGMAN 1991, pp. 483–498, 1993, pp. 242–244).

In his studies, Paul Krugman proves that economic integration in a regional perspective leads, to a greater degree, to a polarisation of development rather than to its unification. This happens as a result of external effects occurring within a single currency area, production scale economy and dynamic, in comparison to the neighbouring areas, and the development of metropolitan areas (KRUGMAN 1991, pp. 486–487). The analysis conducted by Krugman had a comparative nature' EU regions were compared to analogous administrative units in the United States. The main conclusion from Krugman's model is that the introduction of a single currency area may result in an increase in the degree of convergence of business cycles on the level of states, with a simultaneous increase in the range of divergence on the regional scale (CORREIA, GOUVEIA 2013, p. 92).

According to the second concept, proposed by FRANKEL and ROSE (1996), as a result of the elimination of economic barriers among countries and regions of a single currency area, the trade exchange intensifies. A direct effect of this process is, in the opinion of the authors, an increase in the level of synchronisation of cyclical fluctuations. An additional factor contributing to synchronisation of the course of business cycle fluctuations is the implementation of a common economic policy in an integrating area. The difference in the approach to the effects of the created optimum currency area consists in the formulation of the opinion that positive results in this respect will be revealed ex-post, i.e. as a result of the conduct of a common currency policy or the introduction of a single currency (FRANKEL, ROSE 1996, p. 21).

The review of the literature presented above shows that the behaviour of regional economies is not universal, and depends on the specific nature of the countries and regions that function within them. Thence, a question emerges about the course of the discussed process in Polish regions functioning as NUTS 2 areas (provinces) in the EU nomenclature.

Study Methodology of Regional Business Cycles in Eastern Poland Between 2000 and 2015

The objectives of the study are the morphological features of regional business cycles, represented by 16 administratively separate local government units, i.e. provinces. The point of reference is provided by the business cycle morphology for the country in general. The time range of the analysis encompasses a dynamics series of industrial production in a monthly cross-section for the period from January 2000 to May 2015. The selection of such a range is dictated by the availability of comparable statistical data. The period of 16 years also offers the possibility of separating several complete business cycles, as well as the possibility of evaluating differences in their morphological structure.

The bases of research in this study are growth cycles (DROZDOWICZ-BIEĆ 2012, p. 15). This method allows for the identification of business cycles in a situation when there is a period of extended growth and the amount of statistical data is limited.

An important aspect related to the empirical analysis of business cycle fluctuations is the optimum selection of indices which form a basis for evaluating the morphology of economic cycles. In relation to this, the literature indicates two main criteria to which economic variables should be subjected, i.e. the economic significance of variables, and formal and statistical features of time series (ZARNOWITZ, BOSCHAN 1997, p. 7, BARCZYK, KRUSZKA 2003, p. 40).

Taking the above determinants into account, data regarding industrial production and employment were used for the empirical analysis' in the literature on the subject such data are treated as key variables for analysing business cycle fluctuations of the phenomenon. Furthermore, the analysed empirical series comply with the second postulate formulated in the literature, i.e. (BARCZYK, KRUSZKA 2003, p. 41, MATKOWSKI 1998, p. 69).

– publication frequency: analysis of business cycle morphology requires data in monthly or quarterly intervals;

– sensitivity to business cycle changes and representativeness for the analysed area of the economy (sectoral or synthetic data);

– comparability of data in time: refers to uniform rules of aggregation of synthetic variables and uniformity of index construction methods.

The first stage of the analysis of business cycle fluctuations is the elimination of seasonal fluctuations from raw time series. Among the most commonly used methods of seasonal levelling is the TRAMO/SEATS method, recommended by Eurostat (GRUDKOWSKA, PAŚNICKA 2007, pp. 8, 9).

For the purpose of separating a cyclical factor from the previously deseasonalised empirical data with the use of the TRAMO/SEATS method, the

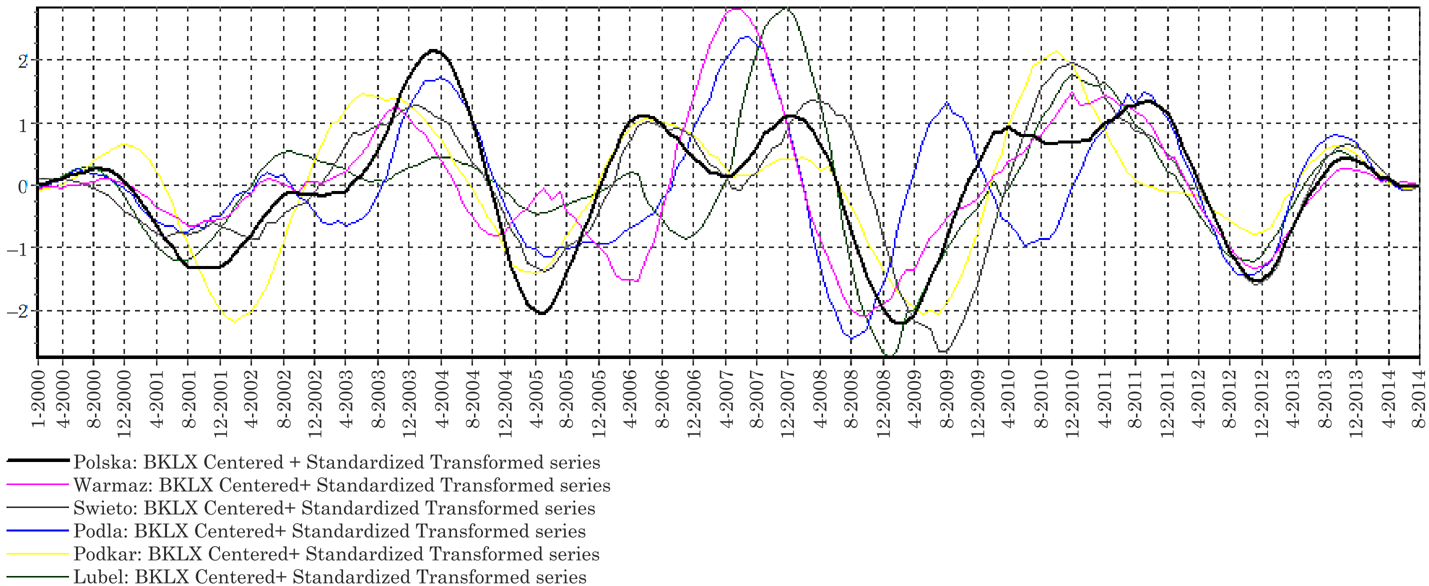

Fig. 1. Cyclical fluctuations in researched regions in the context of Poland business cycle

Source: own elaborations based on: Monthly reports on the socio-economic situation of dolnośląskie, kujawsko-pomorskie, lubelskie, lubuskie, łódzkie, małopolskie, mazowieckie, opolskie, podkarpackie, podlaskie, pomorskie, śląskie, świętokrzyskie, warmińsko-mazurskie, wielkopolskie and zachodniopomorskie voivodship, Local Data Bank, Regional Statistical Office.

Christiano-Fitzgerald asymmetrical filter was used, which enables the procurement of cycle evaluation at the beginning and at the end of a time series (ADAMOWICZ et al. 2008, p. 12), whereas the process of marking turning points relies on the Bry-Boschan method (ADAMOWICZ et al. 2008, p. 13). Analysis of the morphological features of business cycles utilizes measures of variability and dispersion, i.e. the measure of the length of individual phases and cycles, standard deviation, the variability factor, amplitude and intensity factors, and analysis of cross correlations. On the basis of the obtained results, an analysis of the morphological features of industrial production and employment was conducted in five regions of Eastern Poland.

Table 1

Added gross value according to types of activity and selected provinces in 2012 (in %)

Provinces	Total	Agriculture, forestry, hunting, fishing	Industry	Construction	Trade, repairs, transport, accommodation	Financial and insurance activity	Other
POLAND	100	3.1	26.2	7.9	29.8	8.8	24.3
Lublin	100	5.9	20.7	7.4	28.8	9.9	27.3
Podkarpacie	100	1.9	28.2	8.1	28.5	8.2	25.1
Podlasie	100	7.8	20.3	7.6	28.9	8.7	26.7
Świętokrzyskie	100	4.1	26.1	9.4	28.1	7.6	24.7
Warmia and Mazury	100	6.9	24.7	7.9	25.4	8.2	26.8

Source: *Gross Domestic Product...* 2014, p. 66, 67.

The analysis of the regional product structure allows for evaluating the scale of variation among profiles of regional economies of the examined provinces. Typically, agricultural regions include: Podlasie, Warmia and Mazury, and Lublin. Podlasie and Lublin are also provinces with a definitely lower share of industry in the GDP. In the GDP structure of the Lublin Province, the mining and chemical industry is dominant, whereas in Podlasie – the agricultural and food industry, timber and the machine industry. In the Świętokrzyskie Province, the share of agriculture is similar to the national average, whereas the share of the construction industry is higher in comparison to other examined regions. On the other hand, in Podkarpacie, the share of agriculture is smallest, whereas the share of industry is greatest among the provinces of Eastern Poland. The following industries are dominant: aviation, electrical machines, chemicals and food. The above list may constitute an assumption for clarifying the diversified course of business cycle fluctuations in the examined regions. The analysis of the morphology of business cycle fluctuations allows for the evaluation of the sensitivity of individual provinces of Eastern Poland to changes in the international and domestic business outlook.

Analysis of Business Outlook in Eastern Polish Regions Between 2000 and 2015

As mentioned above, the analysis of changes in the business cycles of Eastern Poland's economy is determined in the dimension of the country's functioning in the present administrative division, thence since 1999. Up to the present moment (i.e. the beginning of 2015), there have been three interesting events, from the point of view of morphological analysis, which have influenced changes in the business cycle in the regions. The first event was a short-term recession between 2001 and 2002, which occurred all over the world. The second event, this time with the nature of a positive shock, was Poland's accession to the European Union. The last, but the most visible in the course of the economic activity of the country and the regions was the world economic and financial crisis between 2008 and 2013.

Table 2

Statistics of cyclical factor in industrial production in Eastern Polish regions in relation to the reference series of industrial production of Poland

Time series	Coherence ratio	Mean delay	Cross correlation		
			r_0	r_{max}	t_{max}*
Lublin	0.48	0.14	0.68	0.70	1
Podkarpacie	0.58	-0.02	0.75	0.75	-1
Podlaskie	0.31	0.31	0.54	0.60	2
Świętokrzyskie	0.62	-0.23	0.77	0.82	-2
Warmia and Mazury	0.32	0.31	0.54	0.65	4

* Explanation: values + (-) mean lead (lag) expressed in months in relation to the reference series.
Source: author's elaborations based on: Monthly Reports on the socio-economic situation of dolnośląskie, kujawsko-pomorskie, lubelskie, lubuskie, łódzkie, małopolskie, mazowieckie, opolskie, podkarpackie, podlaskie, pomorskie, śląskie, świętokrzyskie, warmińsko-mazurskie, wielkopolskie and zachodniopomorskie voivodship, Local Data Bank, Regional Statistical Office, http://stat.gov.pl/bdl/, download date: 11.05.2015.

In reference to the first of the above-listed periods, i.e. the years 2001–2002, observations of fluctuations in industrial production in the examined regions testify to their diversified sensitivity to this period of world recession. This refers to the length of the slowdown and its depth. Among Eastern Polish provinces, i.e. Warmia and Mazury, Podlasie, Lublin, Podkarpacie, and Świętokrzyskie, no recession was recorded in the first and the last of the above-listed provinces[2]. In other regions the dynamics of industrial production

[2] In line with the definition, the period of recession means a drop in production for at least two consecutive quarters. Cf. DROZDOWICZ-BIEĆ (2008, p. 9).

were negative for at least several months, yet it may be said that the recession had a rather shallow and short-term nature.

Table 3

Intensity of industrial production series in individual provinces of Eastern Poland between 2000 and 2015

Time series	Standard deviation [points]	Variability index [%]	Average amplitude [%]		
			of growth stages	of drop stages	of cycles
POLAND	8.0	7.4	23.6	21.5	2.1
Lublin	25.2	23.1	39.4	35.1	4.3
Podkarpacie	9.8	9.2	23.6	21.1	2.5
Podlasie	8.7	8.0	16.1	17.3	-1.2
Świętokrzyskie	17.2	15.9	27.4	25.1	2.3
Warmia and Mazury	13.1	12.2	23.0	24.9	-1.9

Source: As in table 2.

In Eastern Polish provinces where no drop in industrial production was recorded between 2001 and 2002, but only a slow-down in the growth rate, the Podlasie Province characterised the highest growth dynamics[3]. On the other hand, the greatest drops in the volume of production in the analysed period were recorded in Lublin and Podkarpacie.

When analysing the first period of the economic crash between 2001 and 2002, it is possible to perceive a delay of Eastern Polish regions with respect to the general results for Poland as far as the beginning and the end of this crisis is concerned. Among the discussed provinces, the first symptoms of the crisis reached Lublin the earliest. On the other hand, the effects of the slowdown were manifested latest in Warmia and Mazury, and Świętokrzyskie. Podlasie was the Eastern Polish province where the end of the drop stage was recorded first.

The values of the coherence index provide information about the level of the adjustment of cyclical variability of industrial production in the analysed regions to the course of the analogous time series in the scale of the entire country[4]. Eastern provinces are characterised by an average level of adjustment within the scope of cyclical fluctuations. Podkarpacie and Świętokrzyskie had the highest indices. The remaining provinces, i.e. Warmia and Mazury,

[3] To evaluate the effects of the crisis between 2001 and 2002, the increase in industrial production was measured with respect to its value in January 2000.

[4] The value of the coherence index determines the value of R^2 adjustment in regression between two time series.

Podlasie, and Lublin, were characterised by the lowest level of adjustment to the reference series. This can be justified by the structures of regional economies, which are most divergent with respect to the national average, with a high share of agricultural production and agricultural and food processing. Świętokrzyskie, presenting the highest level of adjustment to the national cycle, has a high share of construction articles production, whereas Podkarpacie is a region where agricultural production is supplemented by high technology industries located in the Mielec Special Economic Zone.

Analysis of convergence in business cycle fluctuations was also conducted with the use of the simultaneous correlation index and the phase shift with respect to the reference series. For the examined regions, the value of the correlation index oscillated around the level of 0.5, with the value of 0.8 for provinces most correlated with the average value for the country. It is also worth drawing attention to the value of lead or lag with respect to the reference series. All the examined provinces showed phase shifts with respect to the reference series. In the case of Świętokrzyskie and Podkarpacie, there was a 1-month lag on average. The other regions showed leads ranging from 1 (Lublin), 2 (Podlasie) to 4 months (Warmia and Mazury). The two last regions have strong economic relations with the EU countries as a result of the export of a significant part of the regional production.

The second visible period in the change of the business cycle was the growth period directly resulting from Poland's accession to the EU in May 2004 and the decrease phase recorded afterwards. In the scale of the country, the growth effect was noticeable in the period between July 2003 and March 2004, whereas afterwards there was a drop in economic operation lasting until May 2005; however, the overall effect of the so-called „EU shock" was positive.

Table 4

Analysis of industrial production series in provinces in relation to the reference series between 2000 and 2015

Average duration of phases and cycles (in months)				
Reference series	PT	PP	TP	TT
POLAND	12.8	32.75	20.75	32.75
Lublin	12.83	24.20	14.20	26.40
Podkarpacie	24.00	38.64	15.67	42.33
Podlasie	11.80	27.00	15.20	26.20
Świętokrzyskie	16.75	27.00	14.75	30.75
Warmia and Mazury	15.00	29.75	17.50	32.75

Explanations: PP – a business cycle defined by upper turning points, TT – a business cycle defined by bottom turning points, TP – the upward phase of the cycle, PT – the downward phase of the cycle.
Source: As in table 2.

In spite of the positive impact of accession to the EU, not all provinces recorded a positive increase in industrial production dynamics. In three out of the five examined provinces it is not possible to observe the so-called „EU effect" in the form of higher industry dynamics. These were the following regions: Lublin, Podkarpacie, and Podlasie. Agricultural regions of Eastern Poland were not marked by positive reactions at the moment of accession on account of the smaller significance of the industry, which was present earlier in the form of export on the markets of third countries. In the majority of provinces which showed the shock effect of joining the EU the growth phase resulting from acceleration of production was higher than the slowdown phase as a result of the disappearance of the discussed effect. In Warmia and Mazury, where the EU shock effect was smallest, an increase of production was recorded at the level of 12%, and later there was a similar drop in production in the recession phase.

The third period analysed in the article which is visible in the amplitude of fluctuations of industrial production was the global economic and financial crisis which began in 2008. Even though in the analysis of turning points it is described in a two-phase form, on account of a short gap between two troughs and a relatively slight recovery in 2011, it may be treated as one period of the collapse of industrial production in the economy.

In the perspective of the entire economy, the period of the last financial and economic crisis became visible in the greatest drop in the volume of industrial production which, in relation to the long-term trend, amounted to 9% in February 2009, whereas in comparison to the value from the most favourable business situation, it remained at the level of 20%. The beginning of the drop phase in the scale of the entire country was recorded in December 2007. Similarly to previous crises, there was diversification among provinces with respect to the beginning of the collapse and the period of transfer from the drop phase to the recovery phase.

The period of decrease in the industrial production dynamics occurred first in Podkarpacie, where the drop phase began as early as in mid-2006 and lasted until mid-2009. In Warmia and Mazury and in Podlasie, the beginning of the drop phase began five months before the change in the reference cycles, shortly after the brief recovery related to the „EU effect", and lasted until the 4th quarter of 2008. In Świętokrzyskie, the breakdown period started with a three-month delay, whereas in Lublin – simultaneously with the reference cycle.

The greatest breakdown in industrial production took place in the Lublin Province. In comparison to the long-term trend, production dropped by 22%, whereas in comparison to the value for the peak of prosperity, which happened in December 2007, there was a drop in production by 62%. Among the other examined provinces, which showed the greatest sensitivity to the global economic crisis, one can include Świętokrzyskie (-14%), Podkarpacie (-9%), and Warmia and Mazury (-8%). On the other hand, the economy of Podlasie (-5%) showed the greatest resistance to the drop in prosperity related to the last global economic and financial crisis.

Recapitulation

Analysis of the variability of the economic situation in individual regions has great importance in the context of introducing a proper regional policy that stimulates equal development of the entire region. It is also important during the redistribution of EU funds in a territorial layout. If the decentralisation process of economic policy is going to increase, monitoring the course and the specific nature of business cycle fluctuations enables proper reactions to changes in business cycles in regions.

When evaluating the course of business cycle fluctuations in regions between 2000 and 2015, it is possible to formulate the conclusion that this course is not uniform and is subject to various determinants. Regions show diversified sensitivity to „shocks" occurring in the economy, both positive and negative. In spite of a few exceptions, it is possible to observe a correlation between the low level of the region's development and the degree of sensitivity to the above-mentioned economic disruptions. The regions of Eastern Poland, with their different structure of regional production, show numerous divergences with respect to the reference cycle. This is confirmed by the analysis of cycle morphology in the regional perspective. The example of the analysed provinces also shows the relation between the location of the region and its convergence with the reference cycle. In general, it may be stated that regions located in the eastern part of the country show a lesser synchronisation with the business cycle of Poland. This results from a higher share of agricultural production, which is subject to specific business cycle fluctuations, and lower sensitivity of the agricultural and food industry to drops in demand. Furthermore, those regions of Eastern Poland that have industries with a clearly pro-export nature (Warmia and Mazury, Podlasie, Podkarpacie), retain their separate nature during the course of the business cycle fluctuations. On average, it is also possible to observe lower development dynamics of regions that are economically less diversified; in an economic crisis, such regions are exposed to a greater degree to production drops, not only in the relative perspective, but also the absolute one. Lublin Province was such a province among the discussed regions.

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References

ADAMOWICZ E., DUDEK S., PACHUCKI D., WALCZYK K. 2008. *Synchronizacja cyklu koniunkturalnego polskiej gospodarki z krajami strefy euro w kontekście struktury tych* gospodarek. Wydawnictwo IRG SGH, Warszawa.

ARTIS M., ZHANG W. 1997. *International Business Cycles and the ERM: Is There a European Business Cycle?* International Journal of Finance and Economics, 2(1).

ARTIS M., DREGER CH., KHOLODILIN K. 2011. *What Drives Regional Business Cycles? The Role of Common and Spatial Components*. The Manchester School, 79(5).

BARCZYK R., KRUSZKA M. 2003. *Cechy morfologiczne wahań koniunkturalnych w gospodarce Polski w okresie transformacji*. In: *Diagnozowanie koniunktury gospodarczej w Polsce*. Dom Wydawniczy Elipsa, Warszawa.

BARRIOS S., LUCIO J. 2003. *Economic Integration and Regional Business Cycles: Evidence from the Iberian* Regions. Oxford Bulletin of Economics and Statistics, 65(4).

BEINE M., CANDELON B., SEKKAT K. 2003. *EMU membership and business cycle phases in Europe: Markov-switching VAR* analysis. Journal of Economic Integration, 18.

BLANCHARD O., KATZ L. 1992. *Regional Evolutions*. Brookings Paper in Economic Activity, 2.

CAMACHO M., PEREZ-QUIROS G., SAIZ L. 2006. *Do European business cycles look like one?* Computing in Economics and Finance, 175, Society for Computational Economics.

CARLINO G., SILL K. 2000. *Regional income fluctuations. Common trends and common cycles*. Working Papers, 00-8, Federal Bank of Philadelphia.

CORREIA L., GOUVEIA S. 2013. *Business Cycle Synchronisation At The Regional Level: Evidence For The Portuguese* Regions. Regional and Sectoral Economic Studies, 13–1.

CRONE T.M. 2003. *An Alternative Definition of Economic Regions in The United States Based on Similarities in State Business Cycles*. Working Papers, 03–23, Federal Bank of Philadelphia.

DECRESSIN J., FATAS A. 1995. *Regional Labour Market Dynamics in Europe*, European Economic Review, 39.

DROZDOWICZ-BIEĆ M. 2012. *Cykle i wskaźniki koniunktury*. Wydawnictwo Poltext, Warszawa.

DROZDOWICZ-BIEĆ M. 2008. *Regionalne cykle koniunkturalne*. Barometr Regionalny, 3(13).

FATAS A. 1997. *EMU: Countries or regions? Lessons from the EMS Experience*. European Economic Review, 41.

FRANKEL J., ROSE A. 1996. *The Endogeneity of the Optimum Currency Area Criteria.* Working Paper, 5700, National Bureau Of Economic Research.

FRENKEL M., NICKEL C. 2002. *How Symmetric are the Shocks Adjustment Dynamics Between the Euro Area and Central and Eastern European Countries?* International Monetary Fund, IMF Working Paper, 02/222.

Gross Domestic Product, regional calculations in 2012. 2014. Główny Urząd Statystyczny, Warszawa.

GRUDKOWSKA S., PAŚNICKA E. 2007. *X–12 – ARIMA i TRAMO/SEATS – empiryczne porównanie metod wyrównania sezonowego w kontekście długości próby*. Narodowy Bank Polski, Warszawa.

HARDING D., PAGAN A. 2001. *Extracting, Using and Analyzing Cyclical Information*. MPRA Paper, 15, University Library of Munich.

KENEN P. *The Theory of optimum Currency Areas: An Eclectic View* 1969. In: *Monetary Problems of the International Economy*. Eds. R. Mundell, A.J. Swoboda. University of Chicago Press.

KRUGMAN P. 1991. *Increasing returns and economic* geography. Journal of Political Economy, 99.

KRUGMAN P. 1993. *Lessons of Massachusetts for EMU*, w: *Adjustment and Growth in the European Monetary Union*. Eds. F. Torres, F. Giavazzi. CEPR and Cambridge University Press.

MARELLI E. 2006. *Specialisation and Convergence of European Regions*. The European Journal of Comparative Economics, 4(2).

MATKOWSKI Z. 1998. *Złożone wskaźniki koniunktury dla gospodarki polskiej oparte na standardach UE i OECD*. Wydawnictwo SGH, Warszawa.

MCKINNON R. 2002. *Optimum Currency Areas and the European Experience*. Economics of Transition, 10(2).

MONTOYA L., DE HAAN J. *Regional business cycle synchronization in Europe?* Bruges European Economic Research, College of Europe, 11.

Główny Urząd Statystyczny. www.stat.gov.pl\ Local Data Bank.
WEIMANN M. 2003. *OCA theory and EMU Eastern enlargement – an empirical application*. Deutsche Bank, Deutsche Bank Research Working Paper Series, 8.
Z prac nad syntetycznymi wskaźnikami koniunktury dla gospodarki polskiej. 1997. Ed. Z. Matkowski. Prace i Materiały IRG SGH, 51, Warszawa.
ZARNOWITZ V., BOSCHAN CH. 1997. *Cyclical indicators: An Evaluation and New Leading Indexes*. Business Conditions Digest. U.S. Department of Commerce, Bureau of Economic Analysis, Washington.

Annex 1

Analysis of turning points of Eastern Polish regions in relation to the reference series (industrial production in Poland)

Time series	Peak	Bottom	Peak	Bottom	Peak	Bottom	Peak	Bottom	Peak	Bottom	Number of additional cycles
POLAND	M8-2000	M9-2001	M3-2004	M5-2005	M6-2006	M4-2007	M12-2007	M2-2009	M10-2011	M11-2012	
Lublin	-1	-2	+1	-1	-2	-5	0	-1	-10	0	1
Podkarpacie	+4	+5	-9	-1	0	–	–	+3	-12	0	-1
Podlasie	–	-2	+1	0	–	–	-5	-6	-1	-1	0
Świętokrzyskie	–	+8	-2	0	0	+2	+3	+5	-10	0	-1
Warmia and Mazury	+2	0	-5	-6	–	-11	-6	-4	-10	0	0

Source: As in table 2.

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THE PROCESSES OF CONSOLIDATION AND EFFECTIVENESS OF COMMERCIAL BANKS IN THE YEARS 2008–2013

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K e y w o r d s: banking sector**,** consolidation, M&A, effectiveness.

A b s t r a c t

The paper analyzes the mergers and acquisitions in the banking sector in Poland, and determined their impact on the structure of the sector and its effectiveness. The analysis was conducted between 2008 and 2013. In the analyzed sector was found growing concentration of capital in the form of mergers and acquisitions. All indications are that this trend will be maintained in subsequent years. Dominant share in the Polish banking sector are entities controlled by foreign investors, but in the period has been a slight decrease in this regard. In the analyzed period made as a result of mergers and acquisitions, we can observe an increase of concentration of the banking sector.

In the period 2008–2013 there was a decrease in effectiveness of commercial banks; operation, which was caused by deteriorating macroeconomic situation. It can be said that the continuous consolidation processes in the period 2008–2013 have not influenced an improvement of financial results in the analysed sector, but the effects of these processes can be seen only in the long term.

PROCESY KONSOLIDACJI A EFEKTYWNOŚĆ DZIAŁANIA BANKÓW KOMERCYJNYCH W LATACH 2008–2013

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S ł o w a k l u c z o w e: sektor bankowy, konsolidacja, M&A, efektywność.

A b s t r a k t

W opracowaniu przeanalizowano procesy konsolidacji banków komercyjnych w Polsce oraz określono ich wpływ na strukturę sektora i jego efektywność. Badania obejmowały lata 2008–2013.

W analizowanym sektorze stwierdzono rosnącą koncentrację kapitałową w formie fuzji i przejęć i wszystko wskazuje na to, że taka tendencja będzie się utrzymywała w kolejnych latach. Dominujący udział w polskim sektorze bankowym mają podmioty kontrolowane przez inwestorów zagranicznych, w badanym okresie odnotowano jednak nieznaczny spadek w tym zakresie. Na skutek dokonanych fuzji i przejęć stwierdzono wzrost koncentracji sektora bankowego.

W latach 2008–2013 odnotowano spadek efektywności działalności banków komercyjnych, co było spowodowane pogarszającą się sytuacją makroekonomiczną. Można stwierdzić, że postępujące procesy konsolidacyjne w latach 2008–2013 nie wpłynęły na poprawę wyników finansowych analizowanego sektora, chociaż skutki tych procesów mogą być widoczne dopiero w dłuższym okresie.

Introduction

In the last 30 years, one of the most important events affecting the banking sector was an unprecedented level of mergers and acquisitions. From 1987 to 1997, the value of mergers and acquisitions in the world financial industry has reached around 1,4 trillions of US$ (CYBO-OTTONE, MURGIA 2000, p. 832). At the end of the 90s were recorded, among others, a wave the American bank mergers. As a result, from 1980 to 2003 the number of banks in the Unitet States declined from around 16,000 to 8,000, and the share of the ten largest banks rose (in terms of total assets) from 22% to 45% (ALTUNBAS, MARQUES 2007, p. 205).

In the early 90s, the creation of a single market for financial services and the introduction of the euro has contributed to accelerate the process of fiscal consolidation in Europe as well. The single currency within the EU member states and the liberalization of regulations led to increased competition in the banking sector, which resulted in its decision on consolidation.

The term consolidation or consolidation processes is used in Polish literature in regards to bank mergers. Consolidation (lat. consolidato) means integration, strengthening and maintaining (STĘPIEŃ 2004, p. 78). It is described as a merger or a sort of cooperation between two or a number of banks in order to sustain or increase their competitiveness (CICHY 2005, p. 139).

Bank consolidation is described as their capital and capital-organizational combinations. Moreover, it is the process of strengthening banks; strategic potential (JAWORSKI 2000, p.81).

Consolidation of the banking causes changes in the organization of the banking sector and its impact on economic performance, as well as the country's economy. The level of development of the financial system could have a significant impact on economic growth and prosperity of its citizens.

Since the beginning of the 1990s, Polish banking sector has been undergoing continuous changes connected with consolidation and concentration. In recent years consolidation in banking sector has been a thriving phenomenon and is considered as one of the causes of financial and economic crisis over the period 2008–2010. This process causes sudden and unforeseen results in the area of financial market as well as the whole economy (ŚWIETLIK 2012, p. 92).

Liberal approach to the financial market, developing deregulation of financial sector, a decline of the governmental protection over the market and increasing competition mainly influence consolidation processes. In the time of globalization, banks are searching for opportunities of development, which is caused by the previously mentioned factors. Mergers and acquisitions constitute such an opportunity. They cause an increase in bank value and its market shares (STĘPIEŃ 2014, p. 75–76).ą

Mergers constitute one of the forms of cooperation among companies which have decided to run a common business due to integration of their resources and skills. It may take a form of a new individual enterprise or can be joined to an existing one. Acquisition is transferring control over economic activity of an enterprise from one group of investors to another, for instance by the purchase of shares, assets or privatization of a company (SZCZEPANKOWSKI 2000, p.53). Two types of takeover can be distinguished: friendly and hostile. The former is conducted with the mutual agreement and act passing of the taken bank. Whereas the later takes place when the investor turns directly to the bank owners excluding its management in the process of transaction (ZGORZELSKI 1998, p. 15).

According to primary sources both terms: merger and takeover are used together as „mergers and acquisitions" (M&A). It is due to the fact that in many cases they both take place simultaneously and it is difficult to indicate the bounds between them.

Three types of strategies can be outlined as far as consolidation processes are concerned: bank mergers; friendly takeover – a takeover takes placewith the mutual agreement and act passing of the taken bank; hostile takeover – takes place when the investor turns directly to the bank owners excluding its management in the process of transaction (STĘPNIEŃ 2004, p. 82).

The motives of mergers and acquisitions in the Polish banking sector come to willingness to increase banks; effectiveness. The purpose of bank consolidation is broadening the range of the offered products, decrease of expenses, increase in the number of clients, improving the quality of credit portfolio, concentration of funds of the joined units and the improvement of work standards of the joined bank (KRACIUK 2006, p. 285).

The main causes of mergers and acquisitions in Poland: insufficient level of bank internal funds; increase of the range of activity; willingness to enlarge market shares and, in the long term, increase the price of the offered products; threat of bankruptcy in case of banks which are in a difficult financial situation; competition from other banks (including foreign ones); globalization of financial market; possibility of obtaining benefits resulting from synergy;

predictable increase in effectiveness; economic policy of the government; changes in the economic area resulting from introduction of technological innovations (LEWANDOWSKI 2001, p. 117).

Changes in the Polish banking sector after 1989 resulted in a fall in the number of banks and changes in shares of particular groups of banks in this sector. The number of banks with foreign capital has grown rapidly. In contrast, the equity stakes of banks controlled by the National State Treasury has diminished (KRACIUK 2006, p. 289).

Consolidation may cause increase in banks' effectiveness. Mergers and acquisitions cause reallocation of capital, protect banks against adjustment, are a way of restructuring, cause increase in value of weak subjects, and are connected with the costs of achieving the planned effect (KOT-ZACHARUK 2012, p. 487). According to IWANICZ-DROZDOWSKA (2001, p. 583), the research results in the range of improvements of bank effectiveness in mergers and acquisitions are not explicit. The effectiveness of these processes depend on a number of factors which are unmeasurable, including proficiency of conducting and acceptance of the management of the interested entities. Apart from macroeconomic factors, the microeconomic ones play a significant part in the growth of merger market as well as takeovers. The research shows that, in many cases, concentration processes have not contributed to the improvement of basic economic indicators, which means that their motives could have been non-economic, resulting from the strategy of enterprises or transactional corporations (KRACIUK 2010, p. 190).

Banks; functioning in terms of mergers and acquisitions is also a shaping factor for the credit financing of business in a global meaning. Bank consolidation increases their accuracy in loanees' assessment, which influences a decline in the number of credits and causes an increase in effectiveness of credit activity. Consolidation of banking sector is not always positive for the clients. It can negatively influence the competitiveness of service and bank products.

The purpose and methods of the study

The purpose of the study has been to show the process of consolidation in the banking sector and their impact on the effectiveness of commercial banks in Poland. The period of the research included the years 2008–2013. The analysis of bank concentration processes, the basic indicators of banking sector structure and effectiveness of commercial banks have been presented in the article.

The analysis of sector structure was conducted on the basis of the number of bank entities, the shares in the assets of banks controlled by national and foreign investors as well as the index of concentration. Herfindahl-Hirschman index (HHI)[1] and the CR5, CR10, CR15 indicators were used to determine the level of concentration – shares in assets of five, ten, fifteen largest banks.

The effectiveness of commercial banks in Poland has been evaluated on the basis of the chosen measures, such as:

– index of operational costs (C/I) – the relation of expenses and income,

– return on assets (ROA) – the relations of financial net result and the average value of the funds,

– net interests margin (NIM) – the relation of interest result and the average value of assets,

– return of equity (ROE) – the relation of financial net results and the average value of funds,

– index of work productivity – the relation of financial gross result and the number of employees.

The used empirical material came from the reports of Polish Financial Supervision Authority and the data of National Bank of Poland.

Results of the study

In the years of 2008–2013 there were a dozen or so mergers and acquisitions, which had an influence on the level of sector concentration.

In 2008 consolidation processes were a continuation of actions taken in the year before as well as a result of new transactions. The started processes concentrated mainly on reorganization of entity structure in relation to capital groups and strengthening the previous position of certain entities on the market. An example of such processes was the merging of Noble Bank SA and Getin Bank SA, as part of which there was a transfer of property of Getin Bank SA to Noble Bank SA. The merger process ended in 2010. What is more, in May 2008 the shareholders of Cetelem Bank SA and Sygma Bank Poland made a decision to reorganize their operation. As a result, Sygma Bank took over a part of Cetelem Bank's operation in instalment credits, cash loans and credit cards.

In 2009 there were two mergers of commercial banks noted. A legal and transactional mergers of Fortis Bank Poland SA and Dominet Bank SA were conducted. The joined bank (Fortis Bank Poland SA) was placed on the 14th

[1] The Herfindahl index (Herfindahl-Hirschman Index, or HHI) is a measure of the size of firms in relation to the industry and an indicator of the amount of competition among them. It is defined as the sum of the squares of the market shares of the 50 largest firms (or summed over all the firms if there are fewer than 50) within the industry, where the market shares are expressed as fractions. it can range from 0 to 1.0. The higher the values are, the higher the concentration of the market is.

position in terms of assets, whose worth in the 1st quarter of 2009 was PLN 23 billion. It had 270 establishments, 372,825 individual clients and 2,784 institutional clients. There was also a merger of Bank BPH SA and GE Money Bank SA by the transfer of the whole property of GE Money Bank to Bank BPH with simultaneous increase of the authorized capital of BPH Bank which included new issue of joined shares which were given to the shareholders of GE Money Bank by BPH Bank. The stock capital increased for about PLN 33 million.

In 2010 there was a merger of Getin Bank SA and Noble Bank SA. Because of that, Getin Noble Bank SA was established – a Polish bank with the prevalence of Polish capital present on The Exchange in Warsaw. In 2010 the bank was vested with 510 bank establishments and was the 8th bank in Poland when it comes to the assets value. Furthermore, there was a merger of Santander Consumer Bank SA with AIG Bank Poland SA and a takeover of the Polish establishment of BNP Paribas SA clients' assets by Fortis Bank Poland SA.

In 2011 there were three mergers and acquisitions of commercial banks. There was a takeover of AIG Bank Poland by Santander Consumer Bank. As a result, there was one bank established under the name and logo of Santander Consumer Bank SA, which was in the group of fifteen largest banks in Poland. The enlarged Santander owned 250 establishments, credit portfolio with the value of about PLN 12 billion and a deposit of about PLN 4 bilion. What is more, in the same year Santander Consumer Bank SA took over the 70% of shareholding of Bank Zachodni WBK SA from an Irish capital group AIB. In October there was a merger of ING Mortgage Bank with ING Silesian Bank through the transfer of the whole ING Mortgage Bank's property to ING Silesian Bank. Because of the fact that ING Silesian Bank owned all the shares of ING Mortgage Bank, there was not an increase of the authorized capital.

In the next analysed year there was a continuation of consolidation process of the banking sector. There was a merger of Polbank EFG SA with Raiffeisen Bank Poland SA. As a result, Raiffeisen Bank Poland SA was established, operating under the name of RaiffeisenPolbank, which was included in the first ten of the biggest banks in Poland (the value of assets at the end of 2012 was over PLN 54 billion). Furthermore, Getin Noble Bank SA merged with Get Bank SA, resulting in the establishment of Getin Noble Bank. The merger was conducted through the transfer of the whole property of Getin Noble Bank to Get Bank with the simultaneous increase of the authorized capital. Getin Noble Bank became the second largest bank in terms of the assets and the third largest Polish financial institution with Polish majority share in terms of the sales income on the market.

The year 2013 can be called a year of bank mergers, which were dominant in the analysed period. There was a merger of Bank Zachodni WBK and Credit Bank. As a result, Bank Zachodni WBK SA became a legal successor and obtained all the rights as well as duties of Credit Bank. Because of that, the third biggest bank in Poland was created in relation to the assets, credit portfolio and deposits (at the end of the first quarter of 2013 the assets of Capital Group of Bank Zachodni WBK SA equaled PLN 103.5 billion, which was an increase in the quarter scale for about 72.5%). Bank Zachodni WBK disposes of a chain of about 1000 establishments and supports about 3.5 million of clients.

In 2013 there were changes in BRE Bank Group. There was a merger of BRE Bank, Multi Bank and mBank. The purpose of the merger was to decrease the costs of marketing and advertising. What is more, there was a merger of Credit Agricole Bank Poland SA and Credit Agricole Corporate and Investment Bank, with its establishment in Poland, through the purchase of investment – corporation establishment by Credit Agricole Bank Poland SA. Both companies belonged to a French financial group of Credit Agricole.

The following transaction connected with the banking sector was an agreement between BNP Paribas Group and Rapobank Group concerning the shares' purchase of Bank Gospodarki Żywnościowej SA by BNP Paribas Group for the amount of PLN 4.2 billion. In the half of the year a process of taking over Nordea Bank Poland, NordeaTunŻ and Nordea Finance Poland by Bank PKO BP began.

Polish Financial Supervision Authority agreed on the merger of Deutsche Bank Poland SA with Deutsche Bank PBC SA, which was conducted legally in January 2014. Deutsche Bank Poland SA currently belongs to the first fifteen largest banks in Poland.

Table 1 presents a number of commercial banks conducting commercial operation in the analysed period with the property structure of the sector.

Table 1

Number and property structure of banks in the period of 2008–2013

Number of banks	Year						2013–2008
	2008	2009	2010	2011	2012	2013	
Commercial, including:	52	49	49	47	45	41	-11
– controlled by the local investors	10	10	10	10	9	10	0
– controlled by the foreign investors	42	39	39	37	36	31	-11
Cooperative	579	576	576	574	572	571	-8

Source: Own elaboration based on Financial Supervisory Commission report about banking situations.

In the years 2008–2013 a fall in the number of commercial banks was noticed in Poland from 52 at the end of 2008 to 41 at the end of 2013, for about 11 entities. The mentioned decrease was caused by mergers and acquisitions which were conducted in this sector in the described period. The decrease in the number of banks and development of electronic banking contributed to the drop in employment and reducing the sales network.

In the analysed period there was noted an increase of the shares in assets of banks controlled by local investors from 27.7% in 2008 to 36.8% in 2013, which needs to be regarded as a positive tendency. In 2008–2013 the number of commercial banks controlled by national investors did not change and was 10, including 4 banks controlled by the Treasury. At the end of 2013 foreign investors controlled 31 commercial banks. The investors from the euro zone, for instance from Italy (13.1%), Germany (10.3%), Holland (8.9%) and Spain (8.5%), played a significant role. The prominent share of banks controlled by foreign investors in the assets is a result of privatization of national banks as well as the processes of banking system consolidation present from the beginning of the 1990s, in which foreign banks participated effectively. In the initial period of system transformation there were not any national investors with appropriate capital. That is why it was necessary for the foreign capital to be obtained. Foreign investors' interest in Polish banking system was mainly connected with quite a huge demand for the banking services among Polish clients, lasting privatization and consolidation processes of the sector and the opportunity of cheap purchase of bank shares because of their difficult financial situation. Owing to this, foreign investors carved a major part of the Polish banking sector.

Table 2 presents index of banking sector concentration in 2008–2013. In the analysed period the rise of the index of concentration was noted, which was a result of consolidation related to capital groups. Herfindahl-Hirschman (HHI) index was shaped between 0.0569 in 2010 and 0.0620 in 2008. The value of HHI below 0.1 indicates the case of unconcentrated market. The index of 0.0599 gives the evidence of competitive market. In 2013 there was a significant increase of concentration in comparison with 2012, which was caused by the mergers and acquisitions in that period. An explicit rise was noted particularly in case of 15 largest banks; market shares: from 73.2% to 84.1%, which constitutes about 10.9 percentage points. In 2013 the asset shares of 10 largest banks increased in comparison with 2012 from 64.6% to 67.3% and for the five largest banks 45.0% to 46.1%.

Concentration in the banking sector in Poland is relatively low. According to the data presented by the European Central Bank, the index of asset shares of the 5 largest banks in the analysed period was one of the lowest in the European Union, but in 2013 the situation started to improve.

In 2008–2013 the biggest increase in the banking sector was noted in Germany, where the shares of five biggest banks rose about 45%. An essential increase of the analysed index took place in Italy for 27% and Spain for 21%. Whereas the biggest fall of concentration level was in Belgium and Bulgaria for 18% and in France for 13% (*Raport*... 2014, s. 15).

Table 2

Number and property structure of banks in the period of 2008–2013 [%]

Index	Year						2013–2008 [pp]
	2008	2009	2010	2011	2012	2013	
HHI	0.0620	0.0579	0.0569	0.0577	0.0580	0.0599	-0.062
CR5	44.6	44.2	43.9	44.3	45.0	46.1	1.5
CR10	62.5	63.5	63.0	63.4	64.6	67.3	4.8
CR15	73.2	74.1	74.9	74.2	77.5	84.1	10.9

Source: Own elaboration based on Financial Supervisory Commission report about banking situations.

Considering mergers and acquisitions which are going to be finalized in the nearest future, it can be said that the level of concentration of Polish banking sector is going to increase.

Table 3 presents the chosen index showing financial situation of commercial banks. In the analysed period there was a fall of ratio option costs from 53.28% in 2008 to 51.23% in 2013. Even decreasing tendency was noted from 2012, however in the last analysed period there was an increase for about 4% compared with the previous one, which indicates deterioration in work effectiveness. What is more, a weakening condition of commercial banks in 2013 in comparison with the year before can be proven by a decrease of return on assets ratio from 1.23% to 1.14% as well as the return on equity capital from 11.16% to 10.24%. In case of ROE the cause of the fall was an increase of capitals, which is a positive phenomenon. The decreasing tendency was observed from 2011, which was caused by the financial crisis. However, the level of the return on equity was higher than in 2008 for about 3 percentage points.

In the analysed period there was a decrease of interest margin from 3.08% in 2008 to 2.77% in 2013, which was for over 10%. It resulted from deteriorating macroeconomic conditions and difficult financial situation of economic entities and households, which makes banks lower commissions and fees connected with credit service and causes decease in the value of the total by way of commissions and fees.

Table 3

Selected measures of the effectiveness of commercial banks in 2008–2013 [%]

Index	Year						2013–2008 [pp]
	2008	2009	2010	2011	2012	2013	
C/I	53.28	52.87	50.61	49.21	49.10	51.23	-2.05
ROA	1.58	0.83	1.10	1.28	1.23	1.14	-0.44
ROE	7.32	8.58	10.19	12.51	11.16	10.24	2.98
NIM	3.08	2.50	2.75	2.85	3.11	2.77	-0.31
Work productivity [PLN thousand]	112.7	78.4	101.8	131.0	133.4	131.5	18.8

Source: Own elaboration based on Financial Supervisory Commission report about banking situations.

In the analysed period there was an effective use of work resources, which can be visible in the increase of work productivity ratio from PLN 112.7 thousand to 131.5 PLN thousand.

All things considered, in 2013 there was a deterioration of the main measures of commercial bank operation effectiveness in comparison with the previous year. However, having analysed the financial results of the sector in 2014. There can be noticed an increase of the achieved interest margin, a fall of the cost index and increase in the profitability of the authorized income. It is an evidence of adjusting bank deposit – credit policy in the circumstances of low interest rates and changes of regulations. Moreover, it can be the result of mergers and acquisitions in 2013 which constituted the biggest number in the analysed period.

Conclusions

The study presents consolidation processes of commercial banks in Poland in the period of 2008–2013 and their influence on the sector structure and concentration. Furthermore, the analysis of commercial bank operations effectiveness has been made. Attempt was made to determine the relationship between consolidation of banks and effectiveness. On the basis of the conducted research the following conclusions can be made:

1. In the analysed period, there was an observation of the progress of consolidation processes in the banking sector in Poland, which results from the globalization of financial market, the increasing competition, deregulation and liberalization processes and technological development. It can be assumed that the process of consolidation in the banking sector in Poland will be continued.

2. In the analysed years in the banking sector in Poland there was a dominant share of banks controlled by foreign entities. A significant share of foreign capital in the Polish banking sector was one of the causes of its development. However, too strong position of foreign investors can result in the dependence of local partnerships on the laws imposed by their strategic partners.

3. I the period of 2008–2013 mergers and acquisitions caused an increase of concentration index, but their level is still quite low in comparison with other countries of the European Union. The share of five and ten largest banks can be regarded as close to optimal, taking market competition and stability of banking sector into consideration.

4. In the analysed period there was a decrease in effectiveness of commercial banks' operation, which was caused by deteriorating macroeconomic situation. It can be said that the continuous consolidation processes in the recent years have not influenced an improvement of financial results in the analysed sector. It has to be indicated that the largest number of mergers and acquisitions was noted in the last analysed period and their consequences will be noticed as soon as the next year. It is confirmed by the improvement in effectiveness of commercial banks' operations in 2014.

5. The processes of consolidation in the banking sector run economic mechanisms, which may result in an increase in the efficiency of newly established banks, although generally the results of these actions are visible only after several years.

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References

Altunbas Y., Marques D. 2007. *Mergers and acquisitions and bank performance in Europe: The role of strategic similarities*. Journal of Economics and Business, 60: 204–222.

Cichy J. 2005. *Konsolidacja banków w Polsce- próby oceny szans i zagrożeń*. In: *Bankowość*. Ed. M. Zalewska. SGH, Warszawa.

Cybo-Ottone A., Murgia M. 2000. *Mergers and shareholder wealth in European banking*. Journal of Banking & Finance, 23: 831–859.

Iwanicz-Drozdowska M. 2011. *Fuzje i przejęcia w sektorze bankowym*. „Bezpieczny Bank", Wydawnictwo Bankowy Fundusz Gwarancyjny, Warszawa.

Jaworski W.L. 2000. *Współczesny bank*. Poltex, Warszawa, p. 73–91.

Kot-Zacharuk A. 2012. *Procesy konsolidacji w opiniach zarządzających bankami spółdzielczymi*. Zeszyty Naukowe SGGW, Ekonomika i Organizacja Gospodarki Żywnościowej, Wydawnictwo SGGW, Warszawa, 99: 497–508.

Kraciuk J. 2006. *Procesy konsolidacji w polskim sektorze bankowym*. Problemy Rolnictwa Światowego, XV: 282–292.

Kraciuk J. 2010. *Rola fuzji i przejęć w procesach koncentracji w polskim przemyśle spożywczym*. Rozprawy Naukowe i Monografie, SGGW, Warszawa.

LEWANDOWSKI M. 2001. *Fuzje i przejkcia w Polsce na tle tendencji 2wiatowych*. WIG-Press, Warszawa.
Raport „Polska i Europa – kryzys i konsekwencje". 2014. Związek Banków Polskich, Warszawa.
SOLARZ J.K. 1993. *Konsolidowanie się systemów bankowych*. Fundacja Edukacji i Badań Bankowych, Warszawa.
STĘPIEŃ K. 2004. *Konsolidacja a efektywność banków w Polsce*. Wydawnictwo CeDeWu, Warszawa.
SZCZEPANKOWSKI P.J. 2000. *Fuzje i przejęcia. Techniki oceny opłacalności i sposoby finansowania*. PWN, Warszawa.
ŚWIETLIK J. 2012. *Fuzje i przejęcia w sektorze bankowym w Europie (UE-25) jako czynnik wpływający na finansowanie przedsiębiorstw w ujęciu makro*. Zeszyty Naukowe Kolegium Gospodarki Światowej, 33: 92–114.
ZGORZELSKI Z. 1998. *Przesłani i uwarunkowania fuzji banków komercyjnych*. Bank i Kredyt, 4.

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Tomczyk Z. 1996. *Wynalazczość i racjonalizacja źródłem postępu technicznego*. Gosp. Narod., 6: 21–25.

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