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CONTENTS

Artur Bartoszewicz	Social impact of the crisis of foreign currency-related mortgage loans	4
Maria Celińska-Mysław, Tomasz Wiatr	Planning of construction investment projects in a sustainable approach	14
Vladimir Davydenko, Gulnara Romashkina, Ruzilia Nasyrova	Russian government activities during social and economic space for- mation of the russian retail	24
Elżbieta Goryńska-Goldmann	The dimensions of enterprise innovation vs selected trends on the food market	34
Sławomira Kańduła	Methods of increasing the flexibility of state budget expenditure	46
Anatolii Kolot, Oksana Poplavska	Government and business: the search for new forms of cooperation	59
Mirosława Kwiecień	Economics of moderation and reporting corporate social responsibility	69
Marek Leszczyński	The economic dimension of security	80
Małgorzata Łatuszyńska, Shivan Fate	Analyzing the impact of public interventions on poverty	86
Paweł Mikołajczak, Piotr Bajak	Is it worth abandoning OFE? The rate of return and the risk of the capital part of the pension system in Poland in 1999-2013	98
Radosław Murkowski	The challenges and demographic prospects of European countries	107
Anna Niewiadomska	Long-term unemployment of the elderly in Lubuskie Province.	118
Grzegorz Ostasz, Krzysztof Prendecki, Krzysztof Rejman	How much state within a state?	129
Andrzej Prusek	Poland's strategic development challenges in post-crisis conditions	137
Lech Sawicki	People with disabilities in the labor market in Poland	145
Ilona Skibińska-Fabrowska	The role of central banks in the economy - a post-crisis perspective	154
Beata Skubiak	Education as a tool for eliminating development disparities	160
Ewa Sobolewska-Poniedziałek	The financial situation and well-being of people aged 60+ and by re- gion	166
Monika Wojcieszak	Innovative tourism products in the metropolitan area of Krakow – an attempt of characterization	176
Michał Zaremba	The New Silk Road. Economic importance of China expansion in the modern global economy	189

Artur Bartoszewicz, PhD

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Warsaw School of Economics

Spoleczne skutki kryzysu kredytów hipotecznych odnoszących się do walut obcych

Streszczenie

Kredyty indeksowane oraz denominowane do walut obcych (odnoszące się do walut obcych) były udzielane w Polsce osobom nie osiąającym dochodów w walucie obcej, w okresie od 2000 do 2013 roku. Charakterystyczną cechą tych kredytów było to, że najczęściej były udzielane w krajach Europy Środkowo-Wschodniej. W przywołanym okresie kredyty mieszkaniowe były najszybciej rosnącą pozycją w aktywach banków. Jedynie w okresie od grudnia 2002 roku do końca 2012 roku udział kredytów mieszkaniowych w aktywach banków wzrósł ponad pięć razy, a w należnościach od sektora niefinansowego zwiększył się czterokrotnie. W latach 2005-2010 kredyty mieszkaniowe zdominowały strukturę bilansu sektora bankowego. Znaczna zmiana kursów walutowych (m.in. CHF, EUR, USD i JPY) w odniesieniu do złotego (znaczące osłabienie PLN) wpłynęła bezpośrednio na wartość bieżącą kosztów obsługi zobowiązania, jak też wycenę łącznego zobowiązania kredytu hipotecznego odnoszącego się do walut obcych – wartości kredytu i jego kosztów wyliczonych w PLN.

Słowa kluczowe: koszty społeczne, kredyt hipoteczny, kredyt indeksowany, kredyt denominowany, kredyt walutowy

Abstract

Social impact of the crisis of foreign currency-related mortgage loans

Loans indexed and denominated in foreign currencies (related to foreign currencies) used to be granted in Poland to those not receiving income in a foreign currency, in the period from 2000 to 2013. A characteristic feature of these loans is that they were usually granted in the countries of Central Eastern Europe. In this period, loans were the fastest growing item in the banks' assets. In the period from December 2002 to the end of 2012, the share of housing loans in banks' assets increased more than fivefold, and fourfold in receivables from the non-financial sector. In 2005-2010, loans dominated the structure of the balance sheet of the banking sector. A significant change in foreign exchange rates (e.g. CHF, EUR, USD and JPY) in relation to the *złoty* (a significantly depreciated PLN) contributed directly to the current value of the costs of operating liabilities, as well as the valuation of total mortgage obligations related to foreign exchange, the value of credit and its costs calculated in PLN.

Keywords: social costs, mortgage, indexed loan, denominated loan, foreign currency loan

JEL CODE: D10, D12, D14, D90, D91, E20, E21

Introduction

In the post-war years, until 1989, no housing stock was generated on a scale that would meet the growing social needs. This was caused by two things: deficit in the offer of flats for rent on one hand, and on the other hand the enormous pressure on property possession, which used to be largely limited, and often inaccessible, prior to the transformation. The above circumstances justify a radical change in the attitude of banks and mortgage clients, manifested in a wide range of such loans (especially those denominated in foreign currencies). This allowed banks to get through to those clients who would not be able to service the loan in *złotys* and also created a broad demand base for housing and the connected, what at that time seemed, cheap debt financing.

The banking sector was offering mortgages related to foreign currency, including Swiss franc, as early as 2000. Interest rates on housing loans in *złoty* was as high as 20% at that time. For many Polish people who wanted to buy an apartment, loans at such a high cost were then simply unavailable. In 2004-2005, there was a strengthening of the PLN against the CHF, thus allowing those with loans denominated in Swiss franc to actually experience reduced interest rates, which further reinforced the common argument for such loans being a favorable solution and built an additional marketing message.

The relative ease (favorable initial conditions relating to the share of credit in real estate financing and different credit scoring procedure than in foreign currency-denominated loans) in obtaining a mortgage loan related to a foreign currency resulted in the entry to the group of borrowers of those persons and households who would not normally receive a PLN loan at that time, which would therefore not lead to the conclusion of a real estate purchase transaction.

The situation in which one could, without much formalities, take a mortgage loan in foreign currency triggered a huge increase in the number of transactions on the real estate market, and thus the corresponding real estate price increase, until the revaluation. Bank customers were eager to borrow easily available loans and most of them did not anticipate deterioration of their credit conditions or what would happen if they were no longer be able to pay back their loans (Szelągowska 2010, p. 22).

An additional impetus for increased purchase transactions in 2005-2006 was the growing real estate boom, further expanded by media reports on the planned restrictions on the availability of foreign currency-related loans, finally introduced on July 1, 2006 as *Recommendation S concerning Good Practices Related to Mortgage-Secured Credit Exposures*¹.

This article attempted to compile the hypotheses identifying potential social effects of the crisis of foreign currency-related loans using statistically-derived data, research results published by public institutions, and scientific assessments that confirm the assumed model of inference by either indicating or confirming the existence of these phenomena in society and the economy².

The analysis presents data from two main periods, as at 2013 and as at 2015. The 2013 figures demonstrated the scale of the problem at the time of withdrawing the offer of loans denominated in foreign currencies. The 2015 data, meanwhile, made it possible to estimate the scenario most similar to the current one. In addition, it pointed out how the situation of borrowers changed over the last two years, particularly following significant exchange rate changes and measures taken by financial market supervision and consumer protection authorities.

Identifying the causes of the crisis of foreign currency-related mortgage loans

Indexed and denominated loans related to foreign currencies³ were granted in Poland in the period from 2000 to 2013 to persons who were not receiving income in foreign currency⁴.

¹ According to GUS (Polish Central Statistical Office), 114,060 dwellings were commissioned in 2005 (5.5% increase compared to the previous year). In comparison with 2004, the number of residential units developed for sale or rent increased by 38.4%. See more in: *Finansowanie nieruchomości przez banki w Polsce* [Property Financing by Banks in Poland], as at June 2006, KNB (Banking Supervision Commission), Warsaw, November 2006, pp. 28-29.

² This article was developed on the basis of studies and analyses carried out by the author on the commission of the Chancellery of the President of the Republic of Poland, as included in this paper: *Analiza dotycząca społecznych skutków kryzysu kredytów hipotecznych odnoszących się do walut obcych. Raport końcowy*, Warsaw, September 15, 2016.

³ Despite being referred to as "foreign currency loans" and the binding of their interest rates with the LIBOR, these loans were not actually foreign currency loans, either economically or legally. See more in: *Uzasadnienie*

The lending mechanism applicable to foreign currency-indexed and -denominated loans was significantly different from the traditional foreign currency loan in which the lender pays foreign currency to the borrower and subsequently accepts the payment of principal and interest installments in foreign currency⁵.

The characteristic feature of these loans was that they were most often provided in Central and Eastern European countries (*Recommendation of the European Systemic Risk Board* ... 2011, p. 9). Housing loans in the aforementioned period were the fastest growing item in the banks' assets. Only between December 2002 and the end of 2012, the share of housing loans in the banks' assets increased more than fivefold, and fourfold in receivables from the non-financial sector. In 2005-2010, housing loans dominated the structure of the banking sector's balance sheet.

According to analyses by UKNF (Polish Office of the Financial Supervision Commission), the rapid development of the housing loan portfolio in 2002-2008, including loans related to foreign currencies, was mainly due to (Kwaśniak 2013, p. 5):

- rising household incomes;
- inflow of foreign financing;
- reduction of interest rates;
- strong mitigation of credit standards;
- spread of low-interest foreign currency loans (related to foreign currencies);
- high demand for housing;
- rapidly rising real estate prices (in Poland and other countries);
- relatively low initial value of housing loan portfolio in banks and good quality of that portfolio.

In turn, according to analyses by ZBP (Polish Banks Association), the main sources and conditions affecting the existence of the offer of loans related to foreign currencies in Poland are, among others (*Konsekwencje decyzji o uwolnieniu kursu CHF...* 2015, p. 2): demographics, low costs of the money related to foreign currencies, savings gap, rising optimism and foreign transfers. According to estimates by NBP (National Bank of Poland), Poland received a total EUR 36.1 billion from Polish people's work abroad in the UE countries in 2004-2013 (more than EUR 41.6 billion from all non-EU transfers). In relation to GDP, these transfers accounted for 1.4% in 2004 and already more than 1.7% in 2007 (Chmielewska 2015, p. 15).

As a consequence, only at the end of May 2013 (the period of decreased granting of this type of loans), the value of housing loans exceeded PLN 330 billion, which accounted for 23.3% of the total assets of the banking sector and 40% of non-financial receivables. The share of housing loans related to foreign currencies amounted to approximately 12.8% of the

do projektu ustawy z dnia 2016 r. o zasadach zwrotu niektórych należności wynikających z umów kredytu i pożyczki, Sejm of the Republic of Poland, Warsaw 2016.

⁴ It was only after the issuance by the Financial Supervision Authority of Recommendation S (IV) of 18 June 2013 concerning Good Practices in the Management of Mortgage-secured Credit Exposures that the period of foreign currency-related loans granted to individuals ended. Recommendation stated that banks should provide retail customers with mortgage loans only in the currency in which they earn income, also for high-income clients.

⁵ In the case of indexed and denominated loans, a different construction was used. With respect to the indexed loan, the mechanism consisted in that the amount of the loan, denominated in Polish currency, was translated into the foreign currency to which the loan was indexed at the date of concluding the loan or its tranches. As a result of this procedure, the bank calculated the amount of the loan in a foreign currency whose amount became the loan's credit. In turn, that structure was reverse for denominated loans, where, on the day of concluding the loan or its tranches, the bank recalculated the loan amount denominated in a foreign currency into Polish currency, using the bank's exchange rate for that currency. See more in: *Uzasadnienie do Projekt ustawy o zasadach zwrotu niektórych należności wynikających z umów kredytu i pożyczki*, Sejm of the Republic of Poland, Warsaw 2016, p. 13.

balance sheet total of the banking sector and as much as 68.2% of non-financial receivables (Kwaśniak 2013, p. 8).

In terms of volume, PLN loans prevailed in the portfolio, but foreign currency-related loans prevailed in terms of value. This was due to the fact that the latter had the average value nearly twice as high. At the end of 2012, the portfolio was structured as follows (Kwaśniak 2013, p. 9):

- quantitative structure: PLN loans at 980,000 units, i.e. 58.4%; loans related to foreign currencies at 700,000 units, i.e. 41.6% (including 580,000 units for CHF, 113,000 for EUR, and 6,000 for other currencies);
- value structure: PLN loans at PLN 143.5 billion, i.e. 44.6%; loans related to foreign currencies at PLN 178.3 billion, i.e. 55.4% (including PLN 144.6 billion for CHF, PLN 31.4 billion for EUR, and PLN 2.3 billion for other currencies);
- average loan amount: PLN loans at PLN 141,500; loans related to foreign currencies at PLN 253,000

By offering loans related to foreign currencies, borrowers were able to assume higher liabilities and finance higher real estate values, often in large cities where prices per square meter were much higher than in smaller towns. This was especially the case for young men and women just starting their working life, migrant workers from small towns and villages, without any savings and devoid of own funds to invest. A loan related to foreign currency was then the solution to fully cover the value of the property, with banks often granting higher loans plus funds for development, as most new properties fell under what was known as development status.

However, the main driving force behind the growth of foreign currency-related loans was the high difference in the amount of monthly repayment installments between PLN loans and foreign currency-related loans, and thus the expected total costs of servicing each of them. For example, at the time of granting the loan, the expected costs of PLN loans were from about 20% to over 200% higher (triple) compared with the costs of similar CHF loans (*Raport o sytuacji banków w 2015 roku...* 2016, p. 88).

The persistent high interest rate disparity between Poland and other countries led to PLN loan costs remaining substantially higher than the costs of foreign currency loans. According to ZBP analysis, this was the main reason why consumers were willing to take loans related to foreign currencies. Lower borrowing installments on foreign currencies naturally increased the creditworthiness of some borrowers (*Biała księga kredytów frankowych...* 2015, p. 8).

According to ZBP studies, the flat-renting costs in all urban areas were higher than the cost of servicing the loan, especially foreign currency-related, taken for paying a similar flat. This provided an additional impetus for borrowing to purchase housing rather than renting it. Therefore, it can be considered that it was mainly the favorable macroeconomic environment, high interest rates on PLN loans and high rents that, altogether, made the borrowers prefer foreign currency-related loans, especially CHF, to other bank loans (*Biała księga kredytów frankowych...* 2015, p. 9).

In view of the above, at the end of 2015, the number of loans and advances indexed and denominated in foreign currency that were granted to Polish consumers was more than 713,000 at PLN 173 billion in total, of which 562,000 and PLN 144 billion, respectively, were loans or advances denominated in Swiss francs. Most of these loans and mortgages were secured and the majority concerned housing loans (*Uzasadnienie do Projektu ustawy o zasadach zwrotu niektórych należności...* 2016, p. 12). A slightly different data on the number of loans and their value for the corresponding period is found in the 2015 UKNF Annual Report (Table 1).

Table 1. Loan portfolio structure by currency the which the loan is related

Loan portfolio structure by loan currency IN TOTAL		PLN	Foreign currency-related	CHF	EUR	Other currencies
Loan number (units)	1 948 963	1 318 514	630 449	522 746	101 573	6 130
Loan value (PLN mln)	370 624	204 543	166 081	137 616	27 182	1 283
Average loan value (PLN thousand)	190,2	155,1	263,4	263,3	267,6	209,3

Source: *Raport o sytuacji banków w 2015 roku*, KNF (Polish Financial Supervision Advisory), Warsaw 2016, p. 98.

Significant changes in exchange rates (among others CHF, EUR, USD and JPY) in relation to the *złoty* (significant *złoty* depreciation) directly affected the current value of liabilities servicing as well as valuation of the total mortgage loan related to foreign currencies - and its costs calculated in PLN. UKNF studies indicate that out of 35,600 risk-bearing housing loans in the banks' portfolios at the end of 2015, foreign currency-related loans exceeded 16,500 while there were 19,500 PLN loans (*Raport o sytuacji banków w 2015 roku ...* 2016, p. 96).

Identifying social impact of the crisis of foreign currency-related mortgage loans

The need for greater involvement of funds than originally assumed by the borrower on foreign currency loans brought serious negative social effects⁶. The increased cost of servicing the loan increased its share in the household's budget, thereby "squeezing" other spending/consumption areas such as groceries, clothing, equipment, leisure, culture, tourism, education, etc. Those at an increased risk are the average- or lower-income borrowers aged 40 or older. The low income was limited by the flexibility in terms of exchange rate fluctuations, while the age determined the professional attractiveness on the labor market, the level of development and the limits of social promotion. Some of those borrowers experienced slower salary growth than the average observed in the economy (*Raport o sytuacji banków w 2015 roku ...* 2016, p. 96). According to S.J. Adamczyk, specifics of the debt instrument in question allowed for the recognition that mortgage-secured loans related to foreign currencies were a high-risk banking product exposing those in gainful employment to three markets in particular: the foreign exchange market, the real estate market and the economic situation. S.J. Adamczyk argued for the real estate market and the labor market exposure to be correlated with the borrower's exposure to the risk of cyclical change of economic conditions, whereas the ability of the borrower to pay back the loan depended on the circumstances of the labor market (Adamczyk 2014, p. 7). This significantly accumulated potential negative social effects in the event of any disturbance in the above markets.

The scale of the increase in operating costs was revealed by the significant change in exchange rates. For example, the change of CHF/PLN exchange rate between 15 march 2001 and 13 September 2016 was over 66%, while in the same period, the exchange rate changed approx. 17,7%, 5.3% and 13% for EUR, USD and JPY, respectively. That significant change in the Swiss franc exchange rate was not entirely compensated by a drop in interest rates as it directly translated into a significant increase in the borrower's burden disclosed in the value of the installment loan paid in the period and the total valuation of their liabilities towards the

⁶ In the justification to the draft act on the rules for reimbursement of certain debts arising from loan and credit agreements, it is pointed out that even the Chancellery of the President of the Republic of Poland receives letters from people struggling with everyday problems in repayment of loan installments and people who have already lost their assets, and often also family and health. These speeches can be very emotional and depict the tragic fate of many borrowers and their families.

lender. The increase in the cost of servicing mortgage loans related to foreign currencies had a higher dynamics for the borrowers than the average wage increase in the economy (in a given sector where they were employed), thus causing a real pauperization of the borrowers' population, particularly those earning income from remunerated employment.

The situation was aggravated by the fact that LIBOR rates, the reference point for the cost of mortgage loans related to foreign currencies, were very low, which in case of their growth would considerably affect debt service costs, further contributing to the pauperization of the borrower and their family (indirectly, of all household members).

According to UKNF data, in the case of average CHF borrowers, the increase in the monthly repayment rate was offset by an increase in remuneration that occurred in the economy since the loan was received. This meant that CHF borrowers generally should not have problems servicing their liabilities (although one should also bear in mind that most loans were granted for lower amounts, and the majority to marriages, so that, in assessing their situation, wage increase should be multiplied by two as long as both spouses had a job). However, UKFA also stressed that the general conclusions correct for the borrowers in general did not reflect all individual cases. Consequently, there is a group of borrowers whose financial situation has not improved over the period considered, or has even deteriorated as a result of the reduction or loss of a certain part of income, or the occurrence of events that have substantially affected their earnings (e.g. family illness, etc.) (*Raport o sytuacji banków w 2015 roku...* 2016, pp. 85-86).

In view of the risk associated with housing loans, the number and value of loans subject to restructuring should be taken into account, with a doubling of the number and value of such loans by 2015 (88.1% and 122.1%, respectively). 2015 also saw a slight increase in the number and the value of loans whose borrowers took advantage of the so-called "loan holidays" (*Raport o sytuacji banków w 2015 roku...* 2016, p. 102), with no distinction of PLN and foreign currency loans as the restructured loans were being converted into Polish *złoty*.

In line with UKNF data, the bank's loan portfolio contains an interestingly high share of loans granted at the peak of the real estate bull market and the effective reduction of foreign currency loans in 2012-2015. The lowest quality was represented by the 2008 and then 2007 loan portfolio, i.e. loans granted at the peak of the real estate bull market. The deterioration of loan quality in 2009, which was comparable or lower than the portfolio of loans granted prior to 2007, was also significant, where the relatively high share of risk-bearing loans resulted from the "maturing" of that portfolio and the large number of loans repaid ahead of time (loans granted in the first half of the past decade concerned much lower amounts, among other things due to significantly lower real estate prices and more conservative rules of granting loans (*Raport o sytuacji banków w 2015 roku...* 2016, p. 104).

The exclusion of some market participants from secondary real estate transactions as a result of their "permanent" real estate relationship "choked" the market. Overproduction of real estate at low actual demand (eliminating part of demand) affected the prices of housing products and thus caused the loss of potential benefits for their owners. S.J. Adamczyk came to the conclusion that if a borrower would lose liquidity and would either like, or be forced, to repay the loan immediately, they could end up paying the amount several percentage points higher than the actual value of the property. The borrower would be then "imprisoned" in their flat given that, in many cases, the money from the sale of the property would not be enough to repay the loan. Even if someone borrowed money for a small part of the property, they would still find it hard to reconcile with the fact of having to pay back to the bank significantly more money than was borrowed (Adamczyk 2014, p. 4).

According to UKNF analyses, different scenarios applied to different borrower groups, as illustrated by the following phenomena for borrowers of CHF loans taken in the following periods (*Próby rozwiązania problemu...* 2015, p. 9).

- in 2008, when the value of debt in PLN increased and the purchased properties lost their initial market value and were priced below the purchase price;
- in 2007, when the value of debt in PLN increased and the purchased properties retained the initial purchase price;
- by the end of 2006, when there was an increase in the value of debt in PLN, accompanied however by a significant increase in real estate prices (often exceeding 100%, especially in large urban areas).

According to J. Gwizdala (2012, p. 323 *et seq.*), the above situation on the Polish market can be mapped back to what happened on the American market. At that time, low mortgage rates and the resulting increase in bank lending led to increased demand for property and a rise in real estate prices. The resulting increase in property prices, i.e. the value of mortgage collateral, allowed banks to liberalize their lending policies and increase the availability of credit. This, then, led to an increase in demand for flats and an increase in their prices, whereas the increase in real estate prices created additional credit demand as borrowers were under pressure of inflation in the housing market and any delay in purchasing decisions resulted in measurable losses for homeowners.

At the time of taking the loan, the installments of PLN loans were much higher than the installments of CHF loans. According to the UKNF report, at the time of granting the loan, all CHF borrowers paid significantly lower installments than their PLN counterparts (in the analyzed example, the loan installment was on average from 10% to over 70% higher than the CHF loan rate), resulting from the WIBOR and LIBOR interest rate disparity for CHF and was the main motivating factor for taking foreign currency loans in the first place. In 2012-2015, the situation was gradually reversed. As a result of PLN depreciation against CHF, and strong NBP interest rate reductions in 2012-2015, CHF borrowers (with few exceptions) ended up paying higher installments than PLN borrowers (*Raport o sytuacji banków w 2015 roku...* 2016, p. 80).

Due to the change in the market situation (as a result of PLN depreciation against CHF and the strong reduction of NBP interest rates in 2012-2015), the currently expected costs of loans denominated in CHF are higher than PLN loans (with few exceptions), with the most disadvantaged being those borrowers who have taken a CHF-denominated loan between June 2007 and June 2008 (*Raport o sytuacji banków w 2015 roku...* 2016, p. 89).

According to UKNF calculations, for the majority generations of CHF loans, the monthly increase in installments relative to the first installment was about 20-30%. Negative effects of strong *złoty* depreciation were largely offset by a strong drop in CHF interest rates. Because of that, for the majority generations of CHF loans, the increase in monthly installments relative to the first installment did not exceed 20-30%. The exceptions are some generations of loans granted mainly for periods of 15-20 years, where the increase reached as much as 40-50% (it is a derivative of the length of the loan term - extending the period of crediting would reduce the amount of the installment). On the other hand, for some generations of loans granted for periods of 35 years or more, the increase in repayment installments was below 20% or even marginal. Despite the increase in repayment installments of CHF loans, for most generations of loans they were comparable or still largely (up to 30%) lower than initial installments paid by PLN borrowers. The exception are some generations of CHF loans granted mainly for periods of 15-25 years. It is also true that, despite the increase in repayment rates, CHF loans were still significantly lower than the maximum repayment installments paid by PLN borrowers. The exception was some generations of CHF loans granted mainly for the period of 15 years (*Raport o sytuacji banków w 2015 roku...* 2016, pp. 81-83).

However, it should be emphasized that the estimation of the relation between the cost of installments in PLN and CHF has a primary impairment resulting from the assessment of the financial capacity of the household assuming the liability to service the loan denominated in

foreign currency. The initial assessment and share of the installment in the household budget was greatly disturbed and all the consumer and investment restrictions in the borrower's portfolio appeared in a much larger realm, thus affecting their individual case. The argument used by the banking community that PLN borrowers incurred more difficulties than CHF borrowers did not change the situation of individual households and the huge risks additionally affecting their financial, family and social circumstances.

A generation of "credit slaves" emerged as a new social phenomenon, based on living a life with the awareness of long-term default. On the one hand, it limited social and economic activity, while on the other hand it generated indifference towards debt, a condition in which each subsequent commitment "does not worsen" the already bad situation, and the desire to "live life to the full" imposes wrong consumer decisions based on further crediting and generating a debt spiral.

After analyzing the components of this legal relationship between the lender and the borrower of a foreign currency-related loan, it can be concluded that the instrument in question was not an unconditional right to property ownership. Indeed, the defined conditionality leads to the "enslaving" of the borrower and limiting their property rights as proven by S.J. Adamczyk in his publication. According to that author's assessment, until the last delivery of loan installment payment to the bank, there is a specific double right of control over the loaned property. S.J. Adamczyk believed that consumers would find out about the existence of that duality of control under the relevant method of financing the acquisition of real estate only once they have failed to fulfill the contractual obligations as to the delivery of installments, thus prompting the bank to start enforcing the rights resulting from the mortgage loan and the bank enforcement title (BTE) that remained in force until August 2016⁷. The author of this article finally came to the conclusion that the real estate would become unconditional property of the borrower only after the delivery of the last installment of the foreign currency-related loan and the subsequent removal of the bank mortgage from the land and mortgage register. Until then, the entire legal relationship of the borrower demonstrated the features of the agreement on the ownership of the loaned property (Adamczyk 2014, pp. 7-8).

Conclusions

Increasing the sum of liabilities has been directly and indirectly affecting the situation of borrowers and their households, influencing the generation of actual negative social consequences. Continued maintenance of mortgage loans denominated in foreign currencies in the financial system will entail growing threats to the economy, society, but also to individual households and the borrowers themselves.

This risk in question applies equally to those who have and do not have liabilities arising from mortgage loans related to foreign currencies. It is not an exaggeration to say that *we all were, and still are, borrowers of foreign currency-related loans* as the costs of the crisis resulting from their occurrence are borne directly and/or indirectly by each market participant.

The model for solving this problem should be based on a full analysis of the costs and benefits of interventions, as well as the abandonment of maintaining the status quo. It will also prove necessary to identify and analyze both costs and benefits, among others, in the social, economic, spatial, demographic, legal, financial and political dimension (in terms of national economic security).

Credit would have to be adjusted to the borrower's financial circumstances, both short- and long-term. The structure should ensure the granted loan can be repaid, and therefore

⁷ BTE - Bank enforcement title - a document (in the form of a statement) stating the existence of the bank's due claim against a person with whom it has conducted a banking activity or who has secured such a liability with the bank. After issuing the enforcement clause by the court, BTE becomes an enforcement title and is the basis for the court enforcement officer to initiate judicial enforcement.

should not cause undue burdens on household incomes and consequently limit its capacity to meet development needs and current consumption.

It is also worth citing UKNF and stress that: *The correct applications for all borrowers do not reflect all individual cases. It must be borne in mind that, despite the fact that the banking environment presents many extremely favorable solutions to the population of those who have taken foreign currency-related loans, there is a group of borrowers whose financial circumstances not only has not improved, but has deteriorated substantially since receiving the loan as a result of the reduction or loss of a portion of income or the occurrence of events that have caused a substantial deterioration of their financial situation* (Raport o sytuacji banków... 2016, p. 96).

References

Adamczyk S.J. (2014), *Spoleczna odpowiedzialność sektora bankowego z perspektywy kredytów w CHF udzielanych w latach 2004-2008*, Warsaw, <http://www.klubinteligencjipolskiej.pl/2013/11/spoleczna-odpowiedzialnosc-sektora-bankowego-z-perspektywy-kredytow-w-chf-czesc-1/>; <http://www.klubinteligencjipolskiej.pl/2013/11/spoleczna-odpowiedzialnosc-sektora-bankowego-z-perspektywy-kredytow-w-chf-czesc-2-2/>

Bartoszewicz A. (2016), *Analiza dotycząca społecznych skutków kryzysu kredytów hipotecznych odnoszących się do walut obcych. Raport końcowy*, Warsaw.

Biała księga kredytów frankowych w Polsce (2015), Związek Banków Polskich, Warsaw.

Brown M., Peter M., Wehrmüller S. (2009), *Swiss Franc Lending in Europe*, Swiss National Bank.

Chmielewska I. (2015), *Transfery z tytułu pracy Polaków zagranicą w świetle badań Narodowego Banku Polskiego*, „Materiały i Studia”, no 314, Instytut Ekonomiczny, National Bank of Poland, Warsaw.

Finansowanie nieruchomości przez banki w Polsce. Stan na czerwiec 2006r. (2006), Banking Supervision Authority, Warsaw.

Finansowanie nieruchomości przez banki w Polsce. Stan na czerwiec 2008 r. (2008), Polish Financial Supervision Authority.

Gwizdała J. (2012), *Rynek kredytów hipotecznych w warunkach światowego kryzysu finansowego*, in: Pyka I., Cichorska J. (ed.), *Finanse w niestabilnym otoczeniu – dylematy i wyzwania. Bankowość*, „Studia Ekonomiczne Uniwersytetu Ekonomicznego w Katowicach”.

Informacja w zakresie skutków projektu ustawy o sposobach przywrócenia równości stron niektórych umów kredytu i umów pożyczki. Wpływ na instytucje kredytowe (2016), Office of the Polish Financial Supervision Authority, Warsaw.

Kolasa M. (2012), *Teoria realnego cyklu koniunkturalnego*, „Studia i Prace Kolegium Zarządzania i Finansów SGH”, no 119.

Konsekwencje decyzji o uwolnieniu kursu CHF wobec EUR przez SNB dla portfela kredytów walutowych i sektora bankowego w Polsce (2015), Measures by banks and the Polish Bank Association.

Kulczycki M. (2015), *Sektor bankowy w Polsce – sytuacja w 2014 roku i wyzwania na przyszłość*, Akademia Finansów i Biznesu Vistula, ZNUV, no 43(5).

Kwaśniak W. (2013) *Finansowanie budownictwa mieszkaniowego w Polsce*, Prezentacja, Zastępca Przewodniczącego KNF, Department of Commercial and Specialized Banking and Payment Institutions, Department of Banking Sector Analysis, Warsaw.

Martysz Cz., Rzeszutek M. (2015), *Znaczenie i rola zaufania na rynku finansowym*, in: Ostaszewski J. (ed.), *O nowy ład finansowy w Polsce. Rekomendacje dla animatorów życia gospodarczego*, Warsaw School of Economics, Warsaw.

Ocena wpływu na sytuację sektora bankowego i polskiej gospodarki propozycji przewalutowania kredytów mieszkaniowych udzielonych w CHF (2013), Office of the Polish Financial Supervision Authority, Warsaw.

Portret frankowicza – dane Biura Informacji Kredytowej, <https://www.bik.pl/informacje-prasowe/-/article/2016-05-25-portret-frankowicza>, (retrieved 25.05.2016).

Projekt ustawy o sposobach przywrócenia równości stron niektórych umów kredytu i umów pożyczki (2016), Chancellery of the President of the Republic of Poland, Warsaw.

Projekt ustawy o zasadach zwrotu niektórych należności wynikających z umów kredytu i pożyczki (2016), Sejm of the Republic of Poland, Warsaw.

Próby rozwiązania problemu związanego z portfelem kredytów CHF (2015), Materiał na Forum Bankowe 2015, Office of the Polish Financial Supervision Authority, Warsaw.

Przegląd stabilności systemu finansowego I półrocze 2006 (2006), National Bank of Poland, Warsaw.

Raport. Kredyty frankowe strony sporu i ich argumenty (2016), Centrum Grabsiego, Krakow.

Raport o sytuacji banków w 2011 roku (2012), Office of the Polish Financial Supervision Authority, Warsaw

Raport o sytuacji banków w 2015 roku (2016), Office of the Polish Financial Supervision Authority, Warsaw

Rekomendacja S dotycząca dobrych praktyk w zakresie zarządzania ekspozycjami kredytowymi zabezpieczonymi hipotecznie [Recommendation S concerning Good Practices Related to Mortgage-Secured Credit Exposures] (2013), Polish Financial Supervision Authority, Warsaw, https://www.knf.gov.pl/Images/Rekomendacja_S_18_06_2013._tcm75-34880.pdf

Szelągowska A. (2010), *Współczesna bankowość hipoteczna*, CeDeWu, Warsaw.

Winiecki J. (ed.) (2009), *Kryzys globalny, Początek czy koniec?*, Regan Press, Gdańsk 2009.

Wiśłowski M. (2014), *Kredyty hipoteczne w CHF udzielane klientom polskich banków jako element wpływający na zarządzanie złotym polskim*, „Przedsiębiorczość i Zarządzanie”, volume XV, issue 9, part III, SAN.

Zalecenie Europejskiej Rady do spraw Ryzyka Systemowego z dnia 21 września 2011 r. dotyczące kredytów w walutach obcych (ERRS 2011/1).

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Planowanie budowlanych przedsięwzięć inwestycyjnych w ujęciu zrównoważonym

Streszczenie

Budownictwo, jako istotny dział gospodarki, wymaga wdrożenia strategii zrównoważonego rozwoju opartego na trzech filarach: ekonomicznym, społecznym, środowiskowym. Konieczna jest obecnie zmiana podejścia do planowania przedsięwzięć budowlanych, w tym szczególnie projektowania obiektów budowlanych z uwzględnieniem uwarunkowań cyklu ich życia. W artykule przedstawiono metodykę szacowania kosztów w cyklu życia (LCC) na przykładzie budynku mieszkalnego, dokonując analizy rozwiązań wariantowych. Szczególną uwagę zwrócono na przydział składników kosztów do poszczególnych faz cyklu życia, uwypuklając problematykę trwałości elementów obiektu budowlanego i konsekwencji z tego wynikających. W celu przeprowadzenia analizy LCC z wykorzystaniem dyskontowania posłużono się programem Primavera Pertmaster wspomagającym planowanie przedsięwzięć. Podjęcie tak sformułowanego problemu jest szczególnie ważne ze względu na konieczność dostosowania standardów dokumentacji projektowo-kosztorysowej w budownictwie do potrzeb analizy w ujęciu LCC. Na mocy nowego ustawodawstwa prawa zamówień publicznych w Polsce podejście LCC stało się obowiązujące, jednakże o formie implementacji zadecydują dopiero szczegółowe rozporządzenia wykonawcze.

Słowa kluczowe: budownictwo zrównoważone, koszty w cyklu życia, trwałość budynku

Planning of construction investment projects in a sustainable approach

Abstract

Construction, as an important branch of the economy, requires the implementation of sustainable development strategy based on three pillars: economic, social and environmental. It is necessary to change the current approach to the planning of construction works, including in particular the design of buildings taking into account the conditions of their life cycle. This article presents a methodology of life cycle costing (LCC) through the example of a residential building and analyzes alternative solutions. Particular attention was paid to the allocation of the cost elements for different phases of the life cycle, highlighting the issue of the durability of the building elements and the consequences resulting from this fact. The Primavera Pertmaster project planning tool was used for LCC with discounting. The attempts to resolve such problems are especially significant because of the necessity of adapting the design and estimation standards in construction industry to the needs of LCC analysis. Under new legislation on public procurement law in Poland, an LCC approach has been mandatory, but the form of implementation is to be decided by detail executive regulations.

Keywords: sustainable construction, lifecycle costs, building durability

JEL CODE: L74, M11, O22

Introduction

In the light of the sustainable development strategy, it is now necessary to update the approach to the planning of construction works, including the design of buildings and the associated construction costing. This article presents the life cycle costing methodology, abbreviated

as LCC, using a residential building as an example and it reviews Polish legal standards relevant to the presented problem.

The example at hand focuses on the costs of investment works and on the costs of repair works, as well as the implications of the assumed scope of repairs and their location in the life cycle of the building based on their predicted frequencies.

Costs were calculated by means of detailed calculation using a general-purpose costing software, whereas the LCC analysis was based on network scheduling and discounting using a specialized software program to assist project planning and analysis.

Six cases were investigated with different material solutions of individual building elements and necessary maintenance work based on the assumed durability in the two boundary test cases of the facility. It was important to determine the impact of the time horizon on the results of the LCC analysis.

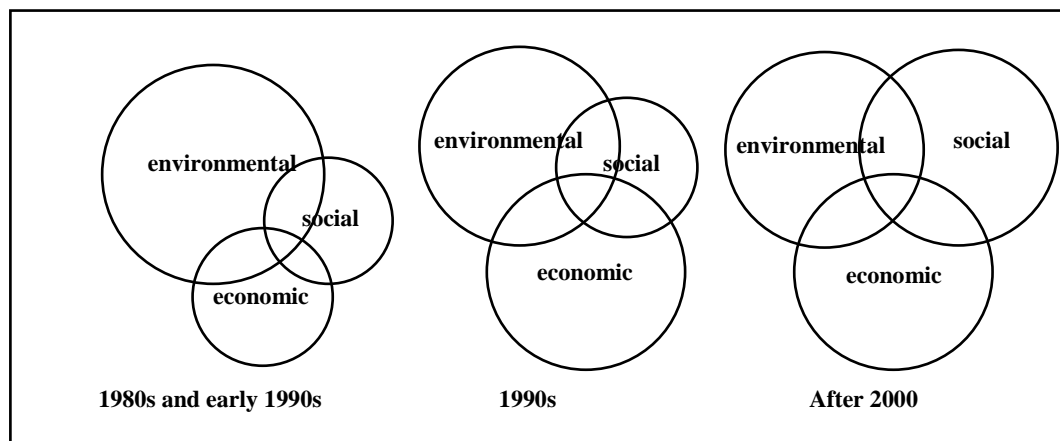
Construction sustainability

The main purpose of construction is to design and erect buildings that should meet a number of requirements, including, in particular, the so-called basic requirements (*Act* 1994) on the safety of construction, fire safety, occupational safety, hygienic and health conditions, environmental protection and protection from noise, vibration, energy savings and thermal insulation, and the recently introduced requirement for sustainable use of natural resources. These requirements are an expression of the alignment of Polish national law with the EU directives as a manifestation of the adopted sustainable development strategy, which was also described in the context of standardization (Wall 2011).

This strategy assumes the management of resources in the present circumstances, which will safeguard the needs of future generations. It rests on three pillars: economic, social and environmental, with the initial objectives focused on the proper management of limited resources, especially energy, and aimed at finding solutions that would reduce the impact of the production of building materials and construction products on the environment. The transition from the leading role of the aspects identified as environmental towards those economic over time has recently led to the social aspects being highlighted. The change in approach in terms of sustainability is shown in Figure 1, especially in the context of global trends.

Currently, implementation of the sustainable development strategy with respect to environmental aspects includes solutions related to the entire life cycle of buildings that could have an adverse impact on the environment. The main focus is on energy conditions, rational use of natural resources (or, more broadly, ecology), material solutions, the use of appropriate building technologies and design processes that take into account the phase of use, deconstruction and waste disposal. An interesting cognitive approach is the design approach that directly accounts for future deconstruction, known as DfD ("Design for Deconstruction"). So far it has been developed in several centers and has prompted interesting detailed solutions.

It should be emphasized that both the building materials industry and the building operation generate significant energy consumption (over 40% worldwide (Czarnecki *et al.* 2012)) and harmful emissions (35% worldwide (Czarnecki *et al.* 2012)). The importance attached to the environmental requirements is presently underlined by environmental product declarations (*Standard* 2014) and building environmental assessment (*Standard* 2012), although their proper implementation remains crucial.

Figure 1. Concept of sustainability across time

Source: Marghescu 2005: as cited in Ibrahim 2015.

One should stress that a well-designed and well-constructed building is a solution that should be accepted from the social perspective throughout the life cycle. Among the key characteristics of this aspect are: microclimate, accessibility for people with disabilities, efficient use of space, building friendliness for both users and the environment, acoustic comfort and visual comfort. The proposal for a way of assessing social qualities is contained in PN-EN 16309 + A1: 2014-12 (*Standard* 2014).

The economic aspect of construction, meanwhile, is expressed by the cost of the building. So far, evaluations focus on the cost of obtaining materials, i.e. construction costs, including design, while the balanced approach requires the inclusion of costs throughout the life cycle. In addition, the economic efficiency of the investment and the value of the building can be assessed in this respect. The full range of evaluation measures for this aspect is included in EN 16627 (*Standard* 2015) for the assessment of economic performance and the corresponding features of the building.

Building life cycle phases

In relation to a building, life cycle involves consecutive, interrelated phases (stages), whose outset is investment planning and scope planning. The subsequent phases of the cycle are: design (preliminary, basic and executive documentation), commissioning, maintenance and use, and final elimination.

Preventive maintenance work is carried out in the use phase and replacement work is performed on the basis of wear and tear. The elimination phase should take into account the deconstruction or disassembly of the building including the planned ecological disposal of the resulting waste or its recycling. Similar indications also apply to waste generated through repairs, which is a condition of a sustainable approach in both cases.

According to Art. 3 of the Construction Law Act (*Act* 1994), the concept of a building includes both buildings and landscape objects. The scope of activities undertaken in the various phases of the life cycle of construction works may vary due to their complex and specific nature, with the most extensive applying to buildings. The next phases in the life cycle of the building are shown in Table 1 where the ranges of corresponding activities are identified.

The design phase of the building should be considered fundamental. The solutions adopted during that stage, including materials and construction products, components and installa-

tion systems plus technical equipment, and more broadly the construction technology, determine the amount of costs generated during the use phase. The choice of design solutions, especially the type of building materials, should take into account not only their negative environmental impacts but also the sustainability of the solutions and the possibilities of recycling. Therefore, variant solutions are of particular importance in the design phase and their economic effectiveness can be assessed using the LCC methodology, which is the key element of the analysis below.

Building life cycle costs

As far as definition is concerned, LCC is about determining the costs associated with a product life cycle directly incurred by one or more participants in the cycle. In the world literature, the methodology for constructing LCC models is very diverse, being linked to various industries and referring to either all or only selected life cycle phases, either in general or in great detail.

General guidelines for costing in the building life cycle are indicated in the Standard (*Standard* 2008). This standard has not been translated into Polish, as opposed to other European Union countries where it was introduced with adaptations to existing national guidelines and regulations. The last amendment of the procurement law (*Act* 2004) indicates the necessity of setting costs in the life cycle of construction works in the area of public procurement in Poland.

The very analysis of costs in a building life cycle can be performed under a deterministic or non-deterministic approach that takes into account risk and even uncertainty. In cost-related issues, the non-deterministic approach is more complex because of the many factors that are difficult to predict or analyze using probabilistic methods. These factors include variable prices of inputs, and in consequence, the value of future repair and maintenance costs.

The procedure of analyzing building life cycle costs can be contained in six steps (*Efektywność* 2015):

- determining analysis scope, including adoption of variants,
- identifying cost components,
- cost estimation,
- calculation of key financial ratios,
- risk and uncertainty analysis,
- choosing solution.

In the case of LCC analyses for construction works, the length of the time horizon is of particular importance in the initial phase. It can reflect the life of an object or it may be a time estimate of the cost of a given model. Another very important step is the identification of the individual cost components adopted in the analyzed LCC model. A summary of the basic cost-generating activities attributed to life-cycle phases is presented in Table 1.

The first, and therefore approximate, cost estimate should be made without taking into account the effect of time at cost level, i.e. inflation and discounting. This approach enables the weighting of individual cost components to be emphasized, allowing the key costs of the model to be emphasized. Only in the next step should the value of individual cost components be estimated in detail and should one proceed to model analysis accounting for the influence of time on the values obtained.

Table 1. Cost components in relation to building life cycle phases

Building life cycle phases				
Design	Construction works	Operation and maintenance	Use (operational costs)	Deconstruction and disassembly
<ul style="list-style-type: none"> - design works (feasibility study and analysis, preliminary, basic and executive documentation) - costs projections - fees, permits - geotechnical research 	<ul style="list-style-type: none"> - temporary works - site preparation - infrastructure works - erecting objects - works related to equipment - small architecture - construction management - taxes - waste disposal - unspent costs - unforeseen costs 	<ul style="list-style-type: none"> - adaptation, maintenance, replacement, refurbishment - design and execution of the above - maintenance of green areas 	<ul style="list-style-type: none"> - media, including fuel, energy, water - sewage disposal - cleaning and maintenance of the object - cleanliness and patency of electric cables - taxes and insurance premiums - pest control - cleaning fee - management fee - other operating costs 	<ul style="list-style-type: none"> - inspections, checks for disassembly, - demolition, disassembly, deconstruction - fees and charges, - preparation for recycling and actual recycling

Source: own study.

Durability as an important factor in sustainability

The length of the time horizon adopted in the LCC model generates a variety of scenarios for the use phase, including the extent of the necessary repair works, replacement of building elements and, above all, their location in time. In the use phase, the durability of buildings and their components should be considered as a basic operational characteristic in addition to the previously specified basic requirements. Normally, it expresses the ability to fulfill the intended function of buildings and their components, and is expressed numerically as time (Ajdukiewicz 2011).

In reference to buildings and their components, durability is determined by a number of factors, but mostly:

- building location, including location in relation to cardinal points,
- groundwater conditions,
- accepted design solutions,
- type of materials used, their composition and properties,
- environmental conditions,
- production quality and control level
- usage.

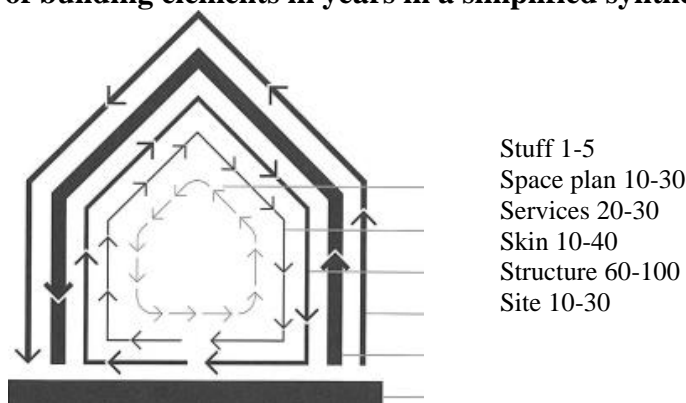
A construction work, and in particular a building, consists of a number of structural elements, i.e. layered bearing and non-bearing sections made of different materials. Consequently, the life cycle of individual elements and their layers and components are very different, usually with longer time horizons for the main load carriers and shorter, plus very distinct, for different types of finishing works, installation systems and components. The process of technical wear of the building as a whole and its components is related to the physical and chemical processes occurring in the building during its use and is conditioned by the influence of the previously mentioned factors.

In the contemporary integrated view, the problem of durability is expressed in what is known as the period of use. In this context, there are two concepts, namely the life-cycle planning within the meaning of international standards (*Standard* 2005) and life-cycle design within the meaning of Eurocode standards, including (*Standard* 2004) for various types of construction works. In the case of buildings, i.e. Category 4 objects according to (*Standard* 2004), the period of use assumed by the designer at 50 years is the time span in which the structure, or its part, is to be used for its intended purpose and within intended maintenance, i.e. it does not require extensive repair (Ajdukiewicz 2011).

In the LCC, there is a need to project the life span as a parameter that reflects the sustainability of a building and its individual components. With a large number of determinants influencing the various building life cycle phases, it is one of the major design problems. This issue is also important in the context of planning the frequency of repair works and their scope during the use phase. The scope of these works can be actively influenced by proper design, including optimized selection of solutions for individual baffles, their layers and components.

In general, the durability of the various elements varies, as schematically shown in Figure 2, indicating different durability times and constituting the basis of many publications, among others by J. Bochen (2014) and A. Pieniążek *et al.* (2015).

Figure 2. Durability of building elements in years in a simplified synthetic view



Source: Brand 1994.

Cost analysis in the life cycle of a residential building

The analysis conducted in this article was to determine the life cycle cost of a construction work for the given model. The LCC model was designed to estimate the design phase, including the purchase of a building plot, the construction of the facility and its use, excluding the deconstruction phase. In the use phase, the costs of repair works were taken into account, while the operating costs incurred from taxes, fees, media and current maintenance of the building were excluded.

The cost estimate was made for a single-family detached house with a usable attic and a usable floor area of approximately 150m² total. The construction site designed in traditional technology is characterized by external baffles that meet the requirements of thermal protection as at January 1, 2014.

Large material differentiation of particular elements of the building influences the considerable variability of the scope of refurbishment works planned during the period of use of the building, which were included in the analysis.

Based on the blueprints of the works and the accepted basis of calculations, the costs of the construction work was estimated, along with the arising repair costs (Cicha, Jędrzejak

2014). Cost estimation of investment and repair construction works was performed based on the detailed method using the Norma Pro computer software supporting cost estimation.

Three time horizons – 30, 50 and 85 years - were adopted for further analyses, and so were two extreme use scenarios and consequently life-cycle patterns:

- *scenario I* with the least durability, i.e. the quickest wear and tear resulting from the lack on the side of the care of the owner of the building for its technical condition,
- *scenario II* with the most durability resulting from the provision of appropriate repairs and maintenance in the time required for these activities.

The adoption of the largest time horizon in the analysis, i.e. 85 years, was dictated by the software application limitations and was also consistent with the maximum duration of sustainability in practice for traditional single-family buildings. The 50-year period reflects the most commonly accepted test case in the world literature for determining the life cycle costs of buildings, and is currently used for reference in the design of such structures. The shortest period of 30 years was established in order to verify the impact on the final results of the time horizon and the frequency of repair works. In both scenarios, the different life cycle of individual components was adopted, and consequently the frequency of work varied.

Based on this data, six time-cost schedules were developed using the Primavera Pertmaster software, although in practice no such plan is developed in such a broad perspective. The analysis with the use of the scheduling method involves the traditional planning of phases of preparation and implementation of the project without the subsequent phases. For the purpose of LCC analysis, the repair processes, their duration, and the logical links with analysis-derived terms were modeled against dynamic cost analysis.

LCC calculations were first performed without taking into account the effect of time on their values and then taking into account that effect with discounting. A fixed discount rate of 4% was assumed. The results of the analyses for the individual scenarios are presented in a synthetic view in Table 2 (a-f), with Column 2 listing the elements of the structure or the type of work performed.

In the case of repair works, the adopted durability in years and sizes are given in parentheses. Determination of proposed durability for individual building components was made on the basis of the analysis of available data, including (Michalik 2014) and technical expertise. The third column lists the planned costs, which for the repair works cover the costs of these works taking into account their multiplicity in the planned life cycle.

The total cost for particular scenarios demonstrates very large variations from PLN 1,417,776 to PLN 813,752. The comparison of these costs without discounting shows that the costs of life-cycle repairs approach the cost of production in the analyzed case. This case is illustrated by the analysis for the largest time horizon, where these costs accounted for 193% of the production cost.

With the change in the time horizon, these relationships significantly decrease, so that, e.g., they were just 111% for the shortest test case in the second scenario. The LCC costs with discounting show different relationships with the distribution of individual amounts in time. They accounted for 118%, and 104% for the longest and shortest time horizon, respectively.

Table 2. LCC analysis reports

a) analysis time 85 years, minimum durability values

Task id.	Building elements or types of works	Netcost [PLN]
0	Project preparation	205 900
A	Ground acquisition and terrain fence	180 000
B	Building design documentation	25 900
1	Earthworks and preparation works	16 402
C	Earthworks and land development	16 402
2	Raw state works	305 472
D	Load-bearing structures of building	252 845
E	Roof refurbishment works [50]	52 627
3	Installation systems works	260 219
F	Installations and external connections	64 719
G	Sanitary installation refurbishments [25]	93 600
H	Electric installation refurbishments [25]	44 400
I	Installation equipment upgrades [15]	57 500
4	Finishing state works	629 783
J	Finishing of building	194 567
K	Plasters and walls claddings [40]	30 916
L	Floor panels [20]	44 400
M	Ceramic plates [15]	66 095
N	Doors and internal woodworks [50]	30 400
O	Painting and wallpapers [5]	65 808
P	Insulations and facades [25]	107 775
R	Gutters, pipes and flashings [15]	61 240

LCC = PLN 835,770 (PLN 1,417,776 zł)

b) analysis time 85 years, maximum durability values

Task id.	Building elements or types of works	Netcost [PLN]
0	Project preparation	205 900
A	Ground acquisition and terrain fence	180 000
B	Building design documentation	25 900
1	Earthworks and preparation works	16 402
C	Earthworks and land development	16 402
2	Raw state works	305 472
D	Load-bearing structures of building	252 845
E	Roof refurbishment works [50]	52 627
3	Installation systems works	179 719
F	Installations and external connections	64 719
G	Sanitary installation refurbishments [40]	62 400
H	Electric installation refurbishments [30]	29 600
I	Installation equipment upgrades [30]	23 000
4	Finishing state works	511 090
J	Finishing of building	194 567
K	Plasters and walls claddings [60]	15 458
L	Floor panels [25]	33 300
M	Ceramic plates [20]	52 876
N	Doors and internal woodworks [60]	30 400
O	Painting and wallpapers [7]	49 356
P	Insulations and facades [40]	71 850

LCC = PLN 782,365 (PLN 1,218,583)

c) analysis time 50 years, minimum durability values

Task id.	Building elements or types of works	Netcost [PLN]
0	Project preparation	205 900
A	Ground acquisition and terrain fence	180 000
B	Building design documentation	25 900
1	Earthworks and preparation works	16 402
C	Earthworks and land development	16 402
2	Raw state works	305 472
D	Load-bearing structures of building	252 845
E	Roof refurbishment works [50]	52 627
3	Installation systems works	191 219
F	Installations and external connections	64 719
G	Sanitary installation refurbishments [25]	62 400
H	Electric installation refurbishments [25]	29 600
I	Installation equipment upgrades [15]	34 500
4	Finishing state works	462 184
J	Finishing of building	194 567
K	Plasters and walls claddings [40]	15 458
L	Floor panels [20]	22 200
M	Ceramic plates [15]	39 657
N	Doors and internal woodworks [50]	30 400
O	Painting and wallpapers [5]	37 017
P	Insulations and facades [25]	71 850
R	Gutters, pipes and flashings [15]	36 744

LCC = PLN 821,434 (PLN 1,181,177)

d) analysis time 50 years, maximum durability values

Task id.	Building elements or types of works	Netcost [PLN]
0	Project preparation	205 900
A	Ground acquisition and terrain fence	180 000
B	Building design documentation	25 900
1	Earthworks and preparation works	16 402
C	Earthworks and land development	16 402
2	Raw state works	305 472
D	Load-bearing structures of building	252 845
E	Roof refurbishment works [50]	52 627
3	Installation systems works	122 219
F	Installations and external connections	64 719
G	Sanitary installation refurbishments [40]	31 200
H	Electric installation refurbishments [30]	14 800
I	Installation equipment upgrades [30]	11 500
4	Finishing state works	335 608
J	Finishing of building	194 567
K	Plasters and walls claddings [60]	0
L	Floor panels [25]	11 100
M	Ceramic plates [20]	26 438
N	Doors and internal woodworks [60]	0
O	Painting and wallpapers [7]	28 791
P	Insulations and facades [40]	35 925
R	Gutters, pipes and flashings [20]	24 496

LCC = PLN 766,628 (PLN 985,601)

e) analysis time 30 years, minimum durability values

Task id.	Building elements or types of works	Netcost [PLN]
0	Project preparation	205 900
A	Ground acquisition and terrain fence	180 000
B	Building design documentation	25 900
1	Earthworks and preparation works	16 402
C	Earthworks and land development	16 402
2	Raw state works	252 845
D	Load-bearing structures of building	252 845
E	Roof refurbishment works [50]	0
3	Installation systems works	133 719
F	Installations and external connections	64 719
G	Sanitary installation refurbishments [25]	31 200
H	Electric installation refurbishments [25]	14 800
I	Installation equipment upgrades [15]	23 000
4	Finishing state works	318 024
J	Finishing of building	194 567
K	Plasters and walls claddings [40]	0
L	Floor panels [20]	11 100
M	Ceramic plates [15]	13 219
N	Doors and internal woodworks [50]	30 400
O	Painting and wallpapers [5]	20 565
P	Insulations and facades [25]	35 925
R	Gutters, pipes and flashings [15]	12 248

LCC = PLN 778,190 (PLN 926,890)

f) analysis time 30 years, maximum durability values

Task id.	Building elements or types of works	Netcost [PLN]
0	Project preparation	205 900
A	Ground acquisition and terrain fence	180 000
B	Building design documentation	25 900
1	Earthworks and preparation works	16 402
C	Earthworks and land development	16 402
2	Raw state works	252 845
D	Load-bearing structures of building	252 845
E	Roof refurbishment works [50]	0
3	Installation systems works	91 019
F	Installations and external connections	64 719
G	Sanitary installation refurbishments [40]	0
H	Electric installation refurbishments [30]	14 800
I	Installation equipment upgrades [30]	11 500
4	Finishing state works	247 586
J	Finishing of building	194 567
K	Plasters and walls claddings [60]	0
L	Floor panels [25]	11 100
M	Ceramic plates [20]	13 219
N	Doors and internal woodworks [60]	0
O	Painting and wallpapers [7]	16 452
P	Insulations and facades [40]	0
R	Gutters, pipes and flashings [20]	12 248

LCC = PLN 737,324 (PLN 813,752)

Source: own study.

The percentage values for all the scenarios illustrating the relationship of lifecycle costs to production costs are summarized in Table 3 (the values given in parentheses refer to the amounts without discounting).

Table 3. Lifecycle costs to production costs

Use scenario	Time horizon		
	85 years	50 years	30 years
I	118% (193%)	116% (161%)	110% (126%)
II	111% (166%)	108% (134%)	104% (111%)

Source: own study.

The differentiation of these relations does not allow to determine the average size apart from the time horizon due to the breakdown of the costs of individual refurbishments. It is crucial to adopt the length of the horizon. The insufficiently long 30-year horizon is not reliable and should be omitted in LCC analyses as it does not properly account for the wear and tear factor of a construction work and its components.

Conclusions

Implementing a sustainable development strategy in the construction industry requires general changes in the planning of construction works, including the design of the structures and consequently the cost estimation. Full analysis of LCCs for building structures requires identification of life cycle components, determination of the durability of construction elements and their components, projection of repair works and their positioning in time, determination of operational expenses and determination of the costs of deconstruction and material recycling. Preparing data for this type of analysis is very laborious.

The analysis of the adopted LCC model for a single-family residential building allowed to set the costs for the assumed scenarios. They are closely related to the technical solutions adopted in this structure (which differ for each structure) and can also be differentiated in terms of costs incurred during the use phase. During the design of the building, targeted changes can be made with regard to the conscious development of the wear pattern. A sustainable approach tends to opt for solutions that are more durable, being usually associated with higher production costs.

The authors chose to tackle the problem due to the recent changes in construction law and public procurement law, which, so far, have affected only those legal acts without the relevant executive regulations. Under the new legislation on public procurement in Poland, the LCC approach has become mandatory, but the form of its implementation is likely to be decided by detailed executive regulations, although the statutory provisions are already marking the direction of change and this article follows them in identifying potential problems that need to be investigated.

References

- Ajdukiewicz A. (2011), *Aspekty trwałości i wpływu na środowisko w projektowaniu konstrukcji betonowych*. „Przegląd Budowlany”, no 2.
- Bochen J. (2014), *Prognostowanie trwałości tynków zewnętrznych na podstawie zmian właściwości fizycznych w procesie starzenia*, „Izolacje”, no 4.
- Brand S. (1994), *How buildings learn. What Happens After They're Built*, Penguin Books, New York.
- Cicha A., Jędrzejak P. (2014), *Analiza przedsięwzięcia budowlanego w aspekcie kosztów realizacji i eksploatacji*, dissertation (engineering) under the academic supervision of M. Celińska-Mysław, Institute of Structural Engineering at Poznan University of Technology, Poznań.

Czarnecki L., Kaproń M., Piasecki M., Wall S. (2012), *Budownictwo zrównoważone budownictwem przyszłości*, „Inżynieria i Budownictwo”, no 1.

Efektywność energetyczna. Analiza kosztów cyklu życia – Podstawy (2015), Forte, <http://leonardo-energy.pl/article/analiza-kosztow-cyklu-zycia-podstawy> (retrieved 30.04.2017).

Ibrahim I. (2015), *Towards Balanced Sustainable Design*, *International Conference on IT, Architecture and Mechanical Engineering*, Dubai.

Marghescu, T. (2005), *Greening the Lisbon Agenda? Greening of The Lisbon Agenda Conference*, EPSD, Strasbourg – unpublished materials.

Michalik K. (2014), *Zużycie techniczne budynków i budowli*, Prawo i Budownictwo, Chrzanów.

Pieniążek A., Szelań J., Żurawski J. (2015), *Izolacje termiczne dachów skośnych*, „Izolacje”, no 2.

Standard (2004), *PN-EN 1990: 2004 Eurokod. Podstawy projektowania konstrukcji*.

Standard (2005), *PN-ISO 15686: 2005 Budynki i budowle – Planowanie okresu użytkowania*.

Standard (2008), *ISO 15686-5: 2008 Buildings and constructed assets – Service – life planning – Part 5 Life – cycle costing*.

Standard (2012), *PN-EN 15978: 2012 Zrównoważone obiekty budowlane. Ocena środowiskowych właściwości użytkowych budynków – Metoda obliczania*.

Standard (2014), *PN-EN 15804+A1: 2014-04 Zrównoważoność obiektów budowlanych – Deklaracje środowiskowe wyrobu – Podstawowe zasady kategoryzacji wyrobów budowlanych*.

Standard (2014), *PN-EN 16309+A1: 2014-12 Zrównoważoność obiektów budowlanych – Ocena socjalnych właściwości użytkowych budynków – Metodyka obliczania*.

Standard (2015), *PN-EN 16627: 2015-10 Zrównoważoność obiektów budowlanych – Ocena ekonomicznych właściwości użytkowych budynków – Metody obliczania*.

Ustawa prawo budowlane z dnia 7 lipca 1994 r. (1994), Journal of Laws of 3 March 2016, item 290.

Ustawa prawo zamówień publicznych z dnia 29 stycznia 2004 r. (2004), Journal of Laws of 14 July 2016, item 1020.

Wall S. (2011), *Nowe kierunki normalizacji europejskiej związane z wdrożeniem zasad zrównoważonego rozwoju w budownictwie*, „Materiały Budowlane” no 3.

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Russian government activities during social and economic space formation of the Russian retail⁸

Abstract

The main reason of continuing discussions about differently oriented government actions during the formation of quite contradictory social and economic space of the Russian retail is that the dynamics of retail trade turnover and paid services to the population from the end of 2014 start to fall rapidly. The article presents the results of original research of relationship between government, business, and retail, in the context of key societal changes taking place in the Russian economy and politics. The government is represented as a special organization of political power, which has a special coercive power, and expresses the will and interests of the ruling group; is noted that the executive and legislative branches of government are both important in analyses of retail market. The article deals with the real impact of business projects during acceptance of amendments to the Federal Law No. 381-FZ "On the Fundamentals of State Regulation of Trade in the Russian Federation" on the basis of expert and statistical data. The article analyzes the consequences of informal practices of the new Russian national project to support small and medium-sized enterprises, using the terminology of R. Merton and P. Sztompka.

Keywords: economic space formation, Russia, retail

Działania rządu podczas tworzenia przestrzeni społecznej i ekonomicznej dla rosyjskiego handlu detalicznego

Streszczenie

Głównym powodem kontynuowania dyskusji o różnie ukierunkowanych działaniach rządu podczas tworzenia zupełnie sprzecznych społecznych i gospodarczych rosyjskich przestrzeni detalicznych jest to, że dynamika obrotów handlu detalicznego i płatnych usług dla ludności od końca 2014 roku zaczęła szybko spadać. W artykule przedstawiono wyniki oryginalnych badań relacji między rządem, biznesem i handlem detalicznym, w kontekście głównych zmian społecznych zachodzących w rosyjskiej gospodarce i polityce. Rząd jest reprezentowany jako specjalna organizacja władzy politycznej, która dysponuje szczególną mocą przymusu, i wyraża wolę oraz interesy grupy rządzącej. Należy zauważyć, że zarówno władza wykonawcza, jak i ustawodawcza są ważne w analizach rynku detalicznego. Artykuł porusza problem rzeczywistego wpływu projektów biznesowych w odniesieniu do poprawek przyjętych do federalnej ustawy nr 381-FZ "O podstawach regulacji handlu w Federacji Rosyjskiej". Wykorzystano do tego dane statystyczne i eksperckie. W artykule, używając terminologii R. Mertona i P. Sztompki, analizuje się konsekwencje nieformalnych praktyk nowego rosyjskiego projektu wsparcia małych i średnich przedsiębiorstw.

Słowa kluczowe: kształtowanie przestrzeni gospodarczej, Rosja, rynek detaliczny

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JEL CODE: M1, M2, M3

Introduction

Russian retail developed without interference from the government regulations for a long time. The situation has changed radically in recent years, with the government now actively controlling the important market segments. However, the effectiveness of such controls is not clear. On the one hand, retailers and suppliers form their own relationship of cooperation and try to find new ways of mutual control over each other's activities. On the other hand, almost all activities in retail form both formal and informal relationships, which contributes to promoting their products effectively, shifting the government representatives from this interaction process. This contradiction determines the actuality of present research.

The authors have formulated a hypothesis about the nature of the relationship between leading market participants and government institutions. This interaction does not have a definite character; it manifests in the active government control over the trading sector, but in disputed areas, unsupported by direct market participants. Such sensitive issues as the protection of small and medium-sized enterprises, quality control of manufactured goods, the labor market in the area of trade and production remain open. The purpose of this work is to disclose conflicts of interaction between government, business, and retail, in the context of key societal changes, taking place in the Russian economy and politics.

Scientific methods of theoretical and applied research, including systematic, comparative analysis, statistical data, and study of database materials: Ebsco, Elibrary, Emerald, Scopus, Web of Science, data from Federal State Statistics Service (Rosstat) were used by the authors. This paper includes main economic and sociological theories about interaction between government and business in the retail sector, analyzes actual information about the Russian retail market in figures, presents the subject-object scheme of regulation in the retail sector, describes its elements and discusses the consequences of government regulation in retail with some challenges and solutions.

Economic and sociological concept of government, business and retail interaction

The theoretical basis in the study of government and business interaction is institutional research (Brown 1987, pp. 5-36; Commons 1924, 1931, pp. 69-76; Veblen 1984, 2007). Representatives of institutionalism focus on the problems of authority, vertical mobility, property, monopolization, increasing government intervention in social and economic processes, in the context of economic realities research (Blaug 1992, 1994; Stiglitz 2000, 2012). Developments in the institutional dynamics and deformatization of rules are also of interest to researchers (Radaev 2007, 2008, pp. 20-50, 2009, pp. 3-30, 2011). Issues relating to the impact of government policy on the development of economy and society, conflicts of different interest groups in the economy (Akhmedzyanova 2013, pp. 84-96; Davydenko, Romashkina, 2013, pp. 95-104; Kaźmierczyk 2013, p. 65).

The discrepancy between the formal ideology of market reforms and the real socio-economic environment directs a large numbers of people to self-interpretation of the shared expectations and the search of appropriate adaptation forms on the basis of formed ideas and experience. R. Merton's conclusion made as a result of explicit and latent institutions functions analysis, according to which the functional defects of official organizations generate an alternative, informal structure for implementing existing needs more effectively seems appropriate (Merton 1968, 1976). Most of social relationships, including economic ones, are informal. The formation of an informal organization within the formal structure contributes to the more efficient functioning and to meeting the needs of its members in some cases (Sztompka 1993, 1999, 2005). The scale of informal economic relations is primarily associated with the ineffectiveness of formal institutions, constraining the process of implementing its activities

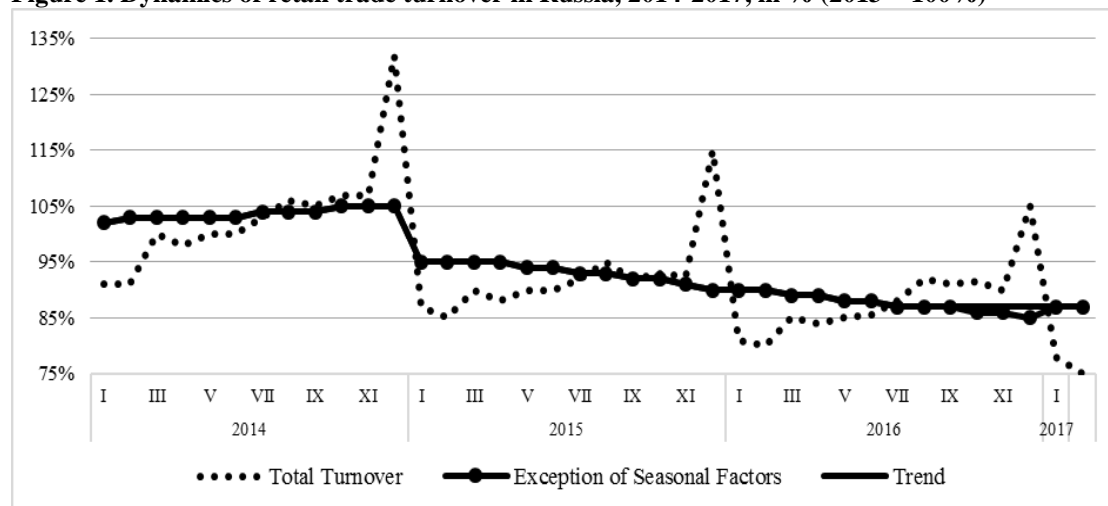
by market participants, according to the Hernando de Soto's neoinstitutional theory (de Soto 1989, 2000, 2006).

D. North's approach seems to be more effective. Three interrelated elements regulating specific areas of public relations were singled out in the internal structure of any institution. There are systems of formal and legal, administrative and organizational norms and rules established and regulated by the authoritative and administrative structures; informal rules, embedded in the culture of each society; norms and patterns of behavior and legal mechanisms of social control and the implementation of these rules. Correlation between the effectiveness and extent of presented elements define those institutional constraints that could pursue own free activity (North 1997; North, Wallis, Weingast 2011). Theories of modern researchers reveal the problems of trust between market participants, their interaction in different types of economies (Rippe, Weisfeld-Spolter, Dubinsky, Arndt, Thakkar 2016, pp. 344-362); formation of strategic alliance between market actors (Butigan, Benic 2016, pp. 77-112); different business strategies of retailers, manufactures, government structures (Binkley, Chen 2016, pp. 557-584). Author's research complements the analysis of interaction between government and business on an example of contradictions disclosure arising between the key participants at retail market, demonstrates the effects of government regulations during the formation of social and economic space of the Russian retail.

Russian retail market dynamics

The main reason for the continuing discussions about divergent government actions during the formation of quite contradictory social and economic space of the Russian retail is that the dynamics of retail trade turnover and paid services to the population began to fall rapidly at the end of 2014. Retail trade turnover fell by 10% at the end of 2015, it was the worst figure in the last years of statistical surveys. Further decline in retail trade turnover in 2017 is observed (Figure 1).

Figure 1. Dynamics of retail trade turnover in Russia, 2014-2017, in % (2013 = 100%)

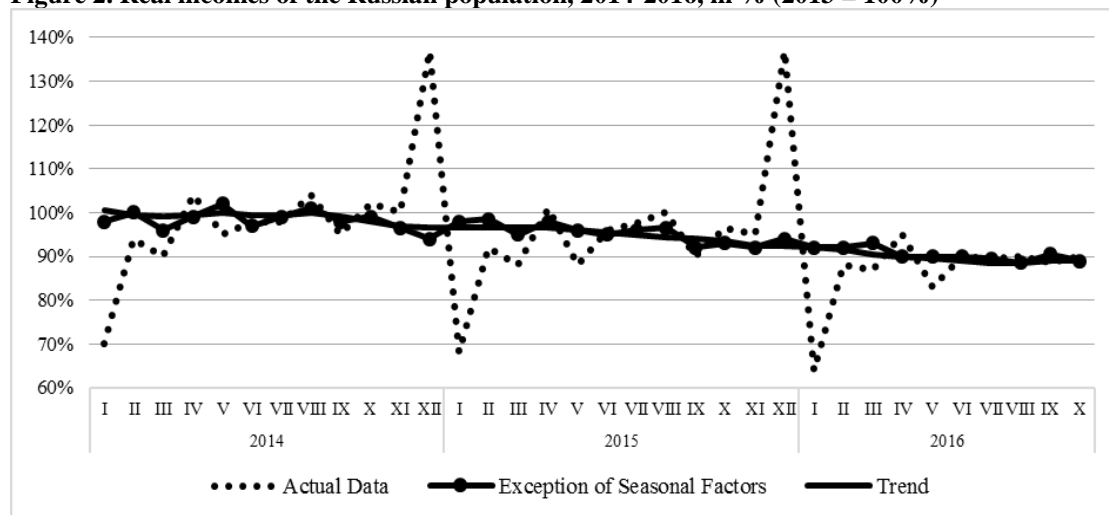


Source: Rosstat (Federal State Statistics Service) website, retrieved 25th April 2017, http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/enterprise/retail/#.

The rate of monthly reduction of retail trade remains one of the most alarming indicators for the Russian economy. Retail turnover was lower by 5.3% in November 2016 than in November 2015. The rate of retail sales falling ranged in the interval from minus 6.4% to minus 4.9% with no apparent signs of slowing down since the beginning of 2015. The average reduction in retail trade turnover was minus 5.6% in the first seven months of 2016, according to Rosstat. This statistic takes into account the decline in sales of both food and non-food goods. Moreover, the rate of non-food goods sales drops slightly higher – from minus 7.1% to

minus 5%; while sales of food products decreased with a rate of minus 3.2% to minus 6%, from the beginning of the year. Retail trade turnover is falling during two consecutive years. Decrease is stable by 5-6% at last few months to the previous year, according to Rosstat data (Figure 1). Considering that the retail sector has been one of the most rapidly developing in Russia and its dynamics were strictly positive from 2000 to 2014 (except the period of financial and economic crisis in 2009)⁹. The increase from 4% to 7% was observed during this period, and therefore the downward trend of the retail business in Russia causes a strong concern in the last two years¹⁰.

Figure 2. Real incomes of the Russian population, 2014-2016, in % (2013 = 100%)



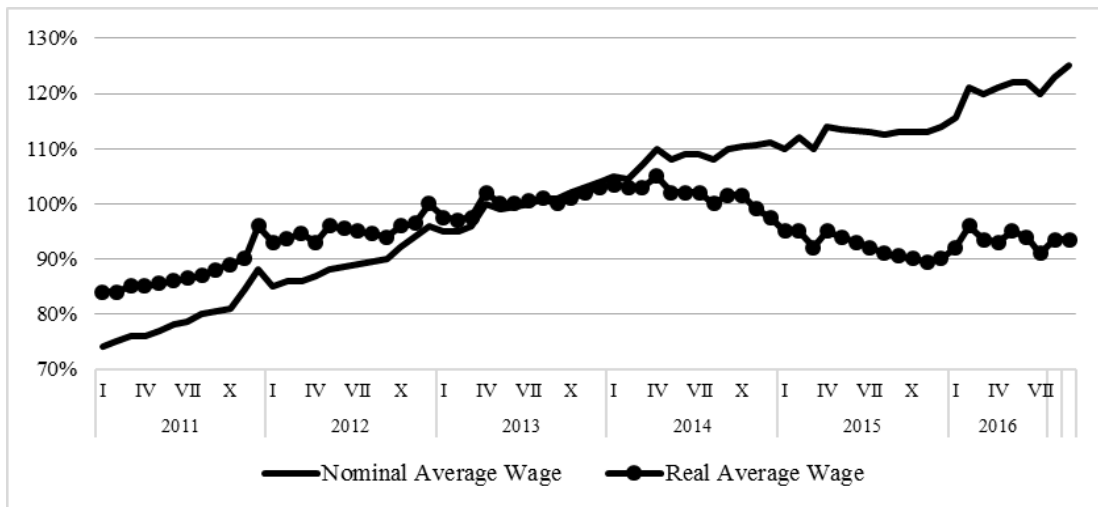
Source: Rosstat (Federal State Statistics Service) website, accessed 25th April 2017, http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/population/level/#.

It makes sense to compare the downward retail business trend with the dynamics of household income in Russia. Real disposable income (after obligatory payment deduction) has been continuously falling during last two years (2015-2016), according to Rosstat (Figure 2). These values decreased by 5.9% year-over-year in October 2016, which is twice more than in September 2016. The peak decline was in August 2016, when Russian incomes fell by 8.3%, and reached the maximum since 2008. In turn, the negative trend of real wages dynamics (Figure 3) decreases the possibility of a recovery in demand among Russian consumers.

⁹ According to the data of Federal State Statistics Service, section Retail trade, public services, tourism http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/enterprise/retail/#. (retrieved: 25th April 2017).

¹⁰ According to the data of Federal State Statistics Service, section Retail trade, public services, tourism http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/enterprise/retail/#. (retrieved: 25th April 2017).

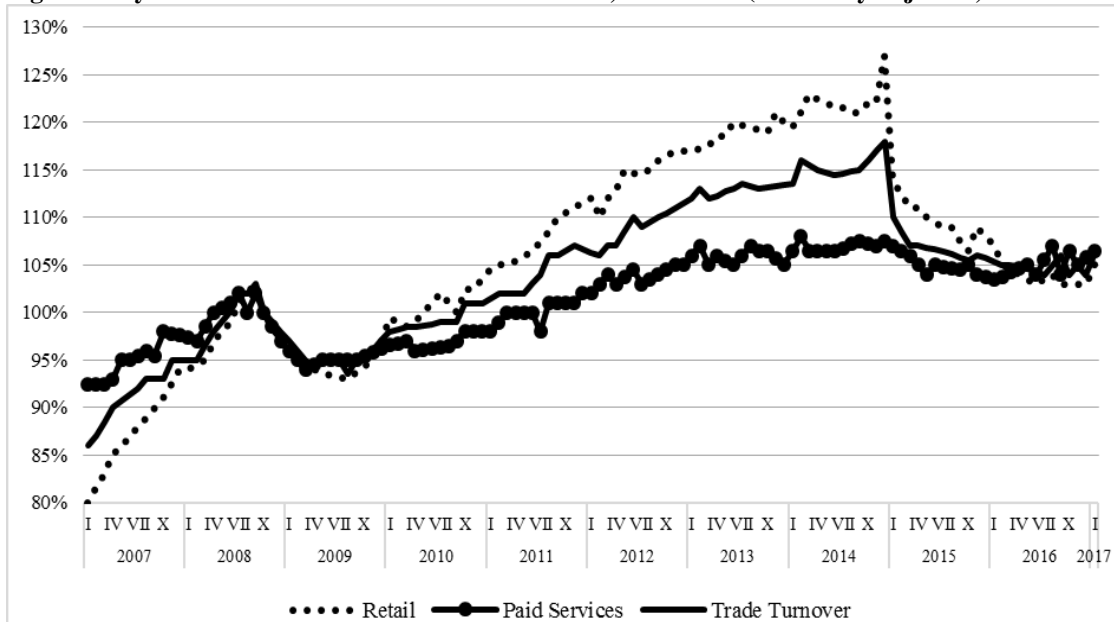
Figure 3. Dynamics of average nominal and real wages in the Russia, 2011-2016 (seasonally adjusted, 2013 = 100%)



Source: Institute Development Centre, Higher School of Economics (2016) Comments about the state and the business. No. 122.

The dynamics of trade turnover and paid services to the population in 2007-2016 (seasonally adjusted, 2008 = 100%) for the following positions: retail trade, paid services, trade and services is shown in Figure 4. The dynamics of retail trade, paid services to the population and trade turnover in Russia, were positive from July 2009 to January 2015, but then they declines – in July 2016, all three trends fell below the level as at July 2012 (Figure 4).

Figure 4. Dynamics of retail trade turnover in Russia, 2007-2017 (seasonally adjusted, 2008 = 100%)



Source: Institute Development Centre, Higher School of Economics (2017) Comments about the state and the business. No. 130.

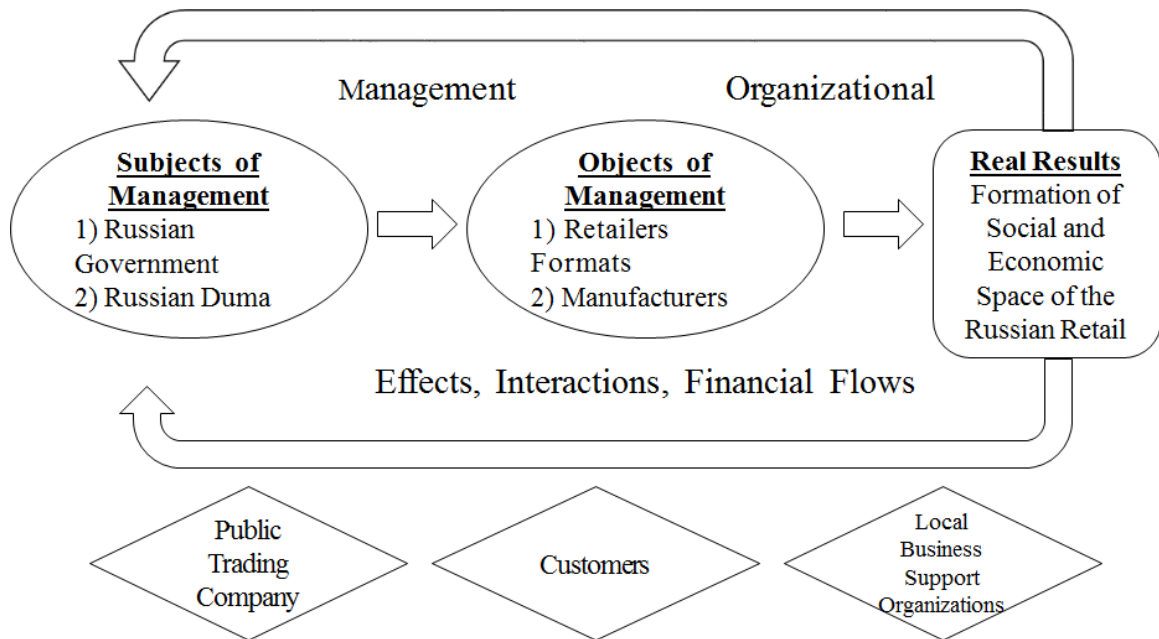
This decline is particularly strong when compared with January 2015: the scale of the fall was about 15% to the average level of 2014. Strictly positive dynamics in December 2014 and in January 2015 is caused by consumer excitement because of the weakening ruble to record levels. The trends shown in Figures 3 and 4 can be explained by: the confrontation of sanctions; the dependence of the Russian economy on currency jumps; the inability of the Russian industry for large-scale substitution of banned import of goods; the high increase of the goods

and services prices in different categories as a consequence. Such macroeconomic factors obviously have a significant impact on the interaction of all market participants. The question arises: what has been happening in Russia during the last two years (2015-2016)? Are we seeing a long-term level of recession in the considered parameters? Are there any other reasons except economic dependence on resources and Western innovation?

The model of Russian retail management

It makes sense to identify the most important players and their special interests in the research process from the standpoint of the subject-object management analysis of retailing in Russia for a more precise description of the current and forecasted situation (Figure 5). Government actions and real results during the formation of social and economic space of the Russian retail market can be represented in the form of three large blocks of the subject-object retailing management scheme in Russia with feedback, using the known methodology of system analysis (Optner 1965; Van Gigch 1978).

Figure 5. Subject-object scheme of Russian retail management



Source: own study.

Substantial elements of the "Block 1" management subjects as regulators constitute the concept of "government activity": (1) Government of the Russian Federation, represented by the Ministry of Economic Development, Ministry of Industry and Trade, Ministry of Finance, Ministry of Transport, the Federal Antimonopoly Service, each of which carries a targeted and quite fundamental impact on retail as an object of management; (2) State Duma, which generates the basic laws for the retail sector. "Block 2", management objects include: (1) retail, retail formats, stores and their representatives, (2) manufacturers.

Public trade organizations are particularly important: Retail Companies Association (AKORT), which brings together the largest retailers; Regional Chambers of Commerce and Industry, which bring together representatives of the business community and the administration in order to promote the development of regional economies; Intersectoral Expert Council on development of the consumer market (MES), which includes both retailers and suppliers, and which supports the principles of self-regulation of markets, reflecting the honest, transparent and fair retailers-suppliers relationships both at formal and informal levels. Social

and political organization of business support, protecting business interests are also important ("Russian Union of Industrialists and Entrepreneurs", "Support of Russia", "Business Russia" and others). "Consumers" are essential in the developed subject-object retailing management scheme. They buy and consume all various products, goods and services provided by retail, pay for them, and thereby generate cash flows which have an absolutely life-saving and fundamental influence on all of the components provided by the presented model (Figure 5).

All communications – both direct and inverse – expressed not only in the management and organizational impacts and interactions, but most importantly – in the financial flows, which are fixed between the subjects and objects of management, in the form of actual results of their interaction. "Block 3" includes actual results in the considered subject-object management scheme – it is the results factually obtained or to be obtained in the process of subjects and objects management's interaction. The real results of the proposed conceptual identification are dynamic data presented in Figures 1-4, namely the dynamics of retail trade turnover, the dynamics of real disposable income, the dynamics of the average nominal and real wages, the dynamics of trade turnover and paid services to population – all consequences of the interaction between presented subjects and objects of management in Russia.

Government regulations for retail business

According to the expert survey commissioned by the Federal Antimonopoly Service among the representatives of business, 51% of the respondents consider procedures of trading activities control as effective (Federal Antimonopoly Service, 2016). Only a third of the respondents positively evaluate the impact of sectoral business associations on the development of competition. It is noted that companies often have to apply for explanations of trade law application in particular situations. However, the answers are usually formal, in particular, only the citation of legal articles. Experts believe that the application of trade law is still shifted toward retailers, while ignoring the large suppliers with significant negotiating power, and able to put pressure on the retailers. One should also note the absence of coordinated action at different levels of government regulation in trade sector. Also, according to experts, in crises, government regulators should focus on stimulating measures to support the economy and avoid introducing strict regulation at legislative level, in particular related to issues, which can be resolved by stimulating measures or at self-regulatory level (Federal Antimonopoly Service 2016).

In this article, the authors attempt to draw attention to one of the key management decisions during the formation of public social and economic space of the Russian retail market, namely the approval of amendments to the Federal Law No. 381-FZ "On the Fundamentals of State Regulation of Trade in the Russian Federation" by the Federation Council on June 29, 2016 adopted earlier (on June 24, 2016) by the State Duma. Market participants continue to adapt themselves to the new environment, despite the fact that every such amendment toughens the activities of retail chains. Prices of goods rise and fall, instead of seeing shopping shelves filled with cheap and quality goods. The new version of trade law was published on July 3, 2016. One of its key provisions is the next revision of the contractual relationships between retail chains and goods suppliers.

The concept of "trade network" is specified, which is now recognized as a combination of two or more commercial properties. Thus, the effect of trade law applies to a larger number of trade objects. The total remuneration paid to the retail chains by suppliers for the purchase of certain amount of product is limited to 5% (Federal Trade Law 2009). At the same time the value added tax and excise duties are excluded from the calculation of this total amount. Various payments figured in the supply agreement previously, for example, charges for marketing and payment product placement on shelves, different bonus payments, and their sizes were unlimited. In accordance with the new editing maximum payment, postponement for retail

chains is reduced in favor of goods suppliers, for 4 days, on average, for different categories of goods (Federal Trade Law 2009).

According to analysts, reduction of goods payment delays will lead to the growth of leverage for the major retailers, growth of average debt for retailers. Decrease of the size of bonuses from suppliers will lead to a decrease in profits and profitability of retailers in the short term. Although the major operators of retail chains have more opportunities for adapting to new rules than small enterprises, the adopted amendments will have an impact on them as well. Retailers will be limited in the ability to compensate for lost bonuses by raising prices because of the low purchasing power of the Russian people and increased competition. They will find it difficult to change suppliers due to the current food embargo. Trade formats will require additional investments in working capital as a result. The limitation period for bringing to administrative responsibility for violation of legislation is also increased from 2 months to 3 years, with the purpose of tightening control (Federal Trade Law 2009). The formulations of offenses and sanctions for their fulfillment are now clarified.

Nevertheless, market participants continue to seek new ways of working around the rules, e.g. the signing of contracts with suppliers about marketing promotion of goods, contracting supplies through subsidiaries, and so forth. All this, of course, increases the volume of document circulation - all payments used to be registered in one supply agreement, but now retailers sign several contracts with supplier and thereby try to comply with the terms of the authorized amendments of the Russian trade law. In addition, retail chains are deprived of creditors, who used to function as suppliers, and they are looking for new ways to recover the losses incurred, including attempts to shift the costs on to consumers.

Conclusions

The analysis of Russian government actions and their real results during the formation of social and economic space of the Russian retail sector make it possible to conclude with a few clear conceptual theses. The growing distance between the market actors, representatives of legislative and executive authorities, and the subjects of trade sector, including small and medium-sized enterprises, leads to misunderstanding and rejection of the state institutions, which can lead to their deformation. It should be understood that all retail formats, including retail chains, are complex socio-economic organisms, huge and branched, the main advantage of which is to provide the widest assortment of goods at affordable prices to consumers, and appropriate distributing of manufactures' goods, which certainly promotes development of consumer culture and prompts expansion of the retail market. Consequently, management and regulatory actions from all control subjects should be, according to the authors, directed at maintaining the activity of retailers and the retail sector, rather than trying to implement support for manufacturers at the expense of retail formats. It is obvious that in order to increase the competitiveness of production, especially food products, additional investments in production will be required.

References

- Akhmedzyanova R. (2013), *Formation and maintenance of partnerships in the retail sector*, "Journal of Economic Sociology", 1, pp. 84-96.
- Binkley J., Chen S. (2016), *Consumer Shopping Strategies and Prices Paid in Retail Food Markets*, "Fall", 50 (3), pp. 557-584.
- Blaug M. (1992), *The Methodology of Economics or how economists explain*, Cambridge University Press, Cambridge.
- Blaug M. (1994), *Economic Theory in Retrospect*, Business, Moscow.
- Brown S. (1987), *Institutional change in retailing: a review and synthesis*, "European Journal of Marketing", 21 (6), pp. 5-36.

Butigan N., Benic D. (2016), *Determinants of Capital Integration among Strategic Alliance Members in the Retail Sector: Evidence from Central and Southeast European Countries*, "Croatian Economic Survey", 18 (2), pp. 77-112.

Commons J.R. (1924), *Legal Foundations of capitalism*, Higher School of Economics, Moscow.

Commons J.R. (1931), *Institutional Economics*, "Terra Economicus", 10 (3), pp. 69-76.

Davydenko V., Romashkina G. (2013), *Economic mechanisms of formation and reproduction of the social structure of the region*, "Vesntik TSU. Sociology", 8, pp. 95-104.

De Soto H. (1989), *The Other Path: The Economic Answer to Terrorism*, Harper&Row Publishers, Inc, New York.

De Soto H. (2000), *The Mystery of Capital*, Random House Group Ltd, London.

De Soto H., Cheneval F. (2006), *Realizing Property Rights*, Rüffer&Rub, Zurich.

Federal Antimonopoly Service (2016), *Report on competition policy*, Federal Antimonopoly Service, Moscow.

Federal Trade Law (2009), No. 381-FZ "On the Fundamentals of State Regulation of Trade in the Russian Federation", Garant-Press, Moscow.

Institute Development Centre, Higher School of Economics (2016), *Comments about the state and the business*, No. 110.

Institute Development Centre, Higher School of Economics (2017), *Comments about the state and the business*, No. 130.

Kaźmierczyk J. (2013), *Konsensus Poznański i Konsensus Azjatycki – jak daleko do Konsensu Waszyngtońskiego? Analiza porównawcza. Pierwsze spostrzeżenia*, in: *Ekonomia dla przyszłości: odkrywać naturę i przyczyny zjawisk gospodarczych: IX Kongres Ekonomistów Polskich*, Polskie Towarzystwo Ekonomiczne, Warsaw, p. 65.

Merton R. (1968), *Social Theory and Social Structure*, Free Press, New York.

Merton R. (1976), *Sociological Ambivalence and other Essays*, The Free Press, New York.

North D. (1997), *Institutions, Institutional Change and Economic Performance*, Economic Foundation Book, Moscow

North D., Wallis D., Weingast B. (2011), *Violence and social orders. Conceptual framework for the interpretation of the humanity written history*, Publishing Gaidar Institute, Moscow.

Optner S. (1965), *Systems analysis for business and industrial problem solving*, Prentice Hall, New Jersey.

Radaev V.V. (2007), *Capture the Russian territory: the new competitive situation in the retail trade*, HSE Publishing House, Moscow.

Radaev V.V. (2008), *Modern economic and sociological concept of the market*, "Economic Sociology", 1, pp. 20-50.

Radaev V. (2009), *Market authorities and market exchanges: suppliers-retailers relationships*, "Russian Journal of Management", 2 (7), pp. 3-30.

Radaev V. (2011), *Who holds power in consumer markets: the relationship between retailers and suppliers in modern Russia: the ratio of retailers and suppliers in modern Russia*, Higher School of Economics, Moscow.

Retail trade, public services, tourism (2017) Federal State Statistics Service, http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/enterprise/retail/#. (Accessed: 25th April 2017).

Rippe C., Weisfeld-Spolter S., Dubinsky A., Arndt A., Thakkar M. (2016), *Selling in an asymmetric retail world: perspectives from India, Russia, and the US on buyer – seller information differential, perceived adaptive selling, and purchase intention*, "Journal of Personal Selling & Sales Management", 36 (4), pp. 344–362.

- Stiglitz J. (2000), *Economics of the Public Sector*, W.W. Norton&Company.
- Stiglitz J. (2012), *The Price of Inequality*, W.W. Norton&Company.
- Sztompka P. (1993), *The Sociology of Social Change*, Blackwell, Oxford – Cambridge.
- Sztompka P. (1999), *Trust: A Sociological Theory*, Cambridge University Press, Cambridge.
- Sztompka P. (2005), *Sociology. Analysis of Modern Society*, Logos, Moscow.
- Van Gigch J. (1978), *Applied General Systems Theory*, Harper&Row, New York.
- Veblen T. (1984), *The Theory of Leisure Class*, Progress, Moscow.
- Veblen T. (2007), *The Theory of Business Enterprise*, Business, Moscow.

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The Dimensions of Enterprise Innovation and Selected Trends on the Food Market

Abstract

Changes are occurring in the food market which are shaping the new face of enterprises that operate in that market. The boom of the food sector in Poland, as well as its expansion, is noticeable due to its innovation, among other things. Specific challenges faced by modern enterprises in the food market come from technological, economic and social spheres. The effect of those achievements are innovations which are the consequences of transformations taking place in the area of products, processes, marketing and organizational activities. Innovations are helping create new products, processes, marketing and promotion activities. Product innovations should be recognized as a leading direction of innovation development in the food industry. In that context, the direction of changes in consumption should be considered an important issue and one that requires further observation. The key role of enterprises involved in the food market is a skillful recognition of needs raised by consumers as well as specific segments and their satisfaction. Entrepreneurs should be aware that knowledge of the market and of consumers decreases the risk of misunderstanding customer needs and increases the chances of success. Leading directions of innovation include low-processed and pro-health products. The sector of functional convenience food is growing rapidly. There are also proposals for products that meet specific needs raised by consumers relating to their diet or lifestyle choices. Trends determine the development of innovation. We can be sure the supply of new products will never run out because the desire to differentiate from other producers, and fulfill the expectations, requirements and demands of their consumers will be an inspiration for their development.

Keywords: innovation, enterprise, food market, consumers trends

Wymiary innowacyjności przedsiębiorstw a wybrane trendy na rynku żywności

Streszczenie

Na rynku żywności zachodzą zmiany kształtujące nowe oblicze przedsiębiorstw związanych z tym rynkiem. Obserwuje się rozkwit sektora spożywczego w Polsce oraz jego ekspansję na skutek zmian, m.in. w zakresie innowacyjności. Specyficzne wyzwania, z jakimi mierzą się współczesne przedsiębiorstwa na rynku żywności leżą w obszarze technologicznym, ekonomicznym jak i społecznym. Efektem owych osiągnięć są innowacje, których następstwem są dokonujące się przeobrażenia w obszarze produktów, procesów, działań marketingowych jak i organizacyjnych. Innowacje kształtują nowe oblicze produktów, procesów, marketingu czy promocji. Za dominujący kierunek rozwoju innowacji w przemyśle spożywczym uznać należy jednak innowacje o charakterze produktowym. W tym kontekście za ważne zagadnienie, wymagające obserwacji przez przedsiębiorstwa funkcjonujące na rynku żywności, należy wskazać kierunki zmian w konsumpcji. Rolą przedsiębiorstw związanych z sektorem żywnościowym jest umiejętne rozpoznanie potrzeb zgłaszanych przez konsumentów, specyficzne segmenty i ich zaspokojenie. Przedsiębiorcy powinni mieć świadomość, że znajomość rynku i występujących na nim konsumentów zmniejsza ryzyko niezrozumienia potrzeb konsumentów i zwiększa szanse na sukces. Do rozwijających się kierunków innowacji można zaliczyć produkty niskoprzetworzone i prozdrowotne. Szybko rośnie segment żywność funkcjonalnej, wygodnej. Powstają też propozycje produktów, które spełniają szczególne

wymagania zgłaszane przez konsumentów względem diety czy stylu życia. Trendy determinują rozwój innowacji. Możemy być przekonani, że nigdy nie zabraknie nowych produktów, bowiem chęć wyróżnienia się i spełniania oczekiwań, wymagań i żądań konsumentów będzie inspiracją dla ich rozwoju.

Słowa kluczowe: innowacje, innowacyjność, przedsiębiorstwo, rynek żywności, trendy konsumenckie

JEL CODE: O31, E20, B22

Introduction

Many demographic, economic and social trends which can be observed around the world that exert considerable influence on production, consumption and consumer behaviours. These aspects, especially production and consumption, are characterised by increasing specialisation and segmentation, which are usually oriented towards niche markets. In this context, production takes responsibility for the needs of consumption, such as the search for goods meeting different needs, the selection, use and disposal as well as anticipation of the demand for these goods. These changes are the resultant of individuals and organisations and in consequence, they affect entire communities.

Innovations are a developing issue in economic sciences. Following the OECD methodology proposed by the authors of the Oslo Manual¹ (2006) (based on the criterion of objectivity), innovations are identified in the areas of product, process, marketing and organisation. New solutions initiate changes, which result in development. Innovative activity and the nature of innovation (breakthrough, incremental) are the elements strictly related to technology and they influence the competitiveness of market entities.

Enterprises' competitive strategies are also considerably influenced by changes in consumer activity, especially by increasing consumer awareness and knowledge of products and services. Product innovations are a leading trend in the food industry in the context of increasing significance of innovativeness². Consumer trends, i.e. trends of changes in consumption, are an important issue, which requires observation by enterprises operating in the food market. This powerful industry is increasingly often powered by consumers rather than producers. Understanding the final consumer is the basis of effective marketing. Enterprises operating in the food sector need to skilfully recognise the needs of consumers and individual segments and to satisfy them with available resources (financial, physical, human), competence and good management. These are key actions which need to be taken by enterprises in order for them to be successful. Entrepreneurs need to collect information about the market and its participants. However, the observation of economic practices shows that tasks related with these actions are neglected. The knowledge of the market and consumers as well as consumer orientation, which involves the recognition of consumers' expectations concerning food, reduces the risk of misunderstanding consumers' needs and increases the chance for success. World trends stress the role of the consumer, who is the shopper, purchaser and user of a particular good. Consumers have increasing influence on products and services. These individuals have different functions in market processes and they are a valuable source of information about the future of the market.

¹ The most common methodology in the European Union, an international standard in research on innovation and its effects used in statistical research of the Central Statistical Office in Poland.

² The research findings given in the report of the World Bank Group (2015) indicate that process innovations in enterprises were implemented half as frequently as product innovations. Marketing and organisational innovations were least frequently implemented. According to the authors of the report, this means that companies do not fully appreciate the potential of productivity related with the improvement of business processes, increasing marketing skills and strengthening organisational practices.

The aim of this article is to present selected consumer trends identified in the context of considerations concerning innovation and innovativeness of enterprises in the food industry. The author of the article emphasised selected problems related with the research subject, indicated the consumer role in creation of innovation and presented selected trends of changes in consumption. The considerations are based on studies of domestic and foreign publications, scientific journals and the Internet. The author of the article also used her experience gained while preparing the opinion about the innovativeness of enterprises in the food industry.

Selected problems of the innovativeness of enterprises in the food industry

In reference publications, innovations are regarded as a necessary element for effective operation of an enterprise, which is significant to its value and “which is strictly correlated with the company’s competitiveness, being its determinant” (Szymański 2013, p. 81). Innovation is the entity’s capacity to develop, implement and absorb new solutions, ideas and methods (Porter 1990, Drahoš, Maher 2004). When considering innovation it is necessary to mention the inextricably linked concept of innovativeness, which refers to the implementation of innovation as novelty³. According to the glossary of terms concerning Innovation and Technology Transfer (Matusiak 2011, p. 119), innovativeness is “a feature of business entities or economies, which refers to their capacity to create, implement and absorb innovation. It involves active engagement in innovative processes and taking actions leading to innovation”.

By active engagement in innovative processes and taking actions leading to innovation entities can gain measurable economic benefits, i.e. make profits, which will increase their significance and authority in the market environment. Actions leading to innovation bring benefits not only to entities but also to regions as they cause development of the national economy based on knowledge and innovative policy (Drucker 1992, Janasz 2003). This trend can be observed both in developed and developing countries (World Bank report)⁴. Since 2014 Poland has been classified as an economy oriented to effectiveness and innovations⁵. As J. Eaton and S. Kortum (1997) indicate, maintaining the competitive position of enterprises and entire economies on the contemporary market requires an adequate level of innovation and rate of its development in combination with technology. This depends on an entity’s or country’s resources and whether they can be used for making innovations. Market entities’ passive attitude to innovation may inhibit their development (they become less competitive) and the development of the region and in consequence, the development of economy.

Enterprises operating in the food market strive to constantly increase competition. In consequence, they prepare and implement different product innovation strategies. This results in products which have different degrees of novelty and originality. It is very difficult to be innovative in the food sector. Enterprises make primary and secondary innovations, the latter being much more common. Incremental innovations prevail over radical ones. This situation is caused by the willingness to copy and adopt “proven” steps taken by market leaders. However, these actions are not void of creative elements, because they are planned, regularly modified and improved. D. Sobotkiewicz and P. Waniowski (2006) stress that completely new products amount only to about 10% of all innovations. These innovations require that their authors have strong research bases.

³ Innovative Economy Operational Programme (IEOP) 2007-2013, p. 5.

⁴ <http://www.worldbank.org/pl/news/press-release/2012/02/09/innovation-and-technology-can-help-sustain-fast-growth-in-emerging-europe> (retrieved: 28 November 2016).

⁵ According to the data published in 2015 by the Polish Agency for Enterprise Development (PARP) in the “Report on the Sector of Small and Medium Enterprises in Poland between 2013 and 2014”, innovation-oriented countries were defined as the countries which may maintain high salaries and adequate living standard only when enterprises can compete by offering new, specialised products and other innovative solutions. In 2014 Poland was classified as an effectiveness-oriented economy. Analyses of this report provided results for innovation-oriented countries as the group of countries which Poland wanted to join.

It is necessary to stress the fact that the food sector in Poland could not flourish or expand without changes in the innovativeness of the entities operating in this market. As far as the time perspective is concerned, the development of the industry started earlier, even as early as the 1990s, when the political system changed – the totalitarian system was abandoned in favour of democracy and market economy. This change involved numerous transformations, and adjustment to new conditions and requirements at national, regional and local level. Poland opened to the world. Another important step was Poland's accession to the European Union (EU). Joining the EU structures and economic system resulted in changes, such as progressing specialisation of production, high quality of food products, diversification of production and markets, changes in the employment structure, processes of concentration and consolidation, new opportunities to acquire funds under external financing of investments.

Innovativeness (the development and implementation of innovations) is considered to be the driving force of economic growth. It gives a possibility to achieve high standards in business (efficiency and profitability) and improves the quality of life. Many companies are not usually ready for this undertaking and the risk it involves. This thesis is confirmed by the results of research conducted on entrepreneurs – innovativeness is of little significance to gaining competitive advantage (World Bank Group 2015).

The significance of the consumer to innovation

21st-century consumers are demanding because their choice of food products depends on considerably diversified factors. It is not only the product appearance and taste that matter but also the attributes which may create additional value for consumers (a combination of benefits). Consumers are increasingly often interested in the processes of production and distribution and they want to know not only how the product was made but also which ingredients were used for its production. They pay particular attention to the origin of these ingredients and concentrate on services provided before, during and after the sales. Consumers' increasing interest in innovation is an example of evolution in the attitude to innovations (Gutkowska 2011, Pee 2016).

K. Gutkowska (2011) and T. Zalega (2015) perceive consumers' innovativeness as a specific trait of their personality and the consistency of action. It is the capacity and readiness to purchase new products and services. Consumers stimulate the industry to make changes and improve products. In a way they initiate changes in the products offered. More diversified and better educated consumers, who expect higher quality standards, force entrepreneurs to notice certain individualism, which is so difficult to achieve nowadays.

Consumers' market behaviours are a strong determinant, which is taken into consideration in the innovation creating process (Gutkowska 2011). The most active and inventive product users are willing to take part in the creation process. They show their big interest in the product (Kall, Sojkin 2008). Taking clients' needs into consideration, maps of the consumption chain can be a useful tool for creating innovation, because they contain important information about consumers' needs and preferences. This tool is the solution which entrepreneurs can use when choosing supported innovation (based on data collected and analysed). This is an important element strengthening the formulation of trends in the innovativeness policy within a business entity. Innovation maps can be widely used, all the more so that they do not require considerable substantive and organisational outlay.

New needs are constantly generated in the market environment. There is a tendency to shorten the life of products, which is undoubtedly caused by the development of innovations and implementation of new technologies. The vector of the "objects of consumers' desire" is shifted towards new impressions and experiences (Goszczynska, Górnik-Durose 2010). The advantage of this tendency is the fact that it favours the idea of sustainable consumption. Consumers' increased attention to social, economic and environmental issues makes companies build their credibility and improve their image offered to clients and business partners. What

becomes increasingly important in the generation of sustainable products and services is open innovation combined, for example, with the concept of sustainable consumption (Arcese et al. 2015). However, the promotion of sustainable consumption is only one of possible trends in innovation. Many innovations lead to consumer attitudes. According to M. R. Salomon (2006), innovation can be positively received (regardless of the fact how significant the changes in behaviour caused by innovation may be) on condition that it is compatible with consumers' lifestyle, giving them an opportunity to try products, which should be simple and noticeable and they should provide a better offer than other goods in a particular branch.

Many large companies start using e-commerce business-to-consumer platforms to create new, more innovative and marketable products together with clients. Pee (2016) stresses the fact that empirical evidence for the client's influence on creation is still rare (open innovations, crowdsourcing – a form of consumers' integration in the process of creating values). The idea of creation can be stronger when it does not involve the decision to create. Participation in the creation of a product at the design stage may affect its innovativeness, whereas at the stage of commercialisation it may have stronger influence on the sales of a product. However, we can expect that in the future companies will increasingly engage clients/consumers in the process of product creation.

Selected consumer trends identified in the context of innovation

The analysis of consumer trends is a tool that enables observation of market processes, e.g. changing lifestyles, habits and cultural trends (Mróz 2013). Trends provide inspiration for the development of innovative solutions (e.g. concerning utility and quality traits of products or managing procedures applied by food producers), processing and adjustment of products in response to consumers' requirements and needs (both real and imaginary needs; existing and created needs). Trends of changes in consumption influence the development of production in terms of the innovativeness of market entities. There are numerous phenomena observed in the area of consumption and the rate of consumer changes is very high. In view of these facts it is natural that consumer trends need to be observed and investigated.

One of the interpretations generally defines trends as the "process of change, which is approached from the psychological, economic or social perspective. It may have short-term or long-term character and regional or global range" (Vejlgaard 2008, p. 9). According to B. Senauer, E. Asp, J. Kinsey (1991, pp. 58-59), "the trend indicates general movement or the direction of changes in attitudes and behaviours, which is characterised by strength and durability in relation to changes in the course of general patterns of consumption". The authors defined it as a mature fashion, which was tried, accepted and adopted by a considerable number of people. When we refer this approach to consumer behaviours, we can say that it concerns particular directions of changes in "model" consumers' lifestyles and it acts objectively, regardless of one's will and awareness. Trends in consumption are usually caused by the broad influence of different environmental factors, e.g. economic, social, political and technological factors, on purchasers' behaviours. In consequence, this leads to changes in patterns and models of consumption (Zalega 2013). The direction of a trend can be measured by means of indicators, measuring scales and indexes (Mróz 2013). It is characterised by certain momentum and durability (Kotler, Keller 2012). Some fleeting fashion trends change into trends lasting a few decades or even centuries.

Enterprises develop their activity under heavy pressure of time. A. S. Clausi⁶ (1999) stressed the fact that sometimes a product was ahead of its times and consumers did not ac-

⁶ Clausi presented three stories describing the introduction of new food products to the American market. He gave three examples of products which satisfied or did not satisfy consumers' expectations. These were: breakfast cereals with lyophilised fruit (strawberry, peach and bilberry), Gainsburger – dog food similar to a hamburger, Tang Breakfast Beverage – a granulated breakfast drink.

cept it although it was very good technologically and consumer needs and requirements were well recognised. Innovations which clients do not accept at a particular time may be abandoned for many years. However, later other companies may successfully launch them, having gained experience and drawn conclusions from earlier failures.

Considerable transformations occurring around the world favour the fragmentation of consumption and development of trends, which rapidly become absorbed in different geographical zones and subsequently, they are processed and differentiated. Enterprises must react to challenges resulting from trends. When a trend finds a susceptible ground, it is accepted under specific macroeconomic conditions. Then it is strengthened and begins to develop, being surprisingly strong and popular.

In view of the considerations presented in this elaboration, it is necessary to pay attention to the significance of strongly outlined trends of changes in consumption, which developed in combination with product innovations. The following trends in food development are presented below: functional foods, convenience foods and minimally processed foods.

Functional foods. Scientific research centres and agri-food enterprises conduct investigations to improve the nutritional value and sensory quality of products offered on the market. One of the aims of these investigations is to develop the technological processing methods which will give a possibility to offer new quality, health-promoting products on the market. The food products which were specially designed, are characterised by proven (documented) health-promoting values and have the form of normal food consumed as a regular diet component are defined as functional foods (Krygier 2011). Functional foods appeared in the mid – 1980s in Japan, where research on these foods started and later it resulted in industrial production (Janicki 2001). Japan was the first country to launch a new category of food with positive effect on human health under the FOSHU programme (Food for Specified Health Uses) (Menrad 2003). Educational actions and promotional campaigns aimed at increasing consumers' awareness and developing their positive attitudes to food favour the interest in functional foods.

Functional foods are classified according to specific ingredients. The following categories are distinguished: enriched food, high fibre food, probiotic food, low energy food, energising food and low cholesterol food (Academy of Nutrition and Dietetics, USA⁷). Functional foods have caught on in the US and Europe (the United Kingdom, France, Germany, the Netherlands, Poland). The demand for this food can be observed in the regions where people have higher income. Due to the definitions of functional foods and due to the fact that they comprise a wide range of foods with bioactive components companies often use them in their marketing actions. However, sometimes they are mistaken and misunderstood by consumers (Florea et al. 2016), as was proved by the results of other European studies (Menrad 2003). There is a trend in communication between enterprises and the market – companies give nutritional information on product labels. Thus, consumers can read about the health-promoting properties of food and see special symbols, which help them choose this food.

Innovations concerning functional foods can be observed in many branches of the food industry in Poland. They are a response to consumers' interest, growing awareness and attitudes to health-promoting values as well as their health care (Gutkowska 2011, Soboń 2015). Innovations in this food category consist in offering products containing substances of high nutritional value and characterised by specific properties. Apart from changes in the nutritional value, the offering of these products usually involves technological and sensory changes. Producers of baked goods have seen the possibility of health benefits resulting from the consumption of a particular type of food. Innovative production technologies based on whole-meal flour and functional additives (e.g. bran, sunflower seeds, pumpkin seeds, sesame seeds, spelt, flax seeds) improve the health and baking value of baked products (Borowska, Rejman

⁷ www.eatrightpro.org. (accessed on 17 November 2016).

2011). Crispbread producers increasingly often promote products with natural ingredients, e.g. buckwheat, evening primrose or inulin. The extrusion technique combined with different ingredients, e.g. black caraway, young oats, bran or buckwheat hulls, used in the technological process enable crispbread producers to make high-grade, ready-to-eat products, which are void of the possible effect of antinutrients. Bread products with dietary fibre, enriched with cultures of lactic fermentation bacteria, oily seeds and calcium are classified as functional baked products with health-promoting properties (Jeżewska-Zychowicz 2015). A wide range of meat products are also classified as functional foods as they combine probiotics, prebiotics, dietary fibre and inulin (Kozań et al. 2012). The dairy sector has also made considerable achievements in this area. There are low-lactose products (due to children's allergies) and products enriched with Omega-3 fatty acids available on the market.

The demand for functional foods will grow not only as a result of increasing health and nutritional awareness among consumers, but also due to the support provided by scientific research institutions to entities in the food sector (Achermowicza 2009, Tomaszewska et al. 2014). However, the lack of a precise approach to the term of functional foods and consumers' difficulties identifying these products may be a strong barrier to their development.

Convenience foods. Another strong and well-established trend determining the development of innovations is convenience foods. Since the 1970s the production of convenience foods and ready-to-eat foods has been increasing all over the world (Grunert 2012). "Convenience foods are the food products which require minimal work and short preparation time to be ready for consumption" (Janicki 1993, p. 228). Convenience foods offered on the market are usually processed and preserved food products, which usually require minimal and short technological preparation (e.g. heating, defrosting, diluting) at home or at work before they are ready to be consumed. The foods can be quickly prepared due to the lack of time limits, place limits and the context of the situation in which they will be consumed. They can be used as the main component of a meal or a snack eaten during the day, depending on consumers' approach and acceptance.

In reference publications products categorised as convenience foods are classified according to their readiness for consumption, the method of preservation and the approach to package (Świderski 2003, Górski-Warszewicz 2007). These issues are crucial to the convenience of food preparation, which is an important determinant affecting the choice of food (Steptoe, Pollard, Wardle 1995, Scholderer, Grunert 2005, Adamczyk 2010). Consumers are satisfied with convenience foods, including various products available in bulk as well as premium products (easy-to-use semi-prepared foods, frozen foods, instant foods, fast foods, snacks, takeaway foods). The results of the research conducted by N. Kahma et al. (2016) show that there are national similarities and differences in convenience foods. The results confirmed that saving time was the main motivation for the consumption of convenience foods. The influence of other aspects analysed in the study was dispersed and factors such as low costs, the health and taste consequences of convenience foods and the convenience of consumption differed in the group of countries under analysis. In four Scandinavian countries (Denmark, Finland, Norway and Sweden) women used less convenience foods than men. In Finland and Norway older respondents used this type of food less often than young ones. People living alone were the most frequent consumers of convenience foods. Education and occupation were of low significance to the consumption of convenience foods. The study conducted by A.I.A. Costa (2003) on Dutch people aged over 55 years showed that the respondents used convenience foods to save the time necessary for preparation of a meal and because they did not have cooking skills. Greater confidence and higher self-esteem resulting from the preparation of one's own meal from convenience foods were significant factors determining the choice of these products.

According to G. Adamczyk (2010), the development of this segment of food in Poland is significantly determined by macroeconomic variables, such as favourable economic climate, development of market economy, rich and diversified market offer, adoption of consumption models from Western European countries, development of technological innovations (development of food preservation methods, increased food processing, new systems controlling the quality of products, quality of organisation and food safety). Apart from the macroeconomic factors, the popularisation of convenience foods can also be attributed to consumers, who underwent transformation. There have been changes in consumers' lifestyles, more intense contacts with other cultures, better education and increased nutritional awareness. The value of time has increased and the living standard has improved. The income of socioeconomic groups has increased and become diversified. There have been changes in purchasing preferences, freedom of choosing and purchasing a variety of products available in different forms in retail outlets of various formats. Consumers have manifested diversified expectations concerning the offer, purchasing method and consumption of products. There have been changes in the structure of households. People in Poland have become more active economically, e.g. in their leisure activities, proportions between working time and free time, occupational activity, family model, availability. The increasing pace of life, convenience, individualisation of consumption and multitasking favour the search for these products and their consumption.

Minimally processed foods. Consumers are interested in the degree of food processing (Świdorski 2003, Chen, Anders, An 2013, Sillani, Nassivera 2015). However, an ordinary consumer finds it difficult to distinguish between food categories and highly or minimally processed products, for example, lasagne (pasta with cheese) as a ready-to-eat product, dried pieces of apples, tomatoes or mushrooms, brown bread or home-made soup (sold in jars or cartons). According to the spokesman of the Academy of Nutrition and Dietetics (USA), the largest organisation of food and nutritional experts, when we talk about processed food, it is necessary to define processing. Depending on the degree of processing, we can distinguish the following groups, ranging from minimally to ultra-high processed foods (Wolfarm 2016):

- minimally processed foods, e.g. vegetable salads, roasted nuts, simply prepared products, refined for consumer convenience;
- highly processed foods (peak to lock), e.g. tinned tomatoes, frozen fruit and vegetables, tinned tuna; these products 'block' the nutritional value and freshness;
- foods with additives improving flavour and consistency, such as sweeteners, seasonings, oils, colouring agents and preservatives, e.g. spaghetti sauce sold in jars, salad sauces, cakes;
- ready-to-eat foods, e.g. crackers, muesli and cold cuts (highly processed products);
- ultra-highly processed foods, e.g. frozen pizza and other frozen or ready-to-eat meals, which only require heating in a microwave oven.

It is thought that the technology used in the food industry causes health problems. Consumers have a low opinion about processed food because it causes a wide range of diseases of civilisation, circulatory system diseases (e.g. hypertension) and higher incidence of type 2 diabetes (Wolfarm 2016). The success of new technologies depends on consumers (Chen, Anders, An 2013). S. Sillani and F. Nassivera (2015) stress that consumers stimulate food innovations, which result in improved food quality and nutritional value. They have critical attitude to the technologies, which in their opinion, involve excessive modification of the original product and may be dangerous to health and the natural environment. Consumers' increased awareness results in higher demand for the food which is thought to be good for health. On the other hand, it causes consumers' reduced interest in the food which they think is void of positive effect on health or which may have negative effect.

Consumers commonly search for unique values so as to be different from other people. While shopping more and more consumers read information on product labels. There is grow-

ing significance of the best-before date among the factors that are decisive to the choice of products. Consumers want original and natural products with a relatively short best-before date. There is a conflict of expectations here. This issue can be easily illustrated with traditional, regional products, which are offered as fresh products, whereas their best-before date is extended (Nicoli 2012). Consumers need to face difficult nutritional choices and make a decision or answer the question whether they prefer highly or minimally processed food.

The terms 'minimally processed' or 'low processed food' can be defined in different ways. In the context of more conventional technologies, minimal processing consists in using the technology which gives a possibility to retain the nutritional and sensory values of food by making it less dependent on heat as the chief preserving procedure (Menichelli et al. 2012). It is interesting to observe the fruit and vegetables category to analyse the market offer referring to this trend of innovations. In Poland we can see a rising trend in the consumption of minimally processed fruit and vegetables, which follows the tendency observed in Italy. Studies on minimally processed foods concentrate on their microbiological quality, safety, processing and packaging (Allende et al. 2006, Alves de Azeredo et al. 2011).

Consumers' interest in minimally processed foods is the result of their evolving habits, nutritional behaviours and attitudes. This trend will be becoming more intense due to the emphasis on food quality and safety, increasing importance of the food origin and methods of production. Many consumers want 'genuine' products and authentic food. They search the market for as natural forms of products and meals as possible within a particular geographical and economic range. Therefore, producers need to show that they particularly care about the regulation and communication of methods of production, face consumers' apprehensions and retain market credibility. As results from the analysis of niche markets in Poland, such as the organic food market and the market of regional and traditional products, certification and labelling systems combined with marketing communication can be indicated as effective instruments causing positive changes in consumers' behaviours.

In view of the changes and consumer trends (both those presented in the article and a wide range of other trends observed by researchers) on the food market it is important to ask the question which trends will be the most important in the food industry in the future. As we observe food producers, we can see that they approach the issue of food quality by taking greater care of the ingredients, materials, methods and technologies of production as well as convenience (simplicity and easiness of use). They use various research methods to learn more about contemporary consumers and understand their behaviour. Online shopping for food is another developing tendency, but its share is still low in Poland. It is a challenge for the future. The author of the article is concerned about the value food enterprises and dealers offer to consumers to be successful on the market and what sort of products a food-conscious consumer will choose. These trends will develop in the future and they will be powered by the demand of consumers, whose interest, awareness and requirements concerning food and nutrition are growing. It is interesting and valuable to continue considerations concerning consumers and ask them the questions which types and groups of products they would like to consume in 5 or 10 years and how they see shopping in the future. These issues will be discussed in separate studies determining trends in food consumption from the consumer's perspective.

Conclusions

The issue of innovations and innovativeness of enterprises and the identification of trends of changes in consumption are complex problems characterised by many aspects. Contemporary enterprises are forced to undergo diversification. They create an additional value of products and they inculcate consumers with benefits which go beyond the regular attributes and functional benefits of products. Enterprises operating in the food market become engaged in

diversification through innovations. Consumers' demand and interest combined with consumption trends are significant factors stimulating action in this area.

Product innovations result from consumer trends (directional changes in consumer behaviours) and they are the predominant trend of innovations in the food industry. The food sector, food producers and food processing enterprises respond to consumer trends, but they less often create and anticipate these trends. The offer of innovative, functional, convenient, minimally processed and health-promoting products is increasing. Trends provide inspiration to develop and adjust products according to consumers' needs and expectations. The high dynamics of the food market combined with trends of changes in food consumption and innovations, especially product innovations, justify companies' interest in these innovations because they constantly generate new needs. It is necessary to observe and research consumer trends because they determine the development of innovations. We can be sure that we will never be short of new products because the need to stand out and meet consumer expectations, requirements and demands will inspire their development.

References

- Achremowicz B. (2009), *Nowe produkty a współczesne zalecenia żywieniowe*, „Przemysł Spożywczy”, nr 1.
- Adamczyk G. (2010), *Popularność żywności wygodnej*, „Journal of Agribusiness and Rural Development”, 4(18).
- Allende A., McEvoy J.L., Luo Y., Artés F., Wang, C.Y. (2006), *Effectiveness of twosided UV-C treatments in inhibiting natural microflora and extending the shelflife of minimally processed “Red oak leaf” lettuce*, „Food Microbiology”, 23.
- Alves de Azeredo G., Montenegro Stamford T.L., Campos Nunes P., Gomez Neto N.J., Gomes de Oliveira M.E., Leite de Souza E. (2011), *Combined application of essential oils from *Origanum vulgare* L. e *Rosmarinus officinalis* L. to inhibit bacteria and autochthonous microflora associated with minimally processed vegetables*, „Food Research International”, 44.
- Arcese G., Flammini S., Lucchetti M.C., Martucci O. (2015), *Evidence and Experience of Open Sustainability Innovation Practices in the Food Sector*, „Sustainability”, 7(7), DOI:10.3390/su7078067 (www.mdpi.com/journal/sustainability).
- Borowska A., Rejman K. (2011), *Spożycie pieczywa i preferencje konsumentów wobec innowacyjności produktowej branży piekarskiej*, „Polskie Stowarzyszenie Zarządzania Wiedzą. Seria: Studia i Materiały”, no 52.
- Chen Q., Anders S., An H. (2013), *Measuring consumer resistance to a new food technology: a choice experiment in meat packaging*, „Food Quality and Preference”, 28(2).
- Clausi A.S. (1999), *Rekcje konsumentów na nowe produkty*, „Przemysł Spożywczy”, no 12.
- Costa A.I.A. (2003), *New Insights into Consumer-Oriented Food Product Design*, Thesis. Wageningen University, the Netherland.
- Drahos P., Maher, I. (2004), *Innovation, competition, standards and intellectual property: policy perspectives from economics and law*, „Information Economics and Policy”, Vol. 16, Issue 1.
- Drucker P.E. (1992), *Innowacje, przedsiębiorczość. Praktyka i zasady*, Wydawnictwo PWE, Warsaw.
- Eaton J., Kortum S. (1997), *Engines of growth: Domestic and foreign sources of innovation*, „Japan and the World Economy”, Vol. 9, Issue 2.
- Florea L., Filip L., Banc R., Cozma A.M., Stanciu O., Gavrilă L.I., Istrate D., Miere D. (2016), *Consumers' knowledge, interest and attitude toward functional food in a Romanian population sample*, „Palestrica of the third millennium – Civilization and Sport”, Vol. 17, no. 1.

Goszczyńska M., Górnik-Durose M. (2010), *Psychologiczne uwarunkowania zachowań ekonomicznych*, Wydawnictwo Difin, Warsaw.

Grunert, K.G. (2012), *Convenience mad*, in: Holm L., Kristensen, S.T. (eds.), *Mad, mennesker og måltider*. 2. udgave, Copenhagen: Munksgaard.

Gutkowska K. (2011), *Innowacyjność konsumentów wobec produktów żywnościowych jako warunek rozwoju rynku żywności*, „Konsumpcja i Rozwój”, nr 1.

Górska-Warsewicz H. (2007), *Żywność wygodna w sektorze mięsnym*, „Przemysł Spożywczy”, no 7.

<http://www.worldbank.org/pl/news/press-release/2012/02/09/innovation-and-technology-can-help-sustain-fast-growth-in-emerging-europe> (data dostępu: 28.11.2016).

Janasz W. (2003), *Innowacyjność, struktury, modele i strategia rozwoju przedsiębiorstw*, Wydawnictwo US Szczecin.

Janicki A. (1993), *Żywność wygodna; definicje i etapy rozwoju*, „Przemysł Spożywczy”, no 9.

Jeżewska-Zychowicz M. (2015), *Innowacyjne produkty zbożowe z perspektywy konsumenta*, Wydawnictwo SGGW, Warsaw.

Kahma N., Mäkelä J., Niva M., Ganskau E., Minina V. (2016), *Convenience food consumption in the Nordic countries and St. Petersburg area*, „International Journal of Consumer Studies”, 40.

Kall J., Sojkin B. (2008), *Zarządzanie produktem – teoria, praktyka, perspektywy*, Wydawnictwo Akademii Ekonomicznej, Poznań.

Kotler P., Keller K.L., (2012), *Marketing*, Wydanie XIV, Dom Wydawniczy REBIS, Poznań.

Kozań K., Guzek D., Lange E., Głąbska D., Włodarek D., Wierzbicka A. (2012), *Produkty mięsne należące do grupy żywności funkcjonalnej z uwzględnieniem potrzeb chorych na nieswoiste stany zapalne jelit*, „Zdrowie Publiczne i Zarządzanie”, 10 (2), DOI: 10.4467/20842627OZ.12.009.0896

Krygier K. (2011), *Żywność funkcjonalna – co to dziś oznacza?*, „Przemysł Spożywczy”, no 4.

Matusiak K.B. (red.) (2011), *Innowacje i transfer technologii: Słownik pojęć*, dostępny na

http://www.pi.gov.pl/PARPFiles/media/_multimedia/B3828FECCCB1427E90E2750F5EAB39D3/20120216_161517%20Innowacje_i_transfer_tehnologii_Slownik_pojec.pdf (data dostępu 23.11.2016).

Menrad K. (2003), *Market and marketing of functional food in Europe*, „Journal of Food Engineering”, 56(2).

Menichelli E., Olsen N.V., Meyer Vh., Næs T. (2012), *Combining extrinsic and intrinsic information in consumer acceptance studies*, „Food Quality and Preference”, Vol. 23, Issue 2.

Mróz B. (2013), *Konsument w globalnej gospodarce. Trzy perspektywy*, Oficyna Wydawnicza SGH, Warsaw.

Nicoli M.C. (red.). (2012), *Shelf life assessment of food*. CRC Press.

Pee L.G. (2016), *Customer co-creation in B2C e-commerce: does it lead to better new products?*, „Electronic Commerce Research”, Vol. 16, Issue 2.

Podręcznik Oslo. 2006. *Zasady gromadzenia i interpretacji danych dotyczących innowacji*, Ministerstwo Nauki i Szkolnictwa Wyższego. Departament Strategii i Rozwoju Nauki, Warsaw.

PO IG – program Operacyjny Innowacyjna Gospodarka 2007-2013, https://www.poig.2007-2013.gov.pl/Dokumenty/Documents/POIG_X_2007.pdf (data dostępu: 10.11.2016).

- Porter M.E. (1990), *The Competitive Advantage of Nations*, The Macmillan Press Ltd., London.
- Raport (2015), *Innovation Union Scoreboard*, <https://badania.parp.gov.pl/polska-w-innovation-union-scoreboard-2015> (retrieved: 22.11.2016).
- Senauer B., Asp E., Kinsey J. (1991), *Food trends and the changing consumers*, Eagan Press, St. Paul, Minnesota, USA.
- Scholderer, J., Grunert, K.G. (2005), *Consumers, food and convenience: the long way from resource constraints to actual consumption patterns*, „Journal of Economic Psychology”, 26.
- Sillani S., Nassivera F. (2015), *Consumer behavior in choice of minimally processed vegetables and implications for marketing strategies*, „Trends in Food Science & Technology”, 46.
- Soboń M. (2015), *Konsumpcja mobilnych usług prozdrowotnych przez młodych konsumentów*, „Marketing i Rynek. Konsumpcja i Innowacje”, no 2 (CD), Wydawnictwo IBRKK, Warsaw.
- Sobotkiewicz D., Waniowski P. (2006), *Marketing, zagadnienia podstawowe*, Wydawnictwo Placet, Warsaw.
- Stepoe A., Pollard T.M., Wardle J. (1995), *Development of a measure of the motives underlying the selection of foods: the food choice questionnaire*, „Appetite”, 25.
- Szymański G. (2013), *Innowacje marketingowe w sektorze e-commerce*, Wydawnictwo Politechniki Łódzkiej, Łódź.
- Świderski F. (2003), *Towaroznawstwo żywności przetworzonej*, Wydawnictwo SGGW Warsaw.
- Tomaszewska M., Bilka B., Grzesińska W., Przybylski W. (2014), *Żywność funkcjonalna jako możliwość rozwoju polskich firm spożywczych*, „Zeszyty Naukowe SERiA”, tom XVI, zeszyt 3.
- Wolfarm T. (2016), *Processed Foods: What's OK and What to Avoid*. Published November 07, <http://www.eatright.org/resource/food/nutrition/nutrition-facts-and-food-labels/avoiding-processed-foods> (retrieved: 17.11.2016).
- World Bank Group (2015), Raport, *W kierunku innowacyjnej Polski. Proces przedsiębiorczego odkrywania i analiza potrzeb przedsiębiorstw w Polsce*, Ministerstwo Rozwoju, Warsaw.
- Vejlgaard H. (2008), *Anatomy of trend*, McGraw-Hill, New York.
- Zalega T. (2013), *Nowe trendy i makrotrendy w zachowaniach konsumenckich gospodarstw domowych w XXI wieku*, „Konsumpcja i Rozwój”, no 2(5).
- Zalega T. (2015), *Innowacje a konsumpcja i zachowania konsumpcyjne – wybrane zagadnienia*, „Marketing i Rynek. Konsumpcja i Innowacje”, no 2 (CD), Wydawnictwo IBRKK, Warsaw.

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Metody uelastyczniania wydatków budżetowych państwa

Streszczenie

Wydatki budżetowe są głównym instrumentem wykonywania zadań państwa. Cechą struktury wydatków budżetu państwa w Polsce jest wysoki udział wydatków sztywnych (prawnie zdeterminowanych). Ich przeciwieństwem są wydatki elastyczne umożliwiające finansowanie nowych wyzwań stojących przed państwem. W artykule podkreśla się potrzebę przeprowadzenia reform zwiększających „pole” podejmowania w miarę swobodnych decyzji w ramach polityki budżetowej oraz omawia się sposoby uelastycznienia wydatków budżetu państwa.

Słowa kluczowe: budżet państwa, polityka budżetowa, wydatki sztywne, wydatki elastyczne

Methods of increasing the flexibility of state budget expenditure

Abstract

Public expenditure is the main instrument for performing the tasks of the state. In Poland, the structure of public expenditure is characterized by a relatively high share of fixed expenses. It is the opposite of flexible expenses used for funding new challenges to be dealt with by the government. The paper emphasizes the need to carry out reforms to expand the "space" for free decision-making in terms of budgetary policy. It also discusses methods of increasing the flexibility of the state budget expenditure.

Keywords: state budget, budgetary policy, fixed expenses, flexible expenses

JEL CODE: H50, H61

Introduction

State budgetary policy is to manage income, revenues and expenditures of the state budget in order to achieve the social and economic goals set out by the government and parliament (Fedorowicz 1998, p. 7). The main instrument of pursuing this policy is the state budget, whose functions include: redistribution of revenue, allocation of budgetary resources and stabilization of the economy. Public expenditure is the main instrument for implementing the allocation of public finance functions, including the state budget. From a legislative point of view, budget expenditure encompasses the financial resources allocated by the government and parliament to maintain state authorities and bodies, and meet the ultimate and non-returnable needs of the public, both through organizational functions and the provision of public services to individual beneficiaries, all based on democratic and public decisions made in the name of common good (Dębowska-Romanowska 2010, p. 119). The economic sense of budgetary expenditure consists in the use of part of GDP for the purposes of satisfying collective social needs and other goals specified in the social and economic policy of the state (Owsiak 2005, pp. 19-32).

Budget expenditure has always been the subject of research by economists, but recent years have seen increased interest in this economic category, also among lawyers. The rank of expenditure as a measure of state budgetary policy grew in significance after Poland's accession to the European Union as, in doing so, the instruments of monetary and budgetary policy became limited. Given that taxes in the EU are harmonized and the budget deficit and public debt are subject to the restrictions of the Maastricht Treaty, the main role is assumed by budg-

et expenditure (Kasperowicz-Stępień 2011, p. 84). The 2008 economic crisis, along with the measures taken to overcome it, have had a negative impact on the outcome of EU budgets. Initially, in many of them, as a result of increased spending or a decline in income, the budget deficit increased. Implementing solutions to limit budget expenditure is currently underway, which further adds to the importance of the level and structure of these expenses.

The purpose of this article is to assess the structure of state budget expenditure in Poland from 1997 to 2015 in terms of the possibilities of the flexible development of these expenses by governmental authorities and the presentation of new budgetary policy instruments aimed at making budget expenses more flexible. The following thesis was adopted: the effects of implementing new budgetary policy instruments will only be visible in a few years.

National and foreign publications were referenced throughout this article. Given that the issues at hand are relatively modern, these were mainly documents developed under the auspices of various public institutions. Data on the amount and structure of state budget expenditure was derived from statistical yearbooks of GUS (Polish Central Statistical Office), reports from the Ministry of Finance on the implementation of that budget and from opinions on draft budget plans commissioned by the Chancellery of the Senate.

This article is structured as follows: following the introduction, the basic spending principles within the state budget were presented; later, the concept of fixed and flexible expenses was defined. The next section discusses the amount and structure of state budget expenditure in Poland and presents ways of making budget expenses more flexible. The conclusion addresses the objective and the main thesis assumed in this paper.

General principles of state budget expenditure

The size and structure of state budget expenditure is on the one hand determined by (Kosikowski 2011, pp. 108-109): type of state system, scope of state funding of public tasks, scope and state of public finances (economic conditions), degree of centralization of organization of public finances (number of special-purpose funds), level of decentralization of public finances, and level of budgetary revenue. Historical and social determinants also influence the level and structure of these expenses. These determinants are social customs and expectations towards the state regarding the fulfillment of material and social needs. Then, there are geopolitical determinants that result in additional burdens on the state, such as membership of international economic and military organizations. Equally important are the legal regulations determining the amount of these expenses.

The principles of budget spending, which are considered on the theoretical basis, are more or less accurately reflected in national and international legal regulations. In Poland, these rules were contained primarily in the 2009 Public Finance Act and they include (Wójtowicz 2011, pp. 139-140; Piotrowska-Marczak 2012, pp. 4-5):

- general principles of financial management of public finance entities (principles of budget planning and implementation);
- quantitative spending limits of different expenses,
- expenditure rules (anchoring¹, temporary expenditure rule in 2011-2012, and since 2013 stabilizing expenditure rule amended as of 2016),
- rules relating to the budget balance,
- standards on the amount of State Treasury debt and public debt,
- regulations for prudence procedures and recovery program.

Budget as a financial plan of the state should meet the requirements defined in the form of the so-called budgetary rules. One of them is the principle of flexibility, whereby the budget should allow for modifications in the amounts it contains, such as updating the amount of

¹ Budget anchoring was to apply in 2006-2009. Under it, the state budget deficit was to never exceed PLN 30 billion a year.

certain expenses, reallocation of budget appropriations, use of budgetary reserves and extra-budgetary income.

Fixed expenses – an attempt to explain the concept

State budget expenditure is varied and can be systematized according to different mutually complementary and interchangeable criteria. It is interesting and important to allocate state budget expenditures from the standpoint of the possibility of the government and parliament to exert influence on them (the criterion of the legal nature of expenditure). Under this view, expenses are divided into: fixed (determined, obligatory, related) and flexible (variable, remaining, discretionary).

There is no legal definition of fixed expenses, nor is this concept properly elaborated in the literature. It also is not referenced in GUS statistics. In government documents (e.g. draft budgets and reports from the Council of Ministers from its implementation), this term appeared around 1999, but its meaning was never clarified.

Fixed expenses are the part of state budget expenditures that the government is obliged to bear under national law, international and court agreements and rulings (Echeverry, Bonilla, Moya 2006, p. 2, Ruśkowski 2015, p. 11). T. Dębowska-Romanowska (2010, p. 127) defines fixed expenses as "the amount, time and mode of financing that are defined so that they exclude, wholly or substantially, the decision-making (political) power of the public authority authorized to represent that public entity in the field of financial sovereignty (autonomy) in the sphere of expenditure policy". Recovery of this sovereignty can only occur after repealing or amending the rules that create them in the first place.

Most authors equate fixed expenses with legally determined expenditure (e.g. Owsiak 2005, pp. 575-576)². The legal determination may consist in determining the amounts of individual expenses in legal regulations or rules for calculating the amount of specific expenditure. It does allow for adjusting the amount and direction of the expenses against economic and social realities³. It also prevents the rationalization of spending (Dębowska-Romanowska 2010, p. 127).

Determining the list and amount of fixed expenses is a daunting task for at least two reasons. There is neither the catalog of these expenditures nor the list of regulations, agreements or rulings that impose the obligation to bear them, whereas the Ministry of Finance often changes the way the state budget spending is presented in reports on the implementation of the Budget Act. I will therefore not go beyond indicating these budget expenses which are traditionally referred to as fixed (e.g. Owsiak 2005, p. 576; Szpringer 2006; Russel 2010, Budzyński 2011).

Fixed expenses are expenditures for servicing the Treasury debt. They derive from the concluded agreements and are shaped by the exchange rate fluctuations. Failure to service debt service would mean loss of credibility on the financial markets, which would hinder future borrowing and would also entail a number of negative consequences for undermining citizens' trust in the state. These expenses also include subsidies for FUS and KRUS. Withdrawing these subsidies would threaten the collapse of the entire social security system (Owsiak 2005, p. 243). The same is true of grants for PFRON (Polish National Disabled Persons' Rehabilitation Fund). In addition, fixed expenses include: subventions and sometimes subsidies for local government units⁴. This is because the amounts contained in the Budget Act for the payment of subventions are – and may be for subsidies – the grounds for claims

² Unlike C. Kosikowski (2011, p. 114).

³ Fixed expenses are only one manifestation of the ongoing process of limiting political freedom in spending public funds. Another example is public procurement law and regulations on public assistance cases. The rules on the spending limits, such as determining the allowable amount of the budget deficit, are similar in that regard (Dębowska-Romanowska 2010, pp. 128-129).

⁴ This remains nonetheless debatable (see Kańduła 2005, pp. 132-133).

made by these units (Dębowska-Romanowska 2010, p. 137). Expenditure on road infrastructure and national defense also falls within the scope of fixed expenses, and so does expenditure such as family benefits, alimony benefits, social benefits, various allowances and vouchers (e.g. for family, nursing and childcare), expenditures commissioned to ZUS and KRUS, as well as social insurance and health insurance contributions covered by state budget (e.g. for non-professional soldiers, caregivers of sick family members, parents on parental leave). Similarly, the expenditure on pension benefits paid out from the state budget for the so-called. uniformed services (soldiers and officers, e.g. customs officers), and the salary of the judges and prosecutors at rest, belongs to fixed expenses. They also finance the offices of the chief executives of state authorities, the control and protection of the law and the judiciary⁵. Furthermore, they include expenses for subsidizing the purchase of housing loans and the reimbursement of the guarantee premiums paid to the savers on the housing savings books. This group also includes expenditure for contributions to the EU budget and for financing projects with EU funds. T. Budzyński also includes in this category the expenditures for the subsidy fund located at *Bank Gospodarstwa Krajowego*, although it seems incorrect given that the amount of these expenses is determined annually in the Budget Act (*Act ... 2002*).

The nature of expenses on remuneration in the state budgetary sector and their derivatives is unclear. The Ministry of Finance (2010, p. 45) and some authors (Owsiak 2005, p. 576) classify them as flexible expenses, but they seem to better fit fixed expenses (Dębowska-Romanowska 2007, p. 291). This is because they are based on legal regulations (*Act ... 1999*), where the principle of wage valorization and the pay scale are determined. In some cases, semi-fixed expenses are defined within fixed expenses, with the total amount of expenditure dependent on the number of beneficiaries (Markiewicz, Siwińska 2003, p. 6). Semi-fixed expenses may also encompass state budget expenditures for multiannual programs and subsidies for local government units (especially for commissioned tasks) etc. (Ruskowski 2015, p. 12).

When discussing fixed expenses, one should pay attention to their characteristic features. The main determinant of fixed expenses is legal regulations (legal provisions, ruled sentences, signed contracts). These expenses are also conditioned by historical factors, such as the customary annual indexation of benefits paid from the state budget. They further derive from the state's membership of international economic and military organizations and from contracts concluded. They involve political struggle because, even in light of the failure to fulfill all of the campaign promises, their impact on the structure of spending is undisputed. The fixedness of expenses limits the possibility of using them as discretionary instruments of state stabilization policy.

Fixed expenses must be budgeted in the appropriate amount and incurred irrespective of the socio-economic situation of the state and the will of the Minister of Finance. They can be reduced only by changing the relevant legal provisions and renegotiating the agreements. Changing the size of fixed expenses is only possible in the long-term perspective. This characteristic means that these expenses limit the options of state authorities for optimal use of budget funds as they "bind" these bodies already at the planning stage. This can be detrimental from the point of view of improving the efficiency of expenditure, the level of what is known as pro-development spending, and the possibility of emergency state intervention (in times of natural disasters, economic crises) (Russel 2010, p. 6). In addition, in the event of a need to cut spending in order to keep budget deficits within the set limits, "the possibility of expanding these limits is narrowed and, consequently, it proves quite distressing to those mainly managing flexible expenses" (Szpringer 2006, p. 30).

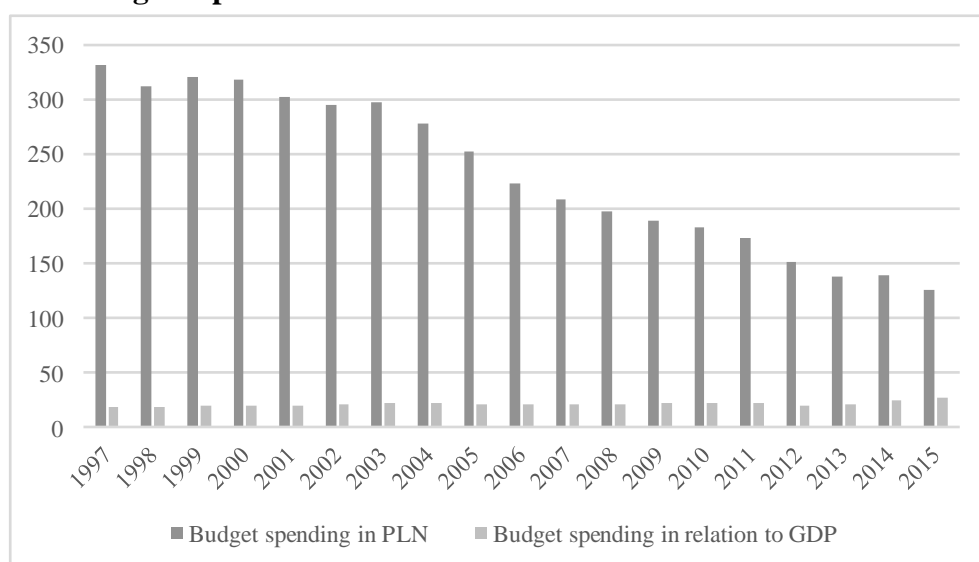
⁵ Financial plan drafts of these entities are included in the draft budget act and usually has not been subject to evaluation by the Council of Ministers or adjustment during parliamentary works. For several years, these expenses have been reduced in a discretionary manner by the parliamentarians.

On the other hand, the share of flexible expenses in budget expenditure determines the actual extent of freedom in allocating public funds for the implementation of public authority tasks. Flexible expenses reflect the government's and parliament's choices resulting from the hierarchy of socio-economic policy goals. These expenditures mainly include: subsidies for local government units (although T. Dębowska-Romanowska argues differently on this matter) and other entities forming (e.g. public universities) and not forming the public finance sector (e.g. non-governmental organizations, business entities), current (material) expenditures of state budgetary units and property expenditures. Sometimes they also include salaries and benefits for state officials (Szpringer 2006, p. 30, Owsiak 2005, p. 576, Kosikowski 2011, p. 120). The flexibility of some expenses is a relative term because in relation to some of them there are legal norms entitling to their receipt. Flexibility, in their case, is the issue of freely determining the amount of expenditure, rather than its occurrence at all (Kosikowski 2011, p. 120).

State budget expenditure in 1997-2015

Figure 1 shows the amount of state budget expenditure in 1997-2015. In the period under review, there was a nominal increase in state budget spending.

Figure 1. State budget expenditure in Poland in 1997-2015



Source: own study based on reports on the implementation of the state budget for the relevant years and verified estimation of gross domestic product for the period of 2010-2015 (www.stat.gov.pl, retrieved 21.10.2016).

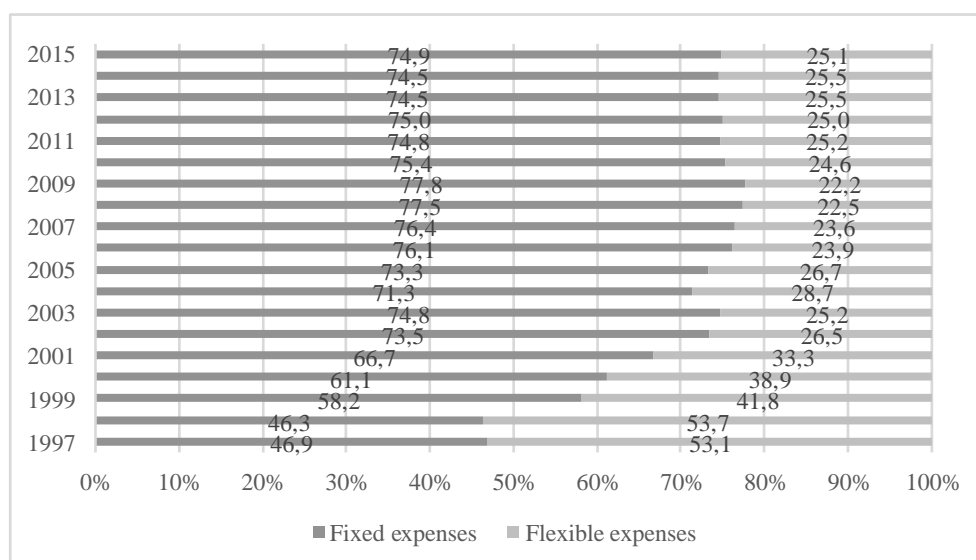
Only in 2010 and 2014 there was a nominal decrease in these expenses. A sharp increase in state budget expenditure occurred in 2001, having arisen from three factors: 1) the need to settle the liabilities resulting from the poor planning of the pension index in 2000, 2) repayment of outstanding state liabilities towards banks, mainly under the guarantee for housing savings books and interest on housing loans, 3) mistakes made in budget planning (income revaluation), which coincided with the economic downturn (Wernik 2007, p. 206). The drop in spending in 2010 was associated with the "freezing" of wages, whose effects in the following years were balanced out by the increase in their number (Baran, Sawulski 2016, p. 16). In 2014, the expenses amounted to PLN 312.6 billion and were 2.6% lower than in 2013, although their value was artificially lowered by approx. PLN 17.1 billion by transferring to FUS PLN 8.9 billion in the form of a loan (treated as disbursement, not expense) and reducing the

expenses on servicing the Treasury debt as a result of the takeover and redemption of treasury bonds held as assets of open pension funds transferred to ZUS (Wernik 2014, p. 8, 18).

The measure of budget spending is its relation to GDP. At first it accounted for about 22% of GDP, from 2004 it was at around 22% as well. Since 2011, these expenses account for less than 20% of GDP, which indicates their stability.

In the analyzed period, except for the years 1997-1998, fixed expenses dominated the expenditure of the state budget. These expenses grew in absolute terms as well as in relation to total state budget spending (Figure 2). For instance, in 2001, they were over PLN 113.0 billion and accounted for almost 67% of total state budget expenditure. Starting from 2004, they were affected by the obligatory contribution to the EU budget. At the same time, the classification of FUS compensation transfers was reduced due to the transfer of its part to open pension funds, known in Poland as OFE. That change triggered a reduction in the amount of fixed expenses and a simultaneous increase in the amount of budget disbursement. The highest share of fixed budget expenses took place in 2006-2009 when they accounted for as much as 76.1- 77.8% of total spending. A slight reduction of this share in the following two years (up to 75%) is, according to T. Budzyński (2010, p. 32), the result of transferring some of the expenditure to the EU budget.

Figure 2. Share of fixed and flexible expenses in state budget expenditure in 1997-2015 (in %)



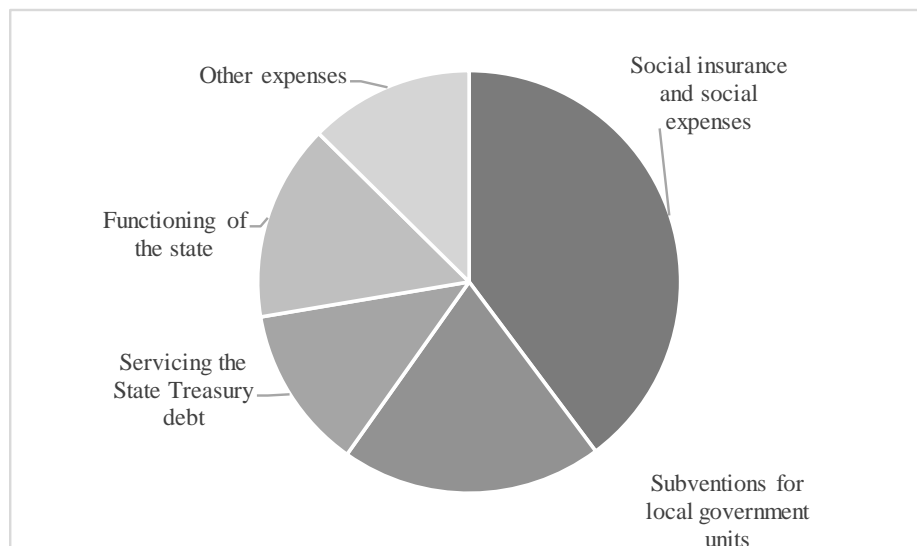
Source: own study based on: for 1997-2000 (Ministry of Finance 2002), for 2001-2004 (Ministry of Finance 2005), for 2005-2011 (Budzyński 2010, p. 31), for 2012-2013 (Budzyński 2012, p. 9), for 2014-2015 (Budzyński 2014, p. 10).

At the same time, it is worth recalling that when planning the state budget expenditure for 2011, the so-called temporary expenditure rule, which consisted in the fact that the increase in flexible expenses should not exceed 1% in real terms, introduced so as to hinder the growth of the State Treasury debt (Ministry of Finance 2010, pp. 42-43). In 2013-2014, the share of fixed expenses fell down to 75%, which is attributed to the impact of the disciplining expenditure rule (see Budzyński 2012, pp. 9-10), although the artificial lowering of expenditure must not be ignored either.

Although some of the expenses classified as fixed are issued to public finance entities, the majority is directed outside this sector. Looking at the structure of expenditures according to their groups (Figure 3), it can be said that expenditure on social insurance and social expenses is definitely prevailing, accounting for over 38% of all fixed expenses. About 20% of these

expenses are subventions for local government units, and more than 12% - expenses for servicing the Treasury debt. When considering particular fixed expenses in isolation, it should be noted that the prevailing items are: subventions for local government units, expenditures on servicing the Treasury debt, ZUS subsidies, national defense expenditures, which altogether constitute over 60% of fixed expenses.

Figure 3. Fixed state budget expenses structure in 2015 (in %)



Source: own study based on: Budzyński 2014, p. 11.

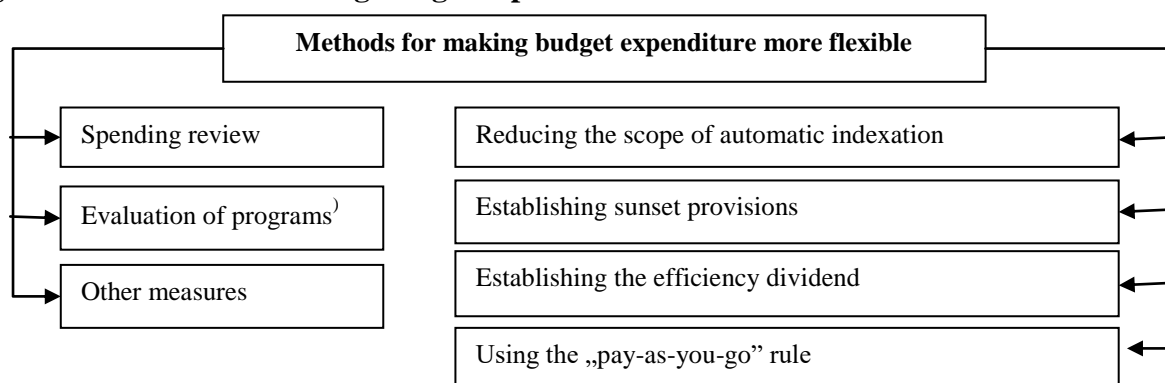
The structure of fixed expenses is dominated by social expenses meant for natural persons and their share will grow due to the implementation of the state's obligations, among others under the "500+" program, but some of this expenditure is pro-developmental. Interestingly, neither the most frequently criticized expenses on performing state tasks are the top budget item as they account for less than 1% of fixed expenses. Therefore, it is impossible to consider fixed expenses at global level and not account for their diverse nature.

New ways to make state budget expenditure more flexible⁶

Since the share of flexible expenses in budget expenditure determines the actual extent of freedom in allocating public funds, a large or increasing share of fixed expenses means that "fiscal space", i.e. room for the government to act relatively freely, is being reduced. This is unfavorable for many reasons, which necessitates finding new ways to make the budget more flexible (Figure 4). The new methods of reducing expenditures include⁷: spending reviews, reducing the scope of automatic indexation, sunset provision, establishing the "effectiveness dividend", applying the "pay-as-you-go" rule.

⁶ The section uses mainly materials published by the Polish Ministry of Finance (2015a; 2015b).

⁷ The traditional ("old") methods of expenditure restraint include expenditure rules and rules relating to the budget balance, Treasury debt and public debt, which were applied prior to 2015. Attempts are also being made to make spending more flexible by zero budgeting and performance of tasks in the public-private partnership formula.

Figure 4. Methods for making budget expenditure more flexible

a) A program should be understood as all ordered activities (regulations) financed from public funds.

Source: own study based on: Polish Ministry of Finance 2015a, pp. 5-8.

The starting point to discuss new instruments of fiscal policy must involve reference to expenditure rules. According to G. Kopits and S. Symansky (1998, p. 2), the fiscal rule is a permanent limitation of budgetary policy reflected in budgetary indicators, indicating that policy's progress. The following rules are distinguished: budget balance, public debt, income and expenditure. With the help of expenditure rules, either the amount of budget spending, expressed in nominal terms or real terms, in a given year, or its allowed increase, are regulated. This amount may be determined, for example, in relation to expenditure from the past period, in relation to GDP or other measures, such as the inflation index, the level of the medium-term inflation target set by RPP (Polish Monetary Policy Council). On the basis of such rules, the budget spending limit in a given year is determined, and with the help of other instruments, so is "fiscal space", i.e. how much budget can be allocated to finance flexible expenses, including new tasks. In order for the expenditure rule to prove effective, it is necessary to review and amend the rules determining the amount of public expenditure, including state budget spending.

Spending reviews are an examination of the directions, levels, ways of determining and purposefulness and efficiency of state budget expenditures. Spending reviews are justified since the applicable legal regulations, according to which the Budget Act is drafted for a given calendar year, are not conducive to political reflection on the need, effectiveness and efficiency of performing "publicly funded" public tasks (programs). Budgetary planning is governed by a historical approach: subsequent budgets are created on the basis of previous ones, supplemented with expenditures for new tasks. The Ministry of Finance itself (2015b, p. 3) admits that there are no comprehensive analyses conducted regarding the legitimacy of continuing tasks and financing new ones. The review should be distinguished from cuts in budgetary spending, which are usually based on a proportional reduction of all expenditures, without taking into account the impact (sometimes adverse) of such action on performing public tasks and meeting social needs. In contrast to "cuts", reviews are made according to a specific methodology, involving various entities (Minister of Finance, Minister responsible for a given task / program, external experts).

Spending reviews are to increase the efficiency of the expenditure of public funds in a given area. The review is done to assess the current expenditure policy and indicate the necessary changes. These changes may consist of:

- relocation of funds between financed tasks (programs),
- finalizing the financing of certain tasks (programs) or financing new ones,
- reducing the total amount of funds transferred to a given area, and in exceptional and justified cases, increasing these funds,
- improving the process of spending public funds.

Two types of spending reviews can be distinguished: performance review (operational, tactical) that allows to specify how existing services can be provided at lower costs, and strategic review that results in a change in spending priorities, reallocating funds or completing the financing of tasks considered ineffective or of low importance. In terms of the subject of the review, a comprehensive and selective review can be distinguished.

The decision to review various expenses was made in 2014. The spending reviews are made jointly by the employees of the Ministry of Finance and the Ministry responsible for achieving the objectives of the given state policy and expenses related to it. The following have been reviewed so far (with the conclusions published): policy of housing support, subsidies for seed and planting material, financial aid for low-income families. A spending review regarding social protection is currently under way. This review seems to be a very important instrument of fiscal policy, given that the so-called fiscal consolidation⁸ may take place during the crisis. It involves: suspension of payment of benefits, reduction of transfers and tightening the criteria for granting them.

The amount of some budget expenditures is correlated with the change in prices, so the method of spending flexibility is to reduce the scope of automatic indexation. There can be distinguished statutory, regarding e.g. the increase in pension benefits, and custom indexation. Influence of inflation on the size of budget expenditure is usually observed with an annual delay since the majority of social expenditures (e.g. old-age and disability pensions) is indexed based on inflation from the previous year (Jablecka, Jędrzejowicz 2015, p. 14).

The change in prices in the economy also affects budget expenditure not covered by indexation mechanisms, i.e. expenses shaped discretely (custom indexation). It has been assumed that budget managers, when preparing their spending proposals, treat inflation assumptions as an index by which they can automatically increase planned expenditures. The inflation forecasted for the upcoming year is used to establish nominal expenditure limits (for the purchase of materials and services as well as investment) and values of wage indexation for budget sector employees (Jablecka, Jędrzejowicz 2015, p. 16).

In an attempt to make budget spending more flexible, it is proposed to de-index some of them, i.e. to move away from their indexed valorization and lower the valorization of some expenses. The effect of de-indexation should be to reduce the state's share in the economy (by limiting the size of services provided) and to reduce the real value of transfers paid.

The next method of increasing the flexibility of budget spending is to establish what is known as a "sunset provision". Such provisions are to enforce automatic termination of the financing of a task after a specified period of time or a review of incurred expenses. This is to push the government to make a formal decision whether to continue with certain expenses. Such records will appear in legal acts that are the basis for making expenses for a specific task (program). According to OECD studies, the establishment of such provisions (for smaller

⁸ Fiscal consolidation can be understood either narrowly and broadly. In a narrow sense, fiscal consolidation (consolidation of the general government sector) means a statement of public income and expenditure after eliminating transfers within this sector. This prevents the double-counting of certain amounts, e.g. subventions for local government units, subsidies for special purpose funds, and enables the correct, i.e. in line with the EU methodology, calculation of the deficit/surplus of the entire sector and its subsectors. In a broad sense, this is a policy aimed at reducing the budget deficit and increasing public debt. It may consist, for example, in determining the amount by which the deficit or debt should be reduced or the period during which the improvement is to take place (Szpringer 2012). In this article, fiscal consolidation is understood in broad terms.

programs) did not bring satisfactory results in most countries, although in some they have been applied to all new spending upon the implementation of broader reforms.

It is anticipated that it will be possible to reduce fixed expenses in the long-term perspective if the purposefulness of making a given expense and its effectiveness are performed on an ongoing basis. Certainly, this is not easy due to the time-consuming nature of the assessment and the wide range and high level of generality of recommendations resulting from this type of practice. The low usefulness of such recommendations stems from at least two circumstances: 1) only some budget expenditures are planned based on the task-based method that enforces the statement of the purpose of spending funds and measures of the degree of its achievement; 2) recommendations are made by experts with theoretical knowledge, but rarely by practitioners who plan similar expenses and are responsible for their settlement. A separate issue is the timing of the preparation of such assessments, which should be adapted to the budget-planning procedure. It should also be emphasized that there is an asymmetry of information and divergence of objectives between the Minister of Finance and other Ministers. The goal of individual Ministers is to increase the efficiency of spending, whereas the Minister of Finance seeks potential savings.

Another instrument that makes the budget expenditure more flexible is the efficiency dividend, which means "a small reduction in expenditure used to reflect on the possibilities and encourage disposers to increase the efficiency and effectiveness of spending, without prejudice to the quality of the public service provided" (Polish Ministry of Finance 2015a, p. 8). This dividend is defined at the outset of the budget planning process, at the level of approx. 1-2% of administrative expenses. Its supporters emphasize that it will allow for a systematic reduction of state budget expenditures, including administrative expenses related to the transfers for local government units and other public finance entities, while its critics draw attention to the disproportionate treatment of the smallest entities and the lack of a clear relationship between the dividend and the increase in efficiency.

The last method of spending flexibility is referred to as the "pay-as-you-go" rule. Under it, the sources of financing new tasks are to be funds derived from a proportional reduction of other (earlier) expenses. The savings obtained are to be collected in a special fund for which Ministers "compete". This should be conducive to the creation of innovative proposals for the use of budgetary funds and to prevent unjustified continuation of existing tasks. With that being said, two negative aspects of this method can be indicated. First, the administrators of the "small" budget parts have fewer opportunities to reduce spending. Second, the reduction of expenditure is also to be related to investment. Will their reduction not lead to a drop in investment outlays below their desired size?

Conclusions

Fixed expenses are that part of the funds spent from the state budget which, to a certain extent, is determined by law and thus limits the decision-making sovereignty (independence) of the government and parliament. Fixed expenses mean liabilities, "obligations" of financing. They are not the subject of a political debate (during the budgetary procedure) on whether it is justified to finance a task (program), in what form and amount, and for how long. From the perspective of an economist, it is not the limitation political freedom but rather the lack of transparency in spending and, on a larger scale lack of flexibility in budgetary policy, that is more important.

The structure of state budget expenditure in Poland in 1997-2015 is unfavorable in terms of the possibility of the flexible development of these expenses. In the analyzed period, except for the years 1997-1998, this expenditure was dominated by fixed expenses which grew in absolute terms and in relation to the total budget spending of the state. A very high, over 70% share of fixed expenses in the total expenditure of the state budget was maintained for several years. Beginning in 2010, it stabilized at approximately 75%, which on the one hand is a de-

rivative of the temporary and stabilizing spending rule, and on the other - the effect of budgetary "treatments" artificially reducing budget spending.

The assessment of the structure of fixed expenses should be made with caution, in light of the fact that, although social expenditures for financing individual consumption prevails, there are also pro-development expenses among them. For this reason, when looking for "space" to make free decisions within the framework of budgetary policy, one should not make discretionary cuts in fixed expenses, but instead develop methods that will enable to rationally reduce them. These methods include such new tools of budgetary policy as: spending reviews, de-indexation of expenditure, sunset provisions, the efficiency dividend, the "pay-as-you-go" rule.

Generally speaking, the application of these instruments consists in examining the legitimacy, principles and amount of financing certain tasks from the state budget, as well as the effectiveness of various budget expenses. This requires examination of many legal acts, analysis of financial plans of budgetary managers and cooperation of employees of various Ministries. This process is politically difficult, apart from being both work- and time-consuming, which is why the effects of using these tools will become visible only in a few years. In the short term, it is likely that a small increase in spending flexibility can be achieved with the aid of the efficiency dividend and the "pay-as-you-go" rule. The annual reduction of expenditure below the inflation rate will reduce the amount of fixed expenses, and in the long run will increase fiscal space. In recent years, however, Poland has witnesses deflation and yet fixed expenses grew regardless. Therefore, linking expenditure to the inflation rate is not the main reason for their fixedness and so making them more flexible under the de-indexation method may not give satisfactory results. A prerequisite for the use of most of the methods discussed in this article is to review expenses, among other things to indicate which of them are inflation-dependent and for which sunset provisions may be applied. Other ways to make spending more flexible is: zero budgeting and performance of tasks in the public-private partnership formula, but the application of these instruments is still limited.

References

Act of 16 December 2005: Ustawa z dnia 16 grudnia 2005 r. o finansowaniu infrastruktury transportu lądowego, Journal of Laws of 2005, no 267, item 2251 as amended

Act of 25 May 2011: Ustawa z dnia 25 maja 2011 r. o przebudowie i modernizacji technicznej oraz finansowaniu Sił Zbrojnych Rzeczypospolitej Polskiej, consolidated text Journal of Laws of 2015, item 1716.

Act of 27 August 2009: Ustawa z dnia 27 sierpnia 2009 r. o finansach publicznych, consolidated text Journal of Laws of 2016, item 1870.

Act of 5 December 2002: Ustawa o dopłatach do oprocentowania kredytów mieszkaniowych o stałej stopie procentowej, consolidated text Journal of Laws of 2014, item 711 as amended).

Baran J., Sawulski J. (2016), *Z dala od równowagi – ewolucja finansów publicznych w Polsce w latach 2004-2014*, IBS Policy Paper no 3, http://ibs.org.pl/app/uploads/2016/03/IBS_Policy_Paper_03_2016_pl.pdf (retrieved 16.11.2016).

Budzyński T. (2010), *Opinia dotycząca ustawy budżetowej na rok 2011* (Senate printed matter no 1072), Senate Chancellery: Analysis and Documentation Office, Opinie i Ekspertyzy: OE-161.

Budzyński T. (2012), *Opinia o ustawie budżetowej na rok 2013*, Senate Chancellery: Analysis and Documentation Office, Opinie i Ekspertyzy: OE-198.

Budzyński T. (2014), *Opinia o ustawie budżetowej na rok 2015*, Senate Chancellery: Analysis and Documentation Office, Opinie i Ekspertyzy: OE-225.

Budzyński T. (2013), *Opinia o ustawie budżetowej na rok 2014*, (Senate printed matter no 530), Senate Chancellery: Analysis and Documentation Office, Opinie i Ekspertyzy: OE-212.

Chancellery of the Prime Minister (2010), *Plan Rozwoju i Konsolidacji Finansów 2010-2011*, Warsaw, www.mf.gov.pl (retrieved 16.11.2011).

Dębowska-Romanowska T. (2007), *Charakter prawny i klasyfikacja tzw. wydatków sztywnych a granice swobody politycznej władz państwa*, in: Głuchowski J., Pomorska A., Szolno-Koguc J. (ed.), *Uwarunkowania i bariery w procesie naprawy finansów publicznych*, KUL, Lublin.

Dębowska-Romanowska T. (2010), *Wydatki publiczne, ich formy prawne oraz zasady realizacji w sektorze finansów publicznych*, in: Ruśkowski E. (ed.), *System prawa finansowego, tom II: Prawo finansowe sektora finansów publicznych*, Wolters Kluwer Polska sp. z o.o., Warsaw.

Echeverry J.C., Bonilla J.A., Moya A. (2006), *Institutional Rigidities and Budget Flexibility: Origin, Motivation and Effects on the Budget*, Universidad de los Andes, School of Economics.

Fedorowicz Z. (1998), *Polityka fiskalna*, Wydawnictwo Wyższej Szkoły Bankowej, Poznań.

Jabłeczka A., Jędrzejowicz T. (2015), *Wpływ zmian inflacji na finanse publiczne i politykę fiskalną w Polsce*, „Materiały i Studia”, no 321, Instytut Ekonomiczny, National Bank of Poland, Warsaw.

Kasperowicz-Stępień, A. (2011), *Kształtowanie się wydatków publicznych w Polsce w latach 2005-2009*, „Zeszyty Naukowe Polskiego Towarzystwa Ekonomicznego”, no 10.

Kopits G., Symansky S. (1998), *Fiscal policy rules*, „IMF Occasional Paper”, no. 162.

Kosikowski C. (2011), *Naprawa finansów publicznych w Polsce (przyczyny, metodologia, kierunki i propozycje)*, Temida 2, Białystok.

Markiewicz M., Siwińska J. (2003), *Wydatki sztywne budżetu państwa*, „Studia i Analizy”, no 249, Centrum Analiz Społeczno-Ekonomicznych, Warsaw.

Ministerstwo Finansów (2002), *Sprawozdanie z wykonania budżetu państwa za okres od 1 stycznia do 31 grudnia 2001 roku*, Warsaw, www.mf.gov.pl (retrieved 21.10.2016).

Ministerstwo Finansów (2005), *Sprawozdanie z wykonania budżetu państwa za okres od 1 stycznia do 31 grudnia 2004 roku*, Warsaw, www.mf.gov.pl (retrieved 21.10.2016).

Ministerstwo Finansów (2010), *Ustawa budżetowa na rok 2011. Uzasadnienie, t. I. Omówienie*, Warsaw, www.mf.gov.pl (retrieved 6.10.2016).

Ministry of Finance (2015a), *Analiza elastyczności wydatków budżetowych w Polsce. Podsumowanie wyników współpracy z OECD*, Warsaw, www.mf.gov.pl (retrieved 6.10.2016).

Ministry of Finance (2015b), *Przeglądy wydatków publicznych. Cele, metodyka, organizacja*, Warsaw, www.mf.gov.pl (retrieved 6.10.2016).

Owsiak S. (2005), *Finanse publiczne. Teoria i praktyka*, Wydawnictwo Naukowe PWN, Warsaw 2005.

Piotrowska-Marczak K. (2012), *Obszary reform finansów publicznych w Polsce*, https://www.law.muni.cz/sborniky/dny_prava_2012/files/Verejnafinancnicinnost/Piotrowska-MarczakKrystyna.pdf (retrieved 10.10.2016).

Russel P. (2010), *Wydatki budżetowe w Polsce*, in: Gołębiewski G. (ed.), *Polityka budżetowa*, Studies of the Sejm Analysis Office, no 3(23).

Szolno-Koguc J. (2015), *Kształt i specyfika wydatków sektora finansów publicznych w Polsce*, „Annales Universitatis Mariae Curie-Skłodowska”, Section H, Vol. XLIX, 2, Lublin, DOI:10.17951/h.2015.59.2.193, pp. 193-203.

Szpringer Z. (2012), *Konsolidacja fiskalna*, in: Gołębiowski G., Marchewka-Bartkowiak K. (ed.), *Leksykon budżetowy BAS*, Studies of the Sejm Analysis Office, Warsaw, <http://www.sejm.gov.pl/sejm7.nsf/BASLeksykon.xsp?t=s&q=konsolidacja> n(retrieved: 22.01.2016).

Ustawa z dnia 23 grudnia 1999 r. o kształtowaniu wynagrodzeń w państwowej sferze budżetowej oraz o zmianie niektórych ustaw, consolidated text Journal of Laws of 2016, item 966.

Wernik A. (2007), *Finanse publiczne. Cele, struktury i uwarunkowania*, Polskie Wydawnictwo Ekonomiczne, Warsaw.

Wernik A. (2015), *Budżet państwa i finanse publiczne w 2014 roku*, „Zeszyty Naukowe Uczelni Vistula”, no 43(5).

Wójtowicz K. (2011), *Problem konstrukcji optymalnej reguły fiskalnej w warunkach kryzysu finansowego*, „Zeszyty Naukowe Polskiego Towarzystwa Ekonomicznego”, no 10.

Zarządzenie nr 30 Ministra Finansów z dnia 4 maja 2015 r. w sprawie powołania Komitetu Sterującego do spraw przeglądów wydatków publicznych, Official Journal of the Ministry of Finance. 2015, item 31.

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Government and business: the search for new forms of cooperation

Abstract

The aim of the article is to analyse changes in the relationship between business and the state and their new mission - sustainable development. The authors believe that these questions should be included in research explorations as they see more and more problems with globalisation, the financial crisis, and the lack of a new role for business and the state in the social sphere and the definition of the spheres of influence of various market factors. The methods of analysis, comparison and an interdisciplinary approach were all applied. The article discusses the problems of a new social phenomenon: “market - the state - business”, the authors’ views on the contemporary role of each institution, their interaction in the process of ensuring sustainable development. Particular attention is paid to the new role of business in the social sphere. The authors argue that a new interpretation of the present role of the state is needed in order to secure sustainable development.

Keywords: sustainable development, social sector, private-public partnership

Państwo i biznes: w poszukiwaniu nowych form kooperacji

Streszczenia

Celem artykułu jest analiza zmian w relacjach między biznesem a państwem i ich nowej misji – zrównoważonego rozwoju. Autorzy uważają, że należy włączyć te pytania do badawczych poszukiwań, ponieważ zauważają coraz więcej problemów ze współpracą w sferze globalizacji, kryzysu finansowego, a także brak określenia nowej roli biznesu i państwa w sferze społecznej, definicji sfer wpływu różnych czynników rynkowych. Zastosowano metody analizy, porównania i interdyscyplinarnego podejścia. W artykule rozważono problemy nowej konfiguracji społecznego fenomenu: rynek – państwo – organizacje (biznes), przedstawiono autorskie spojrzenie na współczesną rolę każdej z instytucji, ich współdziałanie w procesie zapewnienia zrównoważonego rozwoju. Szczególną uwagę zwraca się na nową rolę biznesu w sferze społecznej. Autorzy przekonują, że nowej interpretacji wymaga współczesna rola i miejsce państwa w zabezpieczeniu zrównoważonego rozwoju.

Słowa kluczowe: rozwój zrównoważony, sektor społeczny, partnerstwo publiczno-prawne

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Introduction

Dynamic, multi-vector scale changes in all spheres of public life are the most defining features of the socio-economic development of the late twentieth and early twenty-first century. All this has given rise to higher requirements for economic science whose mission has been the study of the objective laws of the evolution of society and its economic systems (Kolot 2012, p. 15-34). Each stage of the economic system related to the revaluation of the role of the dominant resources, factors, institutions that operate within the realm of socio-economic development. Economic theory continues to explore the issues of today in the context of co-operation between two institutions: the market and the state. However, it is obvious that it is the formation of a new configuration of institutions that determines and will determine the future development of the new economy and post-industrial society.

One of the famous contemporary economists, co-author of the monograph “Politics in the age of austerity”, Colin Crouch, says that the conflict between the market and the state, which would seem to determine the nature of the political struggle in many countries, in fact diverts our attention from the existence of a third, powerful force that can significantly affect the market and the state - namely, corporations. Therefore, in reality, there are three instead of two actors. Policy at the beginning of the XXI century is no longer a confrontation between these powers, it was transformed into a mutually beneficial coexistence, thus embodying the trend of the last century - strengthening the role of corporations in politics and even strengthening their positions after global crises (Shefara, Shtrika 2015).

Engaging corporations in decision-making processes, according to the scientist, is not explained or justified by any of the existing economic theories; however, this process has become an integral part of our social life. If neo-liberalism, as a theory, insists on compliance with certain conditions in policy, among them there is a requirement of a clear distribution of the government and the market. However, if it turns out that the implementation of neo-liberal policies will inevitably lead to the appearance of a close relationship between private corporations and the government, the dominant political ideology will suffer irreparable harm (Kuiggin 2016).

Awareness of the essence of the new configuration of the social phenomenon of “market – the state – organisation (business)” is impossible without a modern vision of the role of each of these institutions and without an understanding of the new nature of their interaction in the process of sustainable development. Economic theories and trends which are now in the field of economics are different in many ways, their genesis explained by the nature of economic and social phenomena and processes. At the same time, among the major differences that represent a watershed between different economic theories - are different attitudes towards the state as an economic institution, different, often diametrically opposed explanations of the role, importance and functions of the state in a market economy. The range of opinions is from complete denial of the social and economic role of the state to the upholding of the primacy of it in sustainable development.

We are focusing attention on the fact that the objections of scientists regarding the participation of the state in performing the socio-economic development tasks often resemble, magic spells, rather than sound scientific judgments. Such judgements often deny the obvious popular reality that since certain forms of state influence in the public dimension justify themselves, they are appropriate and socially relevant.

The irreconcilable attitude of orthodox liberals, as well as many representatives of neo-classical currents, to the active participation of the state in economic life, in fact, fierce denial of such participation, which in practice has become apparent, can be attributed to the ideas, judgments, concepts which, in the terminology of the famous Australian scientist John Kuiggin, claim to be zombie ideas. The scientist says that before the global financial crisis of 2008 some ideas, such as the efficient market hypothesis or “large mitigation”, were very much alive. Their supporters have dominated mainstream economics. These ideas guided practitioners – sometimes unknowingly – whose decisions affected the financial system, which had no parallel in history. An intricate network of bonds amounting to tens of trillions of dollars has been woven from speculative or even fictitious investments. This resulted in the formation of a global economy in which households and entire countries cannot afford to live (Krauch 2013, p.11).

Since it is difficult to change ways of thinking, the zombie ideas, which led to the almost total collapse of the global financial system and the bankruptcy of thousands of companies, cost millions of workers their jobs, are still among us. Unfortunately, we have to agree with John Kuigginom that these ideas are guided by people who are responsible for the anti-crisis policy today and assess the effectiveness of policies (Krauch 2013, p.11).

Obviously, research indicates that economic science is seriously flawed. A huge financial crisis was unfolding in front of representatives of economic science, and yet most of them did not see anything unusual. Even after the crisis, no serious rethinking took place. Too many economists continue to operate as usual, as if nothing had happened. Some are already beginning to claim that nothing serious has really happened and the global economic crisis and its consequences are just a small cloud in the sky and no revision of the fundamental ideas are required (Krauch 2013, p.11).

Discussions on changing the role of the state in the modern economy

In today's globalizing world, changing under the influence of information and communication and other technologies of the 21st century, at the time of the adoption of new values state institutions have to change, transform their functions and tools of influence on economic and social development. At the same time, it should be emphasized that the formation of the new economy and post-industrial society has nothing to do with the precepts of the struggle with the state. In the context of globalization and the actions of a number of other factors, both external and internal, an increase in the complexity of the functions of the state rather than simplification has been observed. Simultaneously, the erasure of boundaries between internal and external policies needs to be updated and done so in partnership with the institutions of the economy and society. Once again, we draw attention to the fact that the modern role of the state cannot be a prisoner to the categories of: more, less, gain, loss and the like. It is lawful and justified to use new concepts in the format of interaction; complications and the new configuration of institutions; the transformation of functions, etc.

It would also be wise to listen to the judgement of the famous American sociologist and economist, Neil Fligstin who in the monograph "Architecture of markets: Economic Sociology of capitalist societies of the XXI century" (Fligstin 2013) notes the following: "The value of the state of modern markets really cannot be overstated. Without stable, non-rent-seeking states, modern production markets simply could not exist. All would be swallowed by war, looting and mercantilist aspirations, which would let businesses sink. For example, the patents issued by the state and controlled by courts, allow enterprises to obtain a legal monopoly on a certain product and reap the profits. Other laws restrict business opportunities for opportunistic behaviour and make a profit at others' expense. In all advanced industrial societies rules and laws exist not only to protect the manufacturers, but also to protect consumers from poor-quality goods and services, as well as workers from hazardous conditions of production" (Fligstin 2013, p. 24). In a globalizing world economy, instability, nonlinearity of development, the need for the acquisition of competitive advantages for the countries, the state is bound to interact actively with market institutions and to solve national economic and social problems which are all expanding. The state has initiated structural reforms, participated in the creation of public goods, become a referee, become a subject of social partnership and the legislator and guarantor of compliance with the rules of the game.

Long, bitter debate and controversy raging between orthodox and other liberal economic theories regarding the advisability of state intervention in the processes of economic development, which - according to A. Elyanov - unexpectedly turned out to be pointless. On this occasion, he writes that virtually all the decisions of the state in any country regarding the economic and social spheres, whether they are about taxes, fees, grants, exchange rates, interest on loans, the budget or the policy on education and training, science, health care, pensions software, etc. – have an impact on the course of its development. The problem is not really the issue of intervening or not, as this is almost impossible to avoid, but the purpose of the intervention, its instruments and effects. The state now, regardless of the level of development, cannot remain aloof from the problems that the country faces without the risk of its collapse and (or) loss of power (Elyanov 1998, p. 60-63). However, despite the obvious lack of alternatives and the state's participation in sustainable development (another thing – in what form

and scale) “enlightenment” of the representatives of orthodox liberal economic theories remains far beyond the reach.

Summarising the experience of the cooperation of the state and business in developed countries at the turn of the millennium; it is clear that new forms of interaction do not fit into the old philosophy of so-called government intervention into a market economy. Unlike traditional intervention and continuous administrative restrictions there appear the horizontal linkages and partnership forms of cooperation that do not correlate with the postulates of either Keynesianism, or libertarianism. The presence of the state as a subject of economic activity is not a sign of the suppression of economic freedom and (or) approval of the command economy, as well as the full liberalisation of economic life is not a testament to the approval of the principles of freedom and justice. In the world of modern values of economic activities, there must be a new way to read and clarify for ourselves and others what intervention is what partnership is; what economic freedom is, and what arbitrariness is; what the development of opportunities is and what severe paternalism is.

In our view, it makes no sense to talk about the limitation of economic freedom or the trampling of liberal values in conditions where the actions of state institutions are aimed at the institutional support of equal opportunities, the restriction of monopoly practices, unfair competition, the establishment of common rules of the “game”. At present, neither theory nor practice provides convincing evidence of the benefits of liberalism in its broadest sense. At the same time, we are direct witnesses to the “indomitable” liberalism that led to the financial and economic crisis in which thousands of businesses turned to state institutions for rescue. Public institutions helped by taking away money from those who, before the crisis, were the victims of liberal reforms.

We emphasise that this article deals not with the protection of the state as an institution of the modern economic system (although it needs this), but with the scientific interpretation of contemporary interaction between government and business based on the principles of partnership and equality. The issue of cooperation between the state and business to find effective methods is relatively narrow. At the same time, it is closely correlated with an urgent task of our time – sustainable development at the stage of the formation of the new economies and post-industrial societies. We must admit that the new forms of interaction between government and business, which have intensively been formed since the late XX –century, are quite diverse. They are not fully “formed” and continue their development according to rules which are often not logical and resemble “trial and error”. In these circumstances, there is a need for an updated scientific study of the interaction between government and business and a search for those methods that create conditions for sustainable development.

The "second breath" of capitalism

The original reasons for the spread of new forms of interaction between government and businesses are appropriate to consider in the context of the nature and essence of the phenomenon which can be called a “second breath of capitalism”, as well as changes in the role of institutions in the new economies. The question that has constantly been debated in academic and professional circles for decades: Which should be more important in sustainable socio-economic development – the state or business? Our reply to the question is as follows. There should be more of both the state and business, the art of administration of a national economy lies in finding and involving those forms of interaction between government and business that meet the conditions of a particular stage of the development of an economy and a society which should work towards sustainable development. Our vision is that “more state” does not mean the nationalisation of the economy and the creation of prerequisites for the active participation of the state, which opens up new opportunities for business development. Our concept of “more state” - is the potential involvement of the state in order to create favourable condi-

tions for improving competitiveness and the acquisition of undeniable competitive advantages for business and the national economy as a whole.

Despite the fact that the opponents' arguments regarding the active participation of the state in the development of the new economy and its functioning mechanisms often do not stand up to criticism, we do not think that we will be able to convince the majority of them. It is more appropriate to focus on the scientific substantiation of a new paradigm of interaction between government and business, which will be of use to young, creative, enthusiastic professionals with a modern economic thinking. We must strive to overcome the stereotypes of economic thinking and to develop a new philosophy of sustainable development. The first step in this direction should be awareness of modern trends of the new economy, the selection of those which are able to ensure sustainable development.

Impartial analysis indicates that the global financial crisis of 2008-2009 forced those countries with developed and transition economies to take the path of strengthening the role of the state as an economic institution on a national scale. Indeed, the main activities as a response to the challenges in practice become state interventionism in various forms and the creation of new state-owned enterprises (SOE) and enterprises with state support (state-supported enterprises – SSE).

The secretary of the international organisation ARSASD McCarthy at a US-Asian conference noted that state capitalism is at a new stage of development, it mobilizes the resources of the state, stimulates the creation of social ventures with foreign companies for the purpose of the transfer of knowledge and technology and has control over key enterprises, subsidising their development and expansion abroad (News Blaze, 2012).

Confirmation of the “second breath” of state capitalism can be found in data. In the list of the world's largest companies, no enterprises received state aid in 2004, and by 2011 that number had changed to 11. In this case, in terms of capitalisation, they were respectively in second (Petro China), fourth (Industrial & Commercial Bank of China), fifth (Petrobras, Brazil) and seventh (China Construction Bank) places (Mises 2009).

This change in the power of state-backed industries can also be seen in other sources, in particular “Forbes”. In 2012, among the top 20 global companies, according to “Forbes”, there were six public corporations, whereas in 2008 there was not even one. In the period from 2004 to 2008 among 2 thousand global corporations in the “Forbes” list there were included 117 state-owned enterprises from India, China, Brazil and other countries. At the same time, 239 corporations from Britain, Germany, the USA and Japan left the list.

What constituted a “second breath” of state capitalism is the tendency of the transnationalisation of public enterprises. State TNCs are companies that have a parent and foreign branches, in which the state has an interest (full, majority or a significant minority) regardless of whether the company is listed on the stock exchange or not. State control is considered to be at 10% or more of voting shares of the company, or if the state is its largest shareholder (Bell 1999, p. 30). According to available data, in 2010 there were 650 public TNCs worldwide, which had 8500 foreign affiliates. It is worth noting that 19 of them were included in the list of the 100 largest transnational corporations in the world.

It can be assumed that the scientific community does not know much about all contemporary forms of state influence on the economy, and even fewer have a thin, suspended, dosage mechanisms and tools for sustainable development with the use of state-building. Unfortunately, we can state that since the beginning of the 90s of the last century the national economic literature has been full of abstract quasi-liberal judgements that the state business loses to private business a priori. Analysis of foreign media suggests that the western economic theory contains no convincing evidence of “anchor” of the efficiency of economic activity when dealing with property. Moreover, fundamental research increasingly emphasises that, in the conditions when the control function is separated from property, between public and pri-

vate companies there is an intensive exchange of management personnel and state capitalism is better than before; it uses the latest management tools, and there are less obvious differences between indicators of the effectiveness of public and private companies. On the contrary, company efficiency is not determined by the form of ownership but by professional management, effective institutions of the environment, the development strategy of companies and the values that they profess.

In public debate, as a rule, opponents who profess liberal principles of economy and post-industrial societies are justifiably numerous. because people at all times, in all corners of the globe strive for freedom and personal independence. Of course, almost nobody likes the outside trying to adjust their behaviour or limit their actions. At the same time, we must realise that there is no real absolute freedom. Therefore, we must cultivate willingness to accept the legal restrictions that do not deny, but rather create the preconditions for the development of capabilities and the approval of the principles of justice.

These concepts are not limited to new trends in the field of interaction between government and business. There is every reason to believe that, in the last decade, the partnership of government and business in countries with market economies has gained such quality and value that it has been transformed into a key factor in the development of national economies. In view of this, the phenomenon of public-private partnership requires a comprehensive scientific study, firstly being a clarification of its nature and the root causes of its development.

US experience in the interaction of the state and business

Once again, it should be remembered we remind that in recent decades the interaction of state and business has been carried out in new forms, and new methods are applied resulting in the deepening of bilateral relations. In our opinion, to operate with concepts such as “strengthening the role of the state” and “weakening the role of the state” is becoming more difficult, because they less reflect the essence of the processes taking place in the “field” of the market economy. After all, in practice there has been approved another form of cooperation between the state and capital; there has a gain (in some areas) as well as decrease (in others) in the level of state’s in dealing with the most complex challenges of sustainable development. It is becoming more difficult to assess the current symbiosis of bilateral relations between the state and business by using long-standing acceptable criteria and approaches. Hence, it is necessary to learn other approaches and a new mindset. Taking into account the experience of the US in this regard, we note the following.

First of all, we focus attention on the fact that in recent decades the American traditional liberalisation of economic activity has begun to falter. Today, in conditions of transnationalisation of production and capital, the emergence of new technological structures and the emergence of new sectors of the economy, unprecedented scale of modernisation of production capacity, mass updates of technical and technological bases, etc., there is a problem of adaptation of the economy and society to the innovations that have become the norm of life.

So, the new economy and post-industrial societies, in the second decade of the XXI century, demonstrate the need for new forms of sustainable development. In order to minimise socio-economic costs of accelerating the adaptation of the population and the institutions of the economy to the current conditions the United States, had to strengthen the levers of state influence on economic and social development. So, since the 90s of the XX century, the state has actively contributed to raising the competitive advantages of the enterprises of new industries, ensuring the production of modern cars, computers, electronics, development of bio- and nanotechnology, and financial and information services. The priorities of state regulation in the US have been attributed to high-tech industries and industries to ensure the formation of human capital. This is a new vision of the role of the social functions of the state in areas in which the focus on market self-regulation is a threat to be on the sidelines of the global socio-economic development.

It should be noted that the system of public-private partnership that has developed in the United States, has a strong legal and regulatory framework. A feature of the US practice is a combination of federal legislation with the rules and standards adopted at the regional level. In this, the last one has priority in the regulation of public-private partnerships. At the national level there is, in particular, article 6305 USC on the order of application of cooperation agreements between the federal authorities and local authorities and other stakeholders and other interested organisations. The state of legal support at the regional level, regulating public-private partnership, can be characterised by the following data. Now, 33 US states have adopted legislation in the field of public-private partnership, and seven states have set up special bodies to manage the development of this socially important institution.

As noted above, in the economic literature there is a dominant view that market economies follow their most liberal traditions when state intervention in economic and social life is minimal. The data and judgements need to revise many so-called axioms because they reflect the practice of public participation in the economic development and the formation of public institutions, which existed until the 1990s. There is every reason to believe that there have been significant changes in the scale, forms, tools and state influence on economic and social development over the past two decades. It is especially vivid in the social and labour sphere.

We emphasise that the latest trends in the implementation of the social functions of the state require a detailed and unbiased analysis. This task is an urgent scientific generalisation of the key areas and forms of participation, on the one hand, the state in the social sphere, and on the other - forms of cooperation between the state and business in this field at the national level.

Again returning to the US example, we note that in the US in recent decades social priorities have been chiefly healthcare, education and the retraining of human resources. This is due to the fact that in these areas there is a formation and increment of human resources. At the same time, it increases the value of the latter in the total capital and competitive advantages move precisely towards economically active people. The US government is considering health care as a priority of human development and the competitiveness of the national economy, and is actively expanding its involvement in the financing of this socially important sector. Note that from 1960 to 2012 health care share of GDP increased from 5.2% to 17.9%, while target medical expenses exceed 2.8 trillion dollars. According to expert calculations, health care costs in the coming years will continue to grow in 2015 and reach 25% of GDP (Zimenenkov 2016, p. 4).

A typical trend in financing health services – the predominance of both absolute and relative indicators of business participation in this process has been observed for more than a decade. Thus, in the 1960s the combined share of private spending was $\frac{3}{4}$ of national health expenditures and, accordingly, $\frac{1}{4}$ of total expenditure accounted for the Federal Government, states and local governments. At the same time, there was a gradual increase in the participation of government, state and local authorities in the financing of health care. Thus, according to the available data in 2012, the private sector accounted for about 55% of all medical expenses. Accordingly, funding from other sources amounted to nearly 45%, including the share of the Federal Government – 28.6%, and the state governments and local authorities – 16.2%. Consequently, the financing load distribution of health care expenditure between the public and private sectors was almost equal.

Here are some examples of effective forms of public-private partnerships, which are used in the US in the field of public health. Thus, the “Buy-Own-Leaseback” (BOL) contract for example, provides the construction of health care facilities by private companies and sells them to the state, with further mandatory transfer of rights to their management by the same private companies. The “Agira” contract contains provisions by which a private company

retains ownership of the constructed object, say a hospital, and is the subject to an agreement with the state agency for public health services at government rates.

An example of an indirect influence of the state on the solution of problems of social character is the policy of stimulation carried out by state structures, the development of private health insurance. When operating according to US laws and regulations, components of the social package, such as pensions and health care provided to the employee by the employer, are exempt from taxes. It should be noted that the total amount of tax benefits for such components was 226 billion dollars in 2008. Confirmation of public-private partnership, the diversity of its forms (sometimes forced) is the fact that in 1986 the US Congress passed a law, according to which hospitals are required to provide urgent medical emergency care to all patients regardless of insurance policy (Kostyaev 2011, p. 47-60).

Increasing the role of business organizations in solving social problems

Signs of global changes taking place in the triad of “market – the state – organisation (business)” are the increasing the role of business organisations in solving social problems and the adoption of a new corporate power. To develop this thesis we add that the organisation is not just the economic integrity. A modern organisation is an integral part of a complex, interconnected and interdependent set of institutions. These have a significant impact on the organisation, acting as customers, suppliers, authorities, mediators, adjudicators, and the like. In this complex network of relationships economic, social, environmental and political interests, motivations and aspirations are intertwined.

We emphasise that the institutions – partners that surround the business organisations, as well as their employees, expect from them not only economically responsible actions, but also participation in solving social, environmental and other issues. Society is interested in the fact that each business structure should receive the status of the organisation focused on sustainable development. Science and practice are convinced that organisations that are able and willing to fulfil their moral and spiritual duties and regulations in economic, social, environmental areas that are vital to the evolution of the economy, and society can only rely on this.

A professor at Stanford University, and ex-president of the International Economic Association, Masahiko Aoki consistently debunks the preconceived idea of the organisation as an institution acting as an agent for its shareholders where the workers are simple tools to maximise the value of the shares. The book “Corporation in a growing diversity: knowledge, leadership and institutions” Masahiko Aoki (Aoki 2015) proves that modern corporations are associative cognitive systems in which “cognitive actions” are distributed among managers and employees, and shareholders provide “cognitive tools” and monitor their use in systems.

First of all, Masahiko Aoki interprets the essence of the modern corporation. The latter, in his opinion, is a voluntary stable association of individuals, which is involved in various types of targeted joint activities; this association is characterised by a unique identity, self-management and corporate culture (Aoki 2015, p.17). Of fundamental importance is the fact that business organisations which perform socially responsible activities are able to win “competition for loyalty”. The idea is that in the field of competition, one intensifies struggle for the purity of relations with a civil society, for consumers and for loyalty to the business organisation on behalf of the stakeholders.

Business leaders are convinced that business should take into account the rapidly growing demands from the actors and institutions of the socio-economic environment to ethical, environmental and social aspects of its activities. Note that, in this case, requirements are complicated and expanded for all components of the business activities of companies, including inadmissibility of the use of child labor and neglect of the fundamental rights of a worker. All this makes it necessary to perform socially responsible actions on the part of businesses, which, in turn, affects the increase in social resources.

The growing participation of organisations in solving social problems is also linked to a limited redistributive capacity of the state at the present stage, which is a consequence of a slowdown in economic development, changes in the age structure of the population in most developed countries in the direction of increasing the proportion of its older age groups, and consequently, the load on social welfare payments, overstating the actual capacity of the state to resolve social development problems.

Accordingly, in such an environment business turns into a major supplier of social services, including those that have traditionally been viewed as a sphere of government regulation. The above shows that corporate social activity has nothing to do with the perception of this institution as a single charity event, as the operations on the topic of the day. Modern philosophy in this area is as follows: corporate socially responsible activities are needed for most business organisations no less than the institutions of state and society.

Corporations taking the individual functions of the state directly concern the growing role of corporate power and strengthen the accountability of business organisations. Even ancient philosophers argued that greater freedom and more power should provide a lot of responsibility. Therefore, in general, the modern role and mission of business organisations should be viewed through the prism of socially responsible activities, the formation of a new corporate power and corporate citizenship. That is what was underlined by the founder and president of the World Economic Forum - Klaus Schwab. In his words, the traditional advantages of corporate social performance are no longer sufficient to optimise corporate behaviour and decision-making processes. New challenges make it necessary to comply with a set of five additional principles of interaction between the company and its stakeholders, primarily the shareholders: corporate governance, corporate philanthropy, corporate social entrepreneurship, global corporate citizenship and professional liability (Schwab 2015). At the same time K. Schwab suggests that compliance by corporations to the listed principles does not guarantee sustainable development. Business which, in essence and form, is becoming global must constantly improve interaction with environmental institutions and be prepared for new forms of partnership and networking.

Indeed, the world is moving in the direction of the network coordination of horizontal relations, operational and diverse partnerships with the same interests, regardless of the geographical location, the scope of the administrative authority, the scope and specifics of business activity. In such circumstances, economic science is designed to help institutions of the economy and of society, all subjects of social and economic, social and labor relations to acquire the concepts of the post-industrial system, to identify current trends and prospects of the interaction of carriers of individual and public interests, to explain the meaning of the new triad "market – the State - organization (business)" and its dominant development.

Conclusions

This study highlights that the relationship between the main institutions of the modern economic system is undergoing profound and multi-vector changes which do not have an unambiguous assessment. There is every reason to believe that today there is being established a new content and configuration of the triad of "market – the state –organization (business)". In this triad the new role of business organisations in enhancing their contribution to meeting the objectives of sustainable economic and social development is vividly manifested. The opinions and concepts contained in this article indicate that it is business and its created organisations that should become the leading element in the mechanism of the coordination of individual and public interests and ensure sustainable development. Taking this into account we cannot but agree with the opinion of the well-known American sociologist Daniel Bell who claims that the a vision of the corporation only as an economic tool shows a complete lack of understanding of the value of social transformation over the last half-century (Bell 1999). The

study urges that a modern role and place of the state in ensuring sustainable development require new research.

A more detailed exposition of the authors' position on the new forms of market interaction of the state and business organisations is contained in a recent article by the authors (Kolot, Poplavska 2016, p. 6-29).

References

Aoky M. (2015), *Korporatsyy v uslovyakh rastushcheho mnohoobrazyya: poznanye, rukovodstvo y ynstytuty* [Corporations in Evolving Diversity: Cognition, Governance, and Institutions], Yzd-vo Ynstytuta Haydara, Moscow.

Bell D. (1999), *Gryadushchee Postindustrial'noe Obshchestvo* [The Coming of Post-Industrial Society], Academia, Moscow.

Elyanov A. (1998), *Gosudarstvo v sisteme dogonyayushego razvitiya*, „MEiMO”, no 3.

Fabulous M., *Are State-Owned Enterprises Emerging to Become Serious Competitors?*, News Blaze, 17.03.2012, available at: <http://newsblaze.com/story/20120317060952mina.nb/topstory.html>.

Fligstin N. (2013), *Arkhitektura rynkov: ekonomicheskaya sotsiologiya kapitalisticheskikh obshchestv XXI veka* [The architecture of the markets: the economic sociology of capitalist societies of the XXI century], Izd. dom Vyisshey shkoly ekonomiki, Moscow.

Kolot A.M. (2012), *Nauka pro pracyu i social'no-trudovi vidnosy'ny': stanovlennya, nachala teorety'ko-metodologichnogo onovlennya*, O. Beyaev (red.), *Formuvannya rynkovoy ekonomiky*, Spec. vyp., V. 1, KNEU, Kiev 2012.

Kolot A.M., Poplavska O.M. (2016), *Derzhava i biznes: novitni tendencyi vzayemodiyi ta zabezpechennya stijkogo rozvy'tku*, „Socialno-trudovi vidnosini: teoriya ta praktika. – Zb. nauk. prac –K.: DVNZ KNEU imeni Vadima Getmana”, no 2(12).

Kostyaev S.S. (2011), *Lobbizm i reforma zdavoohraneniya v SShA posle vyiborov*, „SShA i Kanada: ekonomika, politika, kultura”, no 7.

Krauch K. (2013), *Strannaya ne-smert' neolyberalyzma* [The Strange Non-Death of Neoliberalism], Yzdatel'skyy dom «Delo» RANKh yHS, Moscow.

Kuiggin, Dzh. (2016), *Zombi-ekonomika: Kak mertvyie idei prodolzhayut bluzhdat sredi nas* [Zombie Economics: How Dead Ideas continue to wander among us], Moscow, Izd. dom Vyisshey shkoly ekonomiki.

Mises L. (2009), *Socialism: an Economic and Sociological Analysis*, Auburn.

Schwab K. (2015), *Business in a Changing World: Stewarding the Future*, available at: <https://www.foreignaffairs.com/articles/global-commons/2015-01-06/business-changing-world>.

Shefar A., Shtrik V. (red.) (2015), *Politika v epohu zhestkoy ekonomii* [The policy in an era of rigid economy], Izd. dom Vyisshey shkoly ekonomiki, Moscow.

Zimenkov R.I., Zavialova E.B. (2016), *U.S. State – Business Cooperation in the Solution of Social Problems*, «SShA, Kanada: ekonomika, politika, kultura”, no 2.

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Ekonomia umiaru a sprawozdanie ze społecznej odpowiedzialności biznesu

Streszczenie

Celem niniejszego artykułu jest prezentacja nowej formy informacji sprawozdawczej w kontekście ekonomii umiaru. Zawarte w tej publikacji rozważania stanowią swego rodzaju syntezę toczącej się w kraju oraz zagranicą debaty o zmianach w raportowaniu informacji o dokonaniach organizacji gospodarczej w kontekście utrzymania kapitału, co jest zgodne z nowym pragmatyzmem w ekonomii, czyli ekonomii umiaru, która oznacza w praktyce gospodarczej długofalowy rozwój społeczno-gospodarczy.

Hipoteza artykułu sprowadza się do stwierdzenia, że rozwój teorii interesariuszy oraz ekonomii umiaru znajduje w rachunkowości odzwierciedlenie w nurcie tzw. sprawozdawczości społecznej odpowiedzialności. Podstawowymi metodami badawczymi zastosowanymi w artykule były metody działania poznawczego, czyli wnioskowania logicznego, krytycznej analizy literatury oraz metoda obserwacji.

Przedmiotem rozważań jest raportowanie korporacyjne, czyli analiza rozwiązań stosowanych przez największe spółki odpowiedzialności publicznej notowane na Giełdzie Papierów Wartościowych w Warszawie. W artykule przedstawiono istotę ekonomii umiaru oraz teorii interesariuszy jako nowe wyzwania dla rachunkowości, a zwłaszcza dla sprawozdawczości.

Słowa kluczowe: ekonomia umiaru, teoria interesariuszy, koncepcje utrzymania kapitału, sprawozdanie ze społecznej odpowiedzialności biznesu.

Economics of moderation and reporting corporate social responsibility

Abstract

The aim of this article is to present a new form of reporting information in the context of economics of moderation. Considerations included in this publication are a form of synthesis of the ongoing debate in Poland and abroad. This debate concerns the changes in the reporting of information and achievements of economic organizations in the context of maintaining the capital, which is in accordance with a new pragmatism in economics – economics of moderation, which means the economic practice of long-term socio-economic development.

The hypothesis of the article can be encapsulated as a statement that the development of the stakeholder theory or economics of moderation is reflected in accounting in the mainstream of the so-called reporting of social responsibility. The basic methods of research used in this article were those of cognitive action, namely logical reasoning and critical analysis of the literature.

The subject of discussion is the corporate reporting or analysis of solutions used by major companies listed on the Warsaw Stock Exchange. The article presents the essence of economics of moderation and the stakeholder theory as a new challenge for accounting, in particular for reporting.

Keywords: economics of moderation, stakeholder theory, concepts of capital maintenance, reporting corporate social responsibility

JEL CODE: A13, M14

Introduction

Social sciences, including economics and accounting, significantly change (expand) the subject of research by seeking new research methods, systemizing knowledge about para-

digms. The inspiration for the study referenced in the title of this article was, among other things, were changes in accounting regulations, both domestic and international, and the discourse on the economics of impermanence - speculative bubbles. A statement by J. Wilkin (2015, p. 22) made on the basis on many years of observation of economic practice, especially American: *"I admit that I am worried about the waste of resources that the financial sector takes over for building its power whose economic benefits, especially social ones, are very doubtful. The sector employs a lot of highly qualified people, whose task is to develop new financial products (financial engineering) and "push" these products - sometimes with very dubious value and usefulness - to consumers and other companies"*. One should agree with the next statement of J. Wilkin (2015, p. 20) "it was then [in the late 1960s – M.K.] - I will say without mincing words - that they said they had in their hands a research tool allowing to explain the functioning of the social world in its different areas, much better than representatives of other sciences" [e.g. accounting - M.K.]. Thus, the economists of the Chicago School of neoliberal economics adopted two assumptions:

- the capital market is effective, which means that it immediately and objectively assesses the appearing financial information - reflecting its significance in the price of the security (Hendriksen, van Breda 2002, pp. 196-212, Kwiecień 2015a, 2015b; 2015c; Smejda et al. 2015),
- the CAPM (Capital Asset Pricing Model) is suitable for describing economic reality (Cieślak 2011, pp. 70-150, Hendriksen, van Breda 2002, pp. 201-203; Kwiecień 2015a; 2015b; 2015c; Smejda et al. 2015).

These assumptions were "sealed" by E. Fama's hypothesis about effectiveness and market reliability - supporting the neoliberal idea of state marginalization. One should agree with the statement of many economists that the change in the civilization paradigm (Mączyńska et al. 2014) is the development of not only new information technologies, but above all financial deregulations, as reflected in direct investments aimed at opening various world economies, including by removing restrictions on the free flow of production factors. Changes in gaining a competitive advantage between organizations - based, among others, on the "search" for the so-called strategic assets - business models - changing the traditional boundaries between financial capital and manufacturing capital (Krasodomska 2015, Kaplan, Norton 2011, Karwowski 2015, Kłosiński 2015, Kwiecień 2015a, Kwiecień 2015b, Kwiecień 2015c, Smejda et al. 2015).

Particularly among financial analysts, the above changes instilled a conviction that "on a typical ideal market, the existence of which is assumed in all economics textbooks, there is no room for accounting" (Hendriksen, van Breda 2002, p. 130). It was assumed that "on well-developed and stable financial markets [...] all publicly available information is included in the terms of contract conclusion (i.e. in securities prices on capital markets)" (Cieślak 2011, p. 38). American economic practice has proved (and not only) that dynamic changes in the global economy, especially its financialization, excessively risky technologies (virtual business - cyberspace) and financial products (financial assets - actually their dubious qualification and in particular their valuation) led to the "breaking" of the relationship between economic activity in the real sphere and the financial sphere (Kołodko 2014, Kłosiński 2015, Mączyńska 2015, Wojtyna et al. 2014).

In conclusion, the concept of a free market – stemming from liberalism, neoliberalism, ordoliberalism – was forged by these trends, but what has been dividing is the approach towards the role of the state in shaping the socio-economic order, i.e. institutional and legal solutions. According to G. Kolodko, the so-called "new paradigm" is a new trend in economics. It is the economics and politics geared towards the future – economics of moderation, which in practice means long-term socio-economic development, i.e. (Kolodko 2014, p. 19):

- economically sustainable growth (in relation to product, capital and investment markets, especially financial investment and labor force),
- socially sustainable growth (in relation the socially equitable distribution of income and use of public services as well as the labor force),
- ecologically sustainable growth (in relation to maintaining proper relations between human economic activity and nature).

The discourse on the change in the paradigm of economics determines the discourse on accounting paradigms. Accounting is an empirical science in which theoretical judgements are formulated on the basis of experience (Bareja 2013, Cieślak 2011, Garstecki 2015, Giedroyć 2015, Hedriksen, van Breda 2002; Kaplan, Norton 2015; Karwowski 2015; Krasodomska 2015; Kwiecień 2015a Kwiecień 2015, Kwiecień 2015, Smejda et al. 2015).

For centuries, accounting has been subordinated to values considered to be fundamental and superior to society, and not only to economic organizations as such - this was due to the values and rules of professed by broadly understood management. There has been an ongoing discussion as to which model of economic measurement should be used for the quantification of economic life, whether by historical cost or in fair value?

The purpose of this research is to answer the question of whether accounting is on the verge of a "scientific revolution" that will determine the radical change in the accounting paradigm or it is the economics of moderation that will ultimately determine the new accounting paradigm.

Accounting paradigms are the focus of considerations – the study is interpretative in both critical analysis of the literature and other scientific disciplines as well as legal regulations and empirical analyses. The article uses the methods of cognitive action, i.e.: deduction, induction and inference by analogy.

Business models as the basis for the valuation of assets - evolution or revolution in accounting

The methods of the valuation of assets and the method of their disclosure and presentation in the report arouse great controversy among both theoreticians and practitioners, not only among accountants, but primarily among financial analysts. On the basis of research - analysis of the literature - as well as economics and management, and especially changes in legal regulations, one can risk the statement that the problems are complex because the various bodies (especially international) developing these regulations for years have been updating their views (positions), which poses a major difficulty for the institutions responsible for the "shaping" of legal regulations concerning, e.g. financial assets as they simply cannot keep up with these changes (Buk 2016, pp. 9-18, Frendzel 2016, pp. 27-37; Gos, Hońko 2016, pp. 85-98, Kwiecień 2016a, pp. 67-89, Kwiecień 2016b, pp. 130-148). It is worth emphasizing that the Accounting Regulatory Committee operating within the structures of the European Union is quite cautious about the legal order resulting from international regulations, in particular the International Financial Reporting Standards (Buk 2016, Kwiecień 2015a, 2015b, Kwiecień, Hasik 2009). In my (and not only) belief, caution in modifying legal regulations stems from the fact of the existence of many controversies among economists - the impact of the financial market on national economic growth (Foster 2007, Froud et al. 2000; Orhangazie 2008; Rossman, Greefield 2006: as cited in Wilkin 2015; Freeman 2010; Hausner 2014; Kłosiński 2015; Mączyńska 2015; Wojtyna 2015 et al.). As evidenced by economic practice, especially the American one, the financing of the economy, i.e. the growing role of the financial sphere and financial criteria (financial assets, including derivative instruments), means a change in income streams where incomes from financial activity rather than from traditionally understood activity (operational and investment) are becoming increasingly important. As emphasized by J. Stiglitz (2007, 2014) - "financial elites have been obtaining more and more influ-

ence on economic policy and on the effects of international management (capital flows). It is a civilizational megatrend [...] it is the law of socio-economic development whose manifestations are current processes of globalization. The powers and "mechanisms" that enforce existential rationality are [...] institutional and legal solutions operating on a global scale" (Kłosiński 2015, p. 25), such as the International Integrated Reporting Council (IIRC), which significantly change the "coherence" of information presented and disclosed in reports. The idea of accounting harmonization dates back to the early 20th century in the United States, with these processes being currently implemented in three areas:

- European Union countries - by means of directives,
- supranationally with the use of the International Financial Reporting Standards (IFRS),
- the United States by means of the Generally Accepted Accounting Principles (US GAAP).

One should agree with the statement of A. Jaruga, S. Surdykowska, that "the last decades of financial accounting development, in both theory and practice, have been dominated by the process of harmonization. This was due to the dynamic changes taking place in the global economy, commonly termed globalization. Their essence is determined by the gradual liberalization of the flow of capital, services, goods and people, supported by the rapid development of IT technologies [...]. The phenomena in question can preserve their dynamics only with the support of international institutions and legislation [...] in this context it is necessary to consider the role of accounting as one of the essential elements of market regulation, especially capital regulation" (cited in Gierusz 2015, p. 20). This is because accounting functions have evolved, because "accounting is increasingly a social good thanks to the socialization of control and evaluation and thanks to the application (on an ever-wider scale) of accountability to businesses and institutions for the broadly understood social and economic rationality of the use of material and human resources (Burzym 2008, p. 82). The economic activity of economic organizations depends on various forms of capital, which should be included in their business models and strategies. According to J. Krasodomska, six concepts of capital can be distinguished (Table 1).

Tabela 1. Concepts of capital

Capital	Characteristics
Financial	Includes capital obtained through indebtedness (loans) or operating and investment activities.
Manufacturing	Includes buildings, equipment and machinery and other infrastructure (bridges, sewage treatment plants).
Intellectual	Refers to intellectual property such as patents, copyrights, software, licenses and organizational capital understood as knowledge of organization, systems, procedures, policies and intangible assets related to brand and reputation.
Human	Concerns the competence, experience and motivation of employees for development and innovation, including: <ul style="list-style-type: none"> - applying the principles of corporate governance, risk management, ethical values, - the ability to understand, develop and implement the organization's strategy, - motivation to improve and develop processes, products and services, including employee skills in leadership, management and cooperation.
Social and relational	Applies to the company's standards, values and behaviors as well as relations with external stakeholders, such as customers (clients), suppliers, business partners, and local communities.
Natural	Covers all renewable and non-renewable resources and processes that provide products or services, such as: air, water, land, minerals and forests, ecosystems, gas emissions, sewage and waste.

Source: Krasodomska 2015, p. 81.

A question arises concerning a broad and a narrow perception of capital. In connection with the use of cash measurement in accounting, can all types of capital (as mentioned above) be considered financial? In broader terms, can all assets be considered financial? Interesting

(and convincing) considerations about the qualification of assets were taken, among other authors, by H. Buk (2016, pp. 9-18), M. Frendzel (2016, pp. 37-48), W. Furman (2016, pp. 48-60) and W. Gos, S. Hońko (2016, pp. 85-86), M. Smejda (2015). Principles of recognition, disclosure and presentation of assets are the result of centuries-old accounting evolution, which is reflected in the accounting regulations (including the International Accounting Standards (IAS) 32 and 39 and the IFRS 7 and 9) and Polish legal documents – the Accounting Act (Journal of Laws 2013, item 1333, as amended) and the Regulation of the Ministry of Finance (Journal of Laws 2001, No. 149, item 1674, as amended). As follows from the research of the literature and other scientific disciplines, e.g. economics, finance, management, etc., there are many criteria for classification of assets: by presentation and ability to pay, by description of the economic organization (joint stock company, enterprise, etc.), by explanation of the accounting process, by presentation of valuation methods, by explanation of management intentions, by prediction of cash inflows (Bareja 2013; Bereźnicka, Błażyńska 2016; Buk 2016, Cieślak 2011; Freeman 2010; Frendzel 2016; Furman 2016; Garstecki 2015; Giedroyć 2015; Gos, Hońko 2016, Hendriksen, van Breda 2002, Jajuga 2015, Krasodomska, Waclawik 2016, Kwiecień 2016b, Pielichaty 2016, Smejda 2015, Walińska et al. 2011). The division of assets into financial and non-financial has a relatively short history. As rightly noted by E. Walińska (2011), it was introduced for the purpose of organizing the principles of asset valuation and it separates traditional accounting (evolution of accounting principles) from innovations in accounting (Buk 2016; Karwowski 2015, Kostera, Śliwa 2010, Krasodomska 2015, Kwiecień 2016-2016d, Kwiecień 2015-2015c, Kwiecień 2013a, Kwiecień 2013b, Kwiecień, Hasik 2009, Stiglitz 2010, Walińska 2011, Wartini-Twardowska 2014, Żemigala et al. 2007).

Studies of the literature (and not only – also that of economics and management) authorize us to state that the concept of six types of capital is a "background" upon which economic organizations should self-assess, and then disclose and present assets in reports - except that not in financial statements (as before), but in integrated reports. An integrated report is a revolution in accounting because it assumes publishing by the economic organization a report presenting financial and non-financial information regarding: mission, vision, value and, above all, the resulting strategy - business model. What constitutes a *novum* is the necessity of a narration-commentary, on the relations of expected economic benefits brought by a given group of resources (assets - capital) against the business model adopted by an economic organization. Criticism described by a number of economists of the financialization era (Berezińska, Błażyńska 2016, Garstecki 2015, Giedroyć 2015, Gierusz 2015, Gos, Hońko 2016, Hausner 2015, Hendriksen, van Breda 2002, Kamela-Sowińska 2015, Karwowski 2015, Kolodko 2014; 2016d, Mączyńska 2014, Smejda 2015, Siglitz 2010, Wilkin 2015, Wojtyna 2014 et al.). Against the background of the above considerations, the question arises as to whether narration-commentary is still accounting – and if so, then is it financial (i.e. monetary measurement) or management-related? According to J. Wartini-Twardowska (2014, pp. 98-109), the business process and value for the customer (client) are the main elements of the business model. The basic change in the value for the customer is the value of future cash flows for the owner of the capital – it is therefore considered reasonable to "redefine the measurement of [...] financial assets by relying on the cash flows they generate (Buk 2016, p. 11). It is worth emphasizing that changes in the business model of financial assets management determine the reclassification of all assets affected by this change, which in turn determines the change in the valuation of these assets, e.g. from the amortized cost category to fair value or *vice versa* (Buk 2016; Kwiecień 2016c, Smejda et al. 2015).

Empirical analysis of consolidated reports (researching the balance sheet law covering only one IFRS - IFRS9) in the extractive industry in 2014-2015 gives grounds to the statement that the reports referred to as Corporate Social Responsibility - CSR were drafted in accord-

ance with the principle - explain - comment - narration . It is possible to say on this basis that this is the first step towards integrated reporting - reporting of integrated development and financial reporting. Narration-commentary is an analysis of the relationship between the quality of management - the business model and the financial results of an economic organization. Undoubtedly, in my (and not only) belief, the duty of narration-commentary to the business model adopted by the organization is the effect of changes in accounting paradigms. In my opinion, it is extremely accurate to cite in this case G. Kołodko's statement: "by demonstrating its new pragmatism I show what, as I have termed it, honest economics and the economics of moderation are to rely on. If I write there will be relatively fewer patterns and more words in the economy of the future, that is what I mean. The future must be described in words because it cannot be contained in any enchanted, wonderful mathematical formula [...] A good economist must be able to count, but a very good economist must also be able to feel, which brings us to the second Queen [of the Sciences] - philosophy "(Kołodko 2014, p.14).

As regards the above statement of G. Kolodka, it is worth paying attention to the accounting revolution (for now only in legal regulations – cf. Buk 2016) - in the narration-commentary oriented towards the business management model - the market reaction to the disclosed and presented information is examined (Garstecki 2016; Hausner 2015; Jajuga 2015; Krasodomska 2015; Krasodomska, Waclawik 2016; Kwiecień 2016a-b; Walińska 2011; Żemigala 2007; et al.), although these studies use the assumptions and strategic goals included in the business model to explain (narration-commentary) which factors influenced the change in the value of shares. A further question arises, which justifies the recent changes in the disclosure and presentation of reporting information. While the asymmetry in disclosing and presenting reporting information by companies of public interest may justify the need to draft an integrated report (Burzym 2009; Cieślak 2011; Freeman 2010; Giedroyć 2015; Hendriksen, van Breda 2002; Kamela-Sowińska 2015; Kaplan, Norton 2011; Krasodomska, Waclawik 2016, Kwiecień 2016a-d, Łętowska 2015, Pielichaty 2016, Smejda 2015, Stiglitz 2010, Walińska 2011, Wartini-Twardowska 2014, Wilkin 2015, Wojtyna 2014, Żemigala 2007 et al.), the same obligation for small and medium-sized enterprises is, in my (and not only) conviction, unfounded. The fact that accounting strives to accurately and reliably reflect the economic reality, as well as provide an objective disclosure of the truth about transactions (especially financial) of continuing operations or threats etc., lack of trust in accounting (especially financial reporting – Cieślak 2011; Kamela-Sowińska 2015; Kwiecień 2015a-2015b; Kwiecień 2016a-d; Stiglitz 2007; Stiglitz 2010; Smejda 2015; Walińska et al. 2011) is the effect of legislative liberalization (Bareja 2013; Buk 2016, Cieślak 2011, Gierusz 2015, Kamela-Sowińska 2015, Kwiecień 2010a, Kwiecień 2010b, Kwiecień, Hasik 2009, Pielichaty 2016, Smejda 2015, Walińska et al. 2011) is the result of the liberalization of the law. Another question arises as to whether integrated reporting determines a new accounting paradigm in a broad sense (Kwiecień 2016a). This is not a revealing idea, but it is worth reminding that an important context of modern accounting and practical knowledge is the global economy, especially its crisis, which has proved once again the *raison d'être* of accounting. This is due to the accounting identity derived from its relationship with economic development (Stiglitz 2007, Stiglitz 2010). Profound changes in the financial sector - financialization determined the need for changes in the sphere of management and ownership, and especially creation in business. On the basis of literature studies (include the literature of economics and management), it is possible to say that limiting creation in business, especially in "earning" on financial capital (Smejda et al. 2015, p. 400) is the need of narration-commentary to implement strategic goals – it is a revolutionary change in accounting paradigms in the area of reporting.

Integrated reporting and responsible development

A question arises as to the usefulness of this change. Before addressing it, however, I will return to the problems of modern economy.

There has been an ongoing discussion about accounting, both in the selection of the economic measurement model and according to historical cost or at fair value. The essence of this discourse is economic measurement, and especially the determination of this measurement using the concept of maintaining capital, either financial or material. "According to the financial concept of capital, [...] capital is synonymous with the terms net assets or the owner's equity. According to the factual concept of capital - where it is, among other things, operational capabilities of the individual, capital is the individual's production capacity expressed e.g. in the daily production of product units" (Smejda 2015, p. 400). The business model should include the concept of capital maintenance. The latter can assume two forms: nominal capital and real capital. Maintenance of capital goods expresses the maintenance of operating capital. To measure the profit, one can use three forms of capital maintenance, i.e. cash, real capital and operational capital (Smejda 2015). Economic practice shows that financial capital, in seeking new ways of return on capital, has received theoretical support in the form of currently popular "version of monetarism [...] recognition of money as a commodity is an automatic awarding of the regulatory function of supply and demand in shaping the value of money" (Smejda 2015, p. 400), which determined the volatility of interest rates and exchange rates, while monetarists converted the law of monetary circulation into a way to initiate economic growth processes (Freeman 2010; Hausner 2015; Hendriksen, van Breda 2002, pp. 250-400; Stiglitz 2007; Stiglitz 2010; Smejda 2015; Walińska 2011; Wilkin 2015; Wojtyna 2014 et al.). Therefore, anyone who makes money decisions of any kind cannot not be 100% sure about the costs necessary to bear, in particular that person is unable to determine the future benefits resulting from these activities. The change in legal regulations regarding financial assets (IFRS 9) determines the need to classify all financial assets according to the asset management model adopted by the business organization and the cash flows characteristic of a financial asset resulting from cash flow agreements. This change in legal regulations determines the method for the valuation of financial assets and their presentation in reports (cf. Buk 2016, Frendzel 2016, Pielichaty 2016 et al.). A *novum* that determines the revolutionary principles for accounting is the classification of financial assets that must be made by top-level managers of an economic organization - this classification determines the model of managing financial assets, e.g. it does not "qualify as a business model of asset management whose task is to pursue cash flows only through the sale of assets. An example of a model for managing the results of a portfolio of financial assets is the active acquisition and disposal as well as fair value of the entity as a result of changes in credit spreads and yield curves. The purpose of such a model is not to obtain contractual cash flows" (Buk 2016, p. 11). Accounting is to assess whether the financial assets of an economic organization are classified on the basis of the business objective set out in the business management model. This is important for the selection of methods for the valuation of these assets as well as the assessment of business performance. Economic organizations are obliged to comply with moral and ethical standards when implementing strategic goals included in the business model. In the literature concerning the scientific discipline of management, the term "corporate social responsibility" has been adopted. The concept of corporate social responsibility owes its development to the development of the before-profit-obligation model (Kostera, Śliwa et al. 2010, pp. 50-140). In the before-profit-obligation model, the obligation of an economic organization (especially a public interest company) is to take into account the expectations of stakeholders and equating them with the strategic goals that the economic organization will implement (or implements). If an organization pursues its strategic goals without the equal-rank procedure, the profit it achieves is not morally justified. There has been an ongoing discourse on corporate social responsibility - as proven by economic practice - quite often social responsibility is incorrectly associated with philanthropy, or voluntary involvement of an economic organization in solving social problems (so-called social assistance - sponsoring publications, etc.) An im-

portant issue is to identify to whom and for what the economic organization is responsible (accountable). Accountability of an economic organization can be defined subjectively - they are all entities with which an economic organization has specific relations, e.g. they have shares, rights or interests related to the economic activity of that economic organization. These rights and interests are the result of transactions, agreements or other activities of a legal or moral nature, either individual or group. The corporate social responsibility report prepared by some capital groups for both the needs of the Polish stock exchange (WSE) and international financial markets is freely prepared (both from the substantive and formal point of view) and according to empirical research (Kwiecień 2013b; Kwiecień 2011; Kwiecień 2010a, Krasodomska, Waclawik 2016), economic organizations fail to indicate clearly and transparently the relationship between CSR achievements and the generated value of organization or its profit (Krasodomska 2015, Kwiecień 2016a). These constraints and the reduction of financial consequences determined the necessity to change the legal regulations of the IFRS-9, and made the business management model a basis for the assessment of the creation by an economic organization its value. This led to the assessment of the mapped diachronic relationship (business model - concept of six types of capital) between the ongoing processes, or the "holographic" mapping of the entire economic reality (Kwiecień 2016a). Reporting on the contractually defined corporate social responsibility means disclosure and presentation of financial information only. On the other hand, integrated reporting determines accounting estimates of economic life (including quantification in fair value – cf. Buk 2016, Frendzel 2015, Kwiecień 2016-2016b et al.), i.e. it answers the questions by means of which types of capital the market value of an economic organization was increased - that is why non-financial data is necessary – narration-commentary – about how the assets have been classified for the purposes of the fulfillment of the strategic goal - how they have been valued and why. Accounting must strive for the truth, for the recognition of reality - relations between entities (including stakeholders, etc.), of the rules governing the markets and segments of the economy.

Conclusions

With reference to the above statement by G. Kołodko, according to which an economist must be able to use philosophy, I can assume that economic practice, critical analysis of the literature - in the field of economy and in particular management – gives grounds to the statement that accounting ("accountant" as an economist) must be able to use philosophy. An apt statement in support of my view is L. Hardt's analysis: "criterion of comparability of theory, resulting from a realistic philosophy of economics, *de facto* resembles a certain metacriterion, i.e. it makes accessible to the researcher principles based on which they choose the criterion appropriate to the problem they want to solve [...] the world is not a story without a real structure or processes corresponding to the studied phenomenon, but a structured reality. The use of unrealistic assumptions is not an expression of the conviction that "anything goes" and the content of these assumptions is irrelevant, but on the contrary, their use in economic models shows that first - the real world exists [...] - and second, that this world can be described and one can find order in it, hence also order marked by cause and effect" (Hardt 2013, pp. 70-71). Thus, integrated reporting is indeed a "revolution" in accounting; it is a necessity to conduct interdisciplinary research so that the report is a report of the responsible development of a given business organization (cf. Krasodomska 2015, Kwiecień 2016 a-d).

References

- Bareja K. (2013), *Główne wątki dyskusyjne nad stanem badań naukowych w rachunkowości w Stanach Zjednoczonych*, „Zeszyty Teoretyczne Rachunkowości”, vol. 71 (127).
- Berezińska J., Błażyńska J. (2016), *Accounting Systems and the information needs of contemporary stakeholder*, in: Kamela-Sowińska A. (ed.), *Rachunkowość warta poznania. Współczesna rachunkowość – zagadnienia wybrane*, Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu, Poznań.
- Buk H. (2016), *Modele biznesu jako podstawa klasyfikacji wyceny aktywów finansowych*, w: Luty Z., Łakomiak A., Mazur A. (ed.), *Aktywa finansowe*, „Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu”, no 445.
- Burzym E. (2008), *Spółeczna funkcja rachunkowości*, Zeszyty Teoretyczne Rachunkowości, Rada Naukowa SKwP, Warsaw.
- Cieślak M. (2011), *Podejście etyczne w rachunkowości a jakość sprawozdań finansowych*, Wydawnictwo Ekonomicznego w Poznaniu, Poznań.
- Freeman R.B. (2010), *It's financialization*, „International Labour Review”, 149 (2), Wiley-Blackwell, Hoboken NJ.
- Frendzel M. (2016), *Dobrowolna wycena aktywów finansowych w wartości godziwej przez podziały finansowe notowane na GPW w Warszawie*, in: Luty Z., Łakomiak A., Mazur A. (ed.), *Aktywa finansowe*, „Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu”, no 445.
- Furman W. (2016), *Podatkowe aspekty w zakresie terminologii oraz wyceny aktywów finansowych w kontekście regulacji bilansowych*, in: Luty Z., Łakomiak A., Mazur A. (ed.), *Aktywa finansowe*, „Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu”, no 445.
- Garstecki D. (2015), *Czy rachunkowość społecznej odpowiedzialności zasługuje na miano paradygmatu*, in: Nita B. (ed.), *Teoria rachunkowości. Sprawozdawczość i analiza finansowa*, Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław.
- Giedroyc J. (2015), *Relevantność informacji sprawozdawczych*, in: Luty Z., Chmielowiec-Lewczuk M. (ed.), *Rachunkowość – polityka makroekonomiczna, globalizacja*, Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław.
- Gierusz J. (2015), *Dylematy harmonizacji rachunkowości*, „Zeszyty Teoretyczne Rachunkowości”, vol. 82 (138).
- Gos W., Hońko S., (2016), *Kwalifikacja do aktywów finansowych i jej wpływ na wycenę bilansową*, in: Luty Z., Łakomiak A., Mazur A. (ed.), *Aktywa finansowe*, „Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu”, no 445.
- Hardt Ł. (2013), *Studia z realistycznej filozofii ekonomii*, Wydawnictwo C.H. Beck, Warsaw.
- Hausner J. (2014), *Globalny kryzys, potrzeba nowej polityki gospodarczej*, w: Mączyńska E. (ed.), *Ekonomia dla przyszłości. Fundamentalne problemy teorii ekonomii i praktyki gospodarczej*, IX Kongres Ekonomistów Polskich, PTE, Warsaw.
- Hendriksen E.A., van Breda M.F. (2002), *Teoria rachunkowości*, Wydawnictwo Naukowe PWN, Warsaw.
- Jajuga K. (2015), *Nauka o finansach – nowe wyzwania metodyczne*, in: Fiedor B. (ed.), *Nauki ekonomiczne stylizowane fakty a wyzwania współczesności*, IX Kongres Ekonomistów Polskich [9th Congress of Polish Economists], PTE, Warsaw.
- Kamela-Sowińska A. (2015), *Obrót gospodarczy jako dobra prawnie chronione przez ustawę o rachunkowości*, in: Luty Z., Chmielowiec-Lewczuk M. (ed.), *Rachunkowość polityka makro-ekonomiczna – globalizacja*, Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu 390, Wrocław.

Kaplan R.S., Norton D. (2011), *Mapy strategii w biznesie. Jak przełożyć wartości na mierzalne wyniki*, GWP, Gdańsk.

Karwowski M. (2015), *Model biznesu jako nowe wyzwanie sprawozdawczości zewnętrznej*, in: Nita B. (ed.), *Teoria rachunkowości. Sprawozdawczość i analiza finansowa*, Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław.

Kłosiński K.A. (2015), *Racjonalność egzystencjalna – globalne wyzwania*, in: Mączyńska E. (ed.), *Modele społeczno-gospodarcze, Kontrowersje i dylematy*, IX Kongres Ekonomistów Polskich [9th Congress of Polish Economists], PTE Warsaw.

Kołodko G. (2014), *Nowy pragmatyzm, czyli ekonomia i polityka dla przyszłości*, in: Mączyńska E. (ed.), *Ekonomia dla przyszłości. Fundamentalne problemy teorii ekonomii i praktyki gospodarczej*, IX Kongres Ekonomistów Polskich [9th Congress of Polish Economists], PTE Warsaw.

Kostera M., Śliwa M. (2010), *Zarządzanie w XXI wieku, Jakość, Twórczość, Kultura*, Wydawnictwo Akademickie i Profesjonalne, Warsaw.

Krasodomska J. (2015), *Sprawozdawczość zintegrowana jako nowy obszar badań naukowych w rachunkowości*, „Zeszyty Teoretyczne Rachunkowości”, vol. 82 (138).

Krasodomska J., Waclawik B. (2016), *Ocena zgodności z MSSF informacji dotyczących instrumentów finansowych ujawnianych przez emitentów papierów wartościowych w latach 2009-2015*, in: Luty Z., Łakomiak A., Mazur A. (ed.), „Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu”, no 445.

Kwiecień M. (2010a), *Rachunkowość a zarządzanie informacją w organizacji gospodarczej*, in: Borowiecki R., Czekaj J. (ed.), *Zarządzanie zasobami informacyjnymi w warunkach nowej gospodarki*, Difin, Warsaw.

Kwiecień M. (2010b), *Wiarygodność informacji sprawozdawczej a zarządzanie*, in: Kwiecień M., *Wyzwania i perspektywy rozwoju zasobami informacyjnymi w warunkach kryzysu gospodarczego*, Difin, Warsaw.

Kwiecień M. (2011), *Sprawozdawczość finansowa a korporacyjna odpowiedzialność społeczna*, in: Borowiecki R., Czekaj J. (ed.), *Gospodarowanie zasobami informacyjnymi a perspektywy zarządzania kryzysowego*, TNOiK Dom Organizatora, Toruń.

Kwiecień M. (2013a), *Nowe warunki gospodarowania a wyzwania dla rachunkowości i jej paradygmatów*, in: Karmańska A. (ed.), *Nauka rachunkowości na progu gospodarki opartej na wiedzy. Polski sondaż środowiskowy*, Oficyna Wydawnicza SGH, Warsaw.

Kwiecień M. (2013b), *Sprawozdanie z odpowiedzialności społecznej a ryzyko działalności gospodarczej*, in: Micherda B., Andrzejewski M. (ed.), *Sprawozdawczość i rewizja finansowa – problemy kwantyfikacji ryzyka gospodarczego*, Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie, Krakow.

Kwiecień M. (2015a), *Rachunkowość na skrzydłach XXI wieku*, in: Krasodomska J., Świetla K. (ed.), *Współczesne uwarunkowania sprawozdawczości i rewizji finansowej*, Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie, Krakow.

Kwiecień M. (2015b), *Dylematy współczesnej rachunkowości*, in: Nita B. (ed.), *Teoria rachunkowości. Sprawozdawczość i analiza finansowa*, Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław.

Kwiecień M. (2015c), *Dylematy rachunkowości jako nauki społecznej*, in: Fiedor B. (ed.), *Nauki ekonomiczne. Stylizowane fakty a wyzwania współczesności*, IX Kongres Ekonomistów Polskich [9th Congress of Polish Economists], PTE Warsaw.

Kwiecień M. (2016a), *Sprawozdanie zintegrowane – innowacja paradygmatów rachunkowości*, „Zeszyty Teoretyczne Rachunkowości”, no 87 (143).

Kwiecień M. (2016b), *Kierunki rozwoju współczesnej rachunkowości* in: Kamela-Sowińska A. (ed.), *Rachunkowość warta poznania. Współczesna rachunkowość – zagadnienia wybrane*, Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu, Poznań.

Kwiecień M. (2016c), *Wartość godziwa w poszukiwaniu nowego paradygmatu rachunkowości*, „Zeszyty Naukowe Kolegium Zarządzania i Finansów”, no 146.

Kwiecień M. (2016d), *Contemporary accounting and management*, in: Malina A., Węgrzyn R. (ed.), *Knowledge – economy – society. Challenges and development of modern finance and information technology in changing market conditions*, Foundation of the Cracow University of Economics, Krakow.

Kwiecień M., Hasik W. (2009), *Rachunkowość XXI wieku*, in: Okoń-Horodyńska E. (ed.), *Przedsiębiorczość jako niewykorzystane źródło sukcesu polskiej gospodarki*, VIII Kongres Ekonomistów Polskich [8th Congress of Polish Economists], PTE Warsaw.

Łętowska E. (2015), *Błędologia i manipulowana legislacja*, in: *Jakość prawa, koszty transformacyjne dochodzenia praw z umów*, Biuletyn PTE Warsaw.

Mączyńska E. (2014), *Ekonomia dla przyszłości. Fundamentalne problemy teorii ekonomii i praktyki gospodarczej – wprowadzenie*, in: Mączyńska E. (ed.), *Ekonomia dla przyszłości. Fundamentalne problemy teorii ekonomii i praktyki gospodarczej*, IX Kongres Ekonomistów Polskich [9th Congress of Polish Economists], PTE, Warsaw

Pielichaty (2016), *Nowe wymagania w zakresie klasyfikacji i wyceny aktywów finansowych*, in: Luty Z., Łakomiak A., Mazur A. (ed.), *Aktywa finansowe*, „Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu”, no 445.

Smejda M. (2015), *Teoretyczne kontrowersje wokół przedmiotu rachunkowości*, w: Fiedor B. (red.), *Nauki ekonomiczne stylizowane fakty a wyzwania współczesności*, IX Kongres Ekonomistów Polskich [9th Congress of Polish Economists], PTE, Warsaw.

Stiglitz J.E. (2007), *Globalizacja*, PWN, Warsaw.

Stiglitz J.E. (2010), *Jazda bez trzymanki. Ameryka, wolne rynki i tonięcie gospodarki światowej*, PTE, Warsaw.

Walińska E. (2011), *Definicje podstawowych elementów sprawozdań finansowych, zasady ich uznawania i pomiaru*, in: Walińska E. i inni (ed.), *Sprawozdanie finansowe według MSSF, zasady prezentacji i ujawniania informacji*, Oficyna Wolters Kluwers Business, Warsaw.

Wartini-Twardowska J. (2014), *Konsolidacja w grupach kapitałowych z perspektywy modelu biznesu na przykładzie sektora producentów systemów informacyjnych zarządzania*, C.H. Beck, Warsaw.

Wilkin J. (2015), *Ekonomia wolności i ekonomia zniewolenia. Kiedy ekonomia sprzyja poszerzeniu ludzkiej wolności a kiedy ją ogranicza ?* w: Mączyńska E. (ed.), *Modele społeczno-gospodarcze, Kontrowersje i dylematy*, IX Kongres Ekonomistów Polskich [9th Congress of Polish Economists], PTE, Warsaw

Wojtyna A. (2014), *Czy kryzys w teorii ekonomii jest głębszy niż w gospodarce*, in: Mączyńska E. (ed.), *Ekonomia dla przyszłości. Fundamentalne problemy teorii ekonomii i praktyki gospodarczej*, IX Kongres Ekonomistów Polskich, PTE, Warsaw.

Żemigła M. (2007), *Společna odpowiedzialność biznesu, budowanie zdrowej, efektywnej organizacji*, Oficyna Wolters Kluwer business, Krakow.

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Ekonomiczny wymiar bezpieczeństwa

Streszczenie

Kwestię wzajemnych relacji między systemem bezpieczeństwa a gospodarką narodową bada stosunkowo młoda subdyscyplina ekonomika bezpieczeństwa. Istotne pozostaje określenie współczesnych determinant bezpieczeństwa (w warunkach układu wielobiegunowego i szeregu zagrożeń o charakterze asymetrycznym). Celem artykułu jest osadzenie kwestii bezpieczeństwa na gruncie nauk ekonomicznych i podejmowanie prób analiz problemów we współczesnych warunkach gospodarowania przy uwzględnieniu ewolucji roli państwa narodowego.

Słowa kluczowe: ekonomika bezpieczeństwa.

The economic dimension of security

Abstract

The issue of common relations between the security system and the national economy is examined by a relatively new subdiscipline – national security economics. It remains crucial to define the contemporary security determinants (in the conditions of a multipolar system and the array of asymmetric threats) as well as the role of economic science in making strategic decisions for national security.

Keywords: national security economics

JEL CODE: H41, F52

Introduction

Security has recently become a popular research topic among representatives of many disciplines of social sciences. As part of economic research, security research is conducted within one of the specific field of economics, i.e. national security economics. It is a relatively new scientific subdiscipline, dating back to the 1920s (then war economics under military art, later under military science). War economics, sometimes referred to as military economics, despite concerning somewhat different areas of research, focused on the quest for interdependence between the national economy and the war, or the use of economic resources for the purposes of warfare. In the post-war period, the term defense economics was often used, emphasizing the economic and defense dimension of the field and the issue of resource conversion for national defense. National security economics is the name that has been in use since the mid-1990s. In trying to define the scope of national security economics, one can say it is a subdisciplinary study of relations between the national security system and the economy. It defines the directions of national economic and defense policy and creates the basis for optimizing the use of resources for national security. This discipline is located on the interface of economics and security sciences - the subject of interest is security, while research methods and techniques are derived from economic sciences. Within national security economics, detailed research problems include: national economic security (concerning energy and resource security, financial security, food security), strategic resources and reserves, defense industry potential and human resources for security. This article concerns one of the main areas of research within national security economics, namely economic security (Płaczek 2014, pp. 41-42). The purpose of the article is to ground the problem of security in economic sciences and

attempt to analyze problems in modern economic conditions, taking into account the evolution of the role of the nation state in that respect. The issues of economic security, economic warfare and the progressive “neo-liberalization” of the state were reviewed in this paper.

Economic security and its definitions

Economic security is an area of interest for economics as well as other social sciences. This is partially due to the interdisciplinarity of economic security, but also to the various research perspectives held in relation to it. Economic, social and political realities require considering security as the overriding human (community) need understood as "lack of something necessary for the preservation of life, development and retainment of the social role" (Stachowiak 2012, p. 38).

Security is an example of a non-rivalrous public good, from whose consumption no member of a given community can be excluded. Decisions on the delivery of public goods are the result of public elections and political decisions (Stachowiak 2012, p. 42). Security, as a public good, shares common characteristics with other goods included in this category, such as usability as a determinant of consumer satisfaction. Providing security requires appropriate resources and the associated overheads distributed over time. As a public good, security additionally determines the consumption of other goods and services, constituting a fundamental good and at the same time being complementary to the values covered by the scope of security.

The delivery and production of security rests on the state at institutional level. One of the areas of security is economic security (Stachowiak 2012, p. 42). The condition of effective security (economic security included) is the sovereignty of the subject, in this case the state. "In spite of the progressive integration and dynamics of the formation of integrative groups, sovereignty remains the exclusive attribute of states and is the essence of statehood. The intensification of globalization and fragmentation processes has raised questions about the opportunities and ways of responding to the emerging challenges and threats in international relations, including the sovereignty of the state. This dilemma mainly refers to the further functioning of the international system based on national states and their ability to operate effectively in an increasingly globalized world driven by turbocapitalism "(Grącik-Zajączkowski 2011, p. 234).

From the standpoint of economic security analysis, it is important to define the economic sovereignty of the state. The inability of effectively influencing the course of economic processes or maintaining public order is interpreted as loss of sovereignty. Economic sovereignty is understood as the specific control exercised by public authorities over the transnational flow of goods, capital, people and ideas (Grącik-Zajączkowski 2011, p. 237). The national state continues to be the main actor in terms of security provision (economic security included), although its role in that regard is changing in connection with the intensifying process of globalization that is soon to become hyperglobalization. The sovereignty of a given state can be limited in the name of “greater purposes”, such as to protect the lives and health of endangered people in fallen states or non-democratic regimes. Currently, new and unusual phenomena and economic processes are jeopardizing national stability. They concern areas such as the ability of the economic system to adjust internal and interrelated economic factors so that they provide stability to the state; the derivative of stabilizing and destabilizing factors for security and development of national economy; a balance of needs to ensure stability and economic development and the ability to meet them; state of development of the economy and its structures enabling effective counteracting of negative factors undermining the state of the economy and the stability of the socio-political system and defense capabilities of the country; representations of real and potential threats to the state's economic structures; degree of vulnerability to the transfer of actions aimed at undermining national security and stability through the economic field (Ciszek 2013, p. 49).

According to Księżopolski (2011), economic security is the undisturbed functioning of economies, i.e. maintaining basic development indicators and ensuring a comparable balance against the economies of other states. The author of this article distinguishes four dimensions of economic security, which are logically interrelated and interdependent. These are: finance, raw materials and energy, food, and access to clean water. The concept of economic security reflects not only the harmony of certain economic quantities – at both macro and micro level – but also the numerous challenges and threats whose overcoming requires the effort of the whole society. Challenges and threats are rooted both in the internal system of a given country (political efficiency or inefficiency), but also increasingly in the development and functioning of the global economy as a whole (Stachowiak 2012, p. 45). "National economic security is a relatively balanced, endogenously and exogenously speaking, state of the functioning of the national economy, where the existing risk of imbalance is maintained in defined and acceptable organizational and legal norms and principles of social coexistence" (Raczkowski 2012, p. 81). According to K. Zukrowska, meanwhile, "[e]conomic security (...) means conditions of harmonious development, which allow to provide a balanced prosperity of citizens of the state. (...). In macroeconomic terms, security is the stability of employment, low unemployment rates, predictable development prospects of the economy characterized by financial liquidity. In microeconomic terms, it is the solvency of a household or a business. In both cases, it comes down to the ability to balance out liabilities with respect to needs in the medium term" (Żukrowska 2013, p. 35). Economic security is a derivative of economic development factors and barriers that impede it; the state of the economy and its structure and economic relationships that can effectively counter negative externalities potentially affecting the national system stability, disrupt economic development, or reduce the defense potential; the general state of economic dependence, determining the degree of effectiveness of external economic interventions in internal economic development; expressing the degree of vulnerability of a given country to the transfer via the economic plane – mainly through the transmission by channels and mechanisms of economic dependence – of political actions aimed at undermining state security (energy blackmail, currency and capital market speculations); the balance of development needs and the possibilities of their satisfaction (Stachowiak 2012, pp. 45-46). The presented definition fully reflects the essence of economic security as an area of national economic policy and the realm of international relations.

National economic security in the face of globalization

As noted by U. Beck (Beck 2005, pp. 128-131), the paradox of the neoliberal understanding of the state appears in the present phase of development. On the one hand, the so-called financial markets expect the minimal involvement of the state, subordinated to the rules of competition and open to the expectations of trans-Atlantic capital. On the other hand, the efficient deregulation and privatization of sectors traditionally dominated by public ownership cannot be expected from an institutionally weak state unable to function effectively. The strong state is expected especially in the aspect of border control and movement of persons. The progressive globalization of capital does not exclude the sealing of borders and the intensification of population movements. It is, therefore, not realistic to give up, and sometimes also to strengthen, the political power and autonomy of governments. The state is expected to sanction undemocratic rules of play – unlimited freedom for capital flows and rigorous control over the movement of the population, arising both from economic (migrations from suburbs to city centers) and political and security-related incentives (fear of terrorism). Beck argues that "in order to achieve the goal of neo-liberal restructuring of the world, it is necessary to simultaneously minimize and maximize the power of states" (Beck 2005, p. 128). The rise in support for protectionist practices and increased popularity of nationalism, anti-capitalism, ecoterrorism, support of national democracy and a strong state, xenophobia and religious fun-

damentalism can be a form of social response to progressive globalization and neoliberalization. Many people believed that democracy and capitalism went hand in hand, but as it turns out major financial market players were not worried or concerned about what they should do to serve democratic states and societies. Rating agencies implicitly estimate the financial condition of the states, banks have become so conservative that the ruling politicians are unable to reduce their debts due to the resistance of private creditors, and investment banks continue to partake in speculation.

State authorities chosen in democratic elections are limited in their ability to influence, so they are mainly concerned with debt administration and cutting down public spending, and in doing so inciting social tensions and political radicalism (Bartz 2013, p. 28). Researchers point to the growing contradictions in the development of individual countries and geographical areas. Many places – Africa, Syria, Ukraine – are suffering from local armed conflicts, which are nothing but wars waged on resources and zones of influence. At the same time, one must bear in mind the bloodless rivalry that involves technology theft, intellectual property disputes, destruction of natural resources and exploitation of labor resources, which collectively form the new slavery of human trafficking (Kleer 2015, p. 152). The fragility of national institutions and the specific reversal of roles (the primacy of economic power over democratically accomplished social and legal order) potentially push the state towards bankruptcy, in a scenario analogous to that observed in the corporate sector. The market for loan capital providers is about setting goals and shaping the economic policies of individual countries. In a relatively easy way, the economy of a country can be swept to the brink of insolvency, especially if the political power is weak, has low intranational legitimacy and is unable to pursue effective international policy.

Goeconomics and economic warfare

Under these conditions, a new paradigm is developing in international relations, being referred to as goeconomics (considered a soft force in contrast to military instruments), which is successively overtaking geopolitics. According to Edward Haliżak (Haliżak 2012, p. 48), goeconomics is geared towards the pursuit of two goals: national power defined in terms of wealth and competitive advantage (this is to ensure the most localized attractiveness for portfolio investments and direct investments in services and production) and maximizing access to goeconomic space (access to resources, factors of production, protection and support of national economic entities, possibility of locating tangible assets in order to take advantage of management returns to scale). Goeconomics, therefore, requires a strategic approach and actions relevant to the economic policy of the state. Goeconomics is the expression of a modern approach to defining the role and power of the state in the international arena. Military power no longer plays a crucial role (which is not to say its significance can be completely ignored), but rather complements economic power (based on knowledge, information and technological resources). Liberalization is the essence of the goeconomic approach, leading to the blurring of national borders. For this reason, it is a mistake to equate goeconomics with economic nationalism typical to post-colonial states (with extensive instruments of protectionism) (Neu, Wolf 1994, pp. 69-72). Goeconomics can, on the other hand, be associated with soft power and a desire to dominate, but the rules of the game are determined by the market and economic calculation, rather than diplomatic endeavors and military relations.

Another instrument of influence is known as "economic warfare" and it largely resembles cold-war relations, being typically implemented between non-democratic states. War as a social phenomenon has been associated with humanity for centuries, with researchers arguing about sources, causes and rationality of wars. Today, especially the representatives of the liberal trend in international relations, are prone to back the view that democracies do not wage open wars. There is, however, an element of aggression in inter-state relations. David M. Buss (2003, pp. 309-315) and Krzysztof Drabik (2013, p. 232) distinguish at least a few sources of

aggression that lead to wars: seizure of property, hierarchical fight for dominance, defense against attack, deterrence of potential aggressors. From the standpoint of the economic dimension of war, it is interesting to consider an evolutionary psychology hypothesis that speaks of the need for resources that surpass human consumption. As noted by K. Drabik, "[m]an is not satisfied with *merely* adaptive goods, so he does not stop at the level of competition, he needs something more, which is the fulfillment of desires born in what is specific to his nature - he understands and therefore needs war. Perhaps this is the kind of reason that is *corrupted*, one that goes beyond what is really necessary because of the need for adaptation" (Drabik 2013, p. 233). A specific kind of war is economic war, often termed economic warfare. It does not involve a direct invasion, but is rather a combination of various economic instruments aimed at destabilizing the subject (state) that becomes the target area of aggressive influence. "Economic warfare is a set of economic and military actions aimed at undermining or destroying the enemy's defensive and economic potential" (Stankiewicz 1996, p. 204). In addition to the strictly economic interference of the economic warfare, diplomatic, administrative, information and psychological instruments are also used. Economic warfare relies on specific tools and instruments. Table 1 lists the different measures of economic warfare. These are both military and non-military - depending on the circumstances, some of the funds may be classified as either. Non-military action may resort to propaganda, but it can easily border on military when used with the support of military troops. An invisible lockout may manifest, such as the collusion of financial institutions to hinder access to capital, or it may rely on speculative activities in the country's bond market (Kubisiak, Bomb 2012, pp. 50-51).

Table 1. Economic warfare instruments

Economic warfare instruments				
Non-military			Military	
Administrative measures	Diplomatic measures	Economic measures	Unconventional measures	Military measures
<ul style="list-style-type: none"> - export embargo, - import embargo, - administrative repression (against states and/or citizens); - economic assistance, - blacklisting - preventive purchases 	<ul style="list-style-type: none"> - exerting political pressure - boycott - propaganda 	<ul style="list-style-type: none"> - traditional tariff measures, - traditional non-tariff measures, - concerning currency and finance (contemporary) 	<ul style="list-style-type: none"> - money counterfeit, - operation of consulting firms, - allocation of ecological threats, - international economic crime, - inciting the threat of armed conflict - policy of stability disturbance 	<ul style="list-style-type: none"> - occupation of strategic industrial areas, - attacking the merchant fleet, - attacking economic objects and technical, economic and defense infrastructure. -
			<ul style="list-style-type: none"> - business intelligence - economic blockade, - diversion, - sabotage 	

Source: Bomba, Kubisiak 2012, p. 51.

Conclusions

This article discussed the selected areas of analysis in national security economics. Particularly important is the evolution of the role of the state in shaping economic security against globalization. It is fundamental today to look for sources and methods of achieving a high position in rivalry between states by means of peaceful diplomacy, without using military

force, based on the correct assumption that democracies do not wage wars. Geoeconomics has therefore become a rapidly growing field in contemporary international relations. However, the necessity of using widespread economic warfare instruments in the competition for the allocation of resources to maintain comparative advantage over other states remains controversial. In this context, the flexibility and ability of the state to cooperate within the framework of international groupings, and opt for win-win arrangements under certain favorable circumstances, is crucial.

References

- Bartz B. (2013), *Jak niegodziwy kapitalizm deprawuje demokrację i solidarność*, „Doctrina Studia Społeczno-Polityczne”, no 10.
- Beck U. (2005), *Władza i przeciwwładza w epoce globalnej. Nowa ekonomia polityki światowej*, Scholar, Warsaw.
- Bomba A., Kubisiak P. (2012), *Wojna ekonomiczna i jej społeczne skutki*, „Zeszyty Naukowe WSOWL”, no 3(165).
- Ciszek, M. (2013), *Filozofia ujmowania zagrożeń ekonomicznych dla bezpieczeństwa narodowego RP i stabilności wewnętrznej państwa*, „Doctrina Studia Społeczno-Polityczne”, no 10.
- Płaczek J. (ed.) (2014), *Ekonomika bezpieczeństwa państwa w zarysie*, Difin, Warsaw.
- Grącik-Zajackowski M. (2011), *Suwerenność w warunkach globalizacji*, in: Żukrowska K. (ed.), *Bezpieczeństwo międzynarodowe. Przegląd aktualnego stanu*, IUSatTAX, Warsaw.
- Księżopolski K.M. (2011), *Bezpieczeństwo ekonomiczne*, Elipsa, Warsaw.
- Neu C.R., Wolf Jr. Ch. (1994), *The Economic Dimensions of national Security*, RAND, National Defense Research Division, Santa Monica.
- Stachowiak Z. (2012), *Teoria i praktyka mechanizmu bezpieczeństwa ekonomicznego państwa. Ujęcie instytucjonalne*, AON, Warsaw.
- Stankiewicz W. (1996), *Ekonomika obrony*, WSO, Wrocław.
- Żukrowska K. (2013), *Ekonomia jako sfera bezpieczeństwa państwa*, in: Raczkowski K., Żukrowska K., Żuber M. (ed.), *Interdyscyplinarność nauk o bezpieczeństwie*, Difin, Warsaw.

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Metody analizy wpływu interwencji publicznych na poziom ubóstwa

Streszczenie

W związku z dużą skalą zjawiska ubóstwa, które nieodłącznie towarzyszy życiu społecznemu oraz gospodarczemu, bardzo ważnym elementem polityki publicznej na wszystkich szczeblach (międzynarodowym, krajowym i regionalnym) jest podejmowanie działań mających na celu jego ograniczenie. Działania te mają charakter interwencji publicznych i docelowo powinny prowadzić do pozytywnej zmiany strukturalnej. Nie zawsze jednak tak się dzieje – zatem przed realizacją konkretnego działania wskazane jest dokonanie dogłębnej analizy efektów jego wdrożenia – zarówno krótko, jak i długookresowych. W praktyce, skutki realizacji interwencji publicznych są najczęściej oceniane *ex-post* w drodze tzw. ewaluacji, która jest trudnym procesem, realizowanym przy zastosowaniu różnorodnych metod. Istotą procesu ewaluacji nie powinna być jednak wyłącznie konstatacja zdarzeń minionych, ale przede wszystkim znajomość skutków planowanych działań, dlatego niniejszy artykuł koncentruje się głównie na analizie *ex-ante* wpływu interwencji publicznych na poziom ubóstwa, a jego celem jest przegląd metod, które mogą być w niej zastosowane, ze szczególnym uwzględnieniem różnego rodzaju modeli.

Słowa kluczowe: ubóstwo, analiza wpływu interwencji publicznych

Analyzing the impact of public interventions on poverty

Abstract

Due to the large scale of poverty, a very important element of public policy at all levels (international, national and regional) is to undertake activities aimed at limiting this problem. These activities should ultimately lead to a positive structural change. However, it does not always happen – so before the realization of a particular public intervention, it is advisable to make a thorough analysis of the effects of its implementation – both short and long term. In practice, the results of public intervention are mostly evaluated *ex-post* with the use of different methods. However, the essence of the evaluation process should not only be observation of past events, but also an acquaintance with the effects of planned activities. Hence, this article focuses mainly on *ex-ante* analyses of the impact of public intervention on levels of poverty, and its purpose is to review the methods that can be used in such analyses, with particular emphasis on various types of models.

Keywords: poverty, *ex-ante* analysis of public interventions

JEL CODE: I3

Introduction

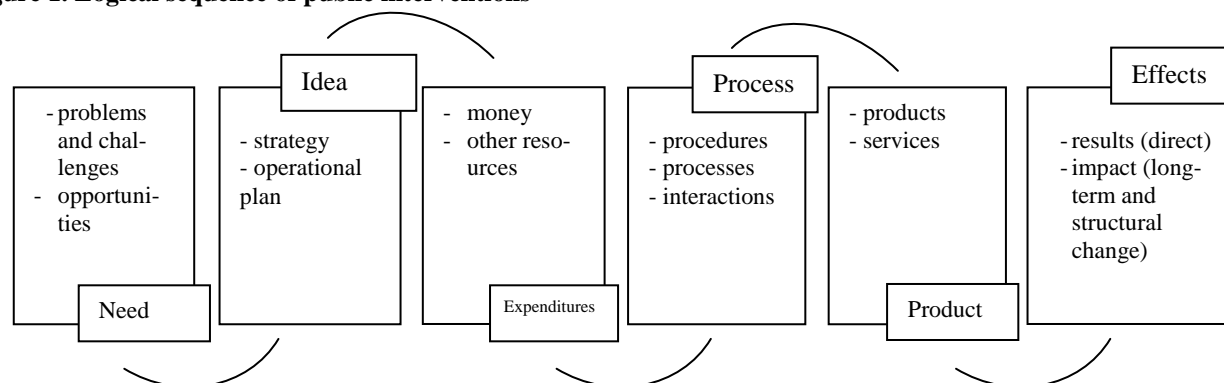
Poverty, understood as a lack of material resources to satisfy the basic life needs of an individual or a family (Bukowski and Magda 2013, p. 14), still concerns a large number of people both in the European Union (EU) and in Poland. Based on European Statistical Office data, the number of people at risk of poverty in the EU in 2014 was 17.2%, i.e. over 85 million, and 17%, i.e. 6.4 million, in Poland alone. The survey of household budgets conducted by GUS (Polish Central Statistical Office) found that, in 2014, there were around 2.8 million people living in households whose expenditure was below the extreme poverty threshold (i.e.

below the subsistence minimum). The number of people living below the statutory poverty threshold, i.e. below the threshold of social intervention, is estimated at around 4.6 million (GUS 2015, pp. 1-2).

Given the large scale of this problem, a very important element of public policy at all levels (international, national and regional) is to undertake activities aimed at limiting this problem. Guidelines in this respect are formulated in strategic documents at various levels. For example, at EU level, the document "Europe 2020 Strategy" (EC 2010) can be mentioned, whereas at national level there is *KPPUiWS2014* (Polish National Program for Counteracting Poverty and Social Exclusion 2020 - New Dimension of Active Integration). At regional level, meanwhile, the problem of combating poverty appears can be found, among others, in the documents of the Polish "Regional Operational Program" (PUE 2014). For more see this study (Łatuszyńska, Fate 2016).

Activities aimed at reducing poverty involve public interventions. They can be described as logical sequences of events and decisions (Figure 1). Under this approach, public interventions arise from a specific need. Correct identification of that need is the basis for working out the right way to solve a given problem. Then, certain expenditures are involved (including public funds), which are then converted into products and services in the implementation process. In principle, these products and services should satisfy the needs and resolve the problem that necessitates the intervention in the first place. Ultimately, the intervention should result in a certain positive structural change (Kościelecki, Warzybok 2011, p. 10).

Figure 1. Logical sequence of public interventions



Source: Hatry 2007; Keehley and Abercrombie 2008, p. 32.

However, public interventions do not always lead to the expected improvement. Therefore, before carrying out a specific action, it is advisable to perform an in-depth analysis of the effects of its implementation - both short- and long-term. In practice, the effects of public interventions are often evaluated *ex-post*, which is a difficult process involving a number of methods. The essence of the evaluation process should not be only the observation of past events, but most importantly the knowledge of the effects of planned activities. This is why this article focuses mainly on the *ex-ante* analysis of the impact of public interventions on poverty, with a view to reviewing the methods that can be applied, with particular emphasis on various types of models.

Dilemmas of the analysis of the impact of public intervention on poverty

Referring to the logical sequence of intervention, as shown in Figure 1, it can be assumed for the purposes of this article that the procedure of *ex-ante* analysis of the impact of public interventions on poverty, in general, consists of the following stages (Figure 2):

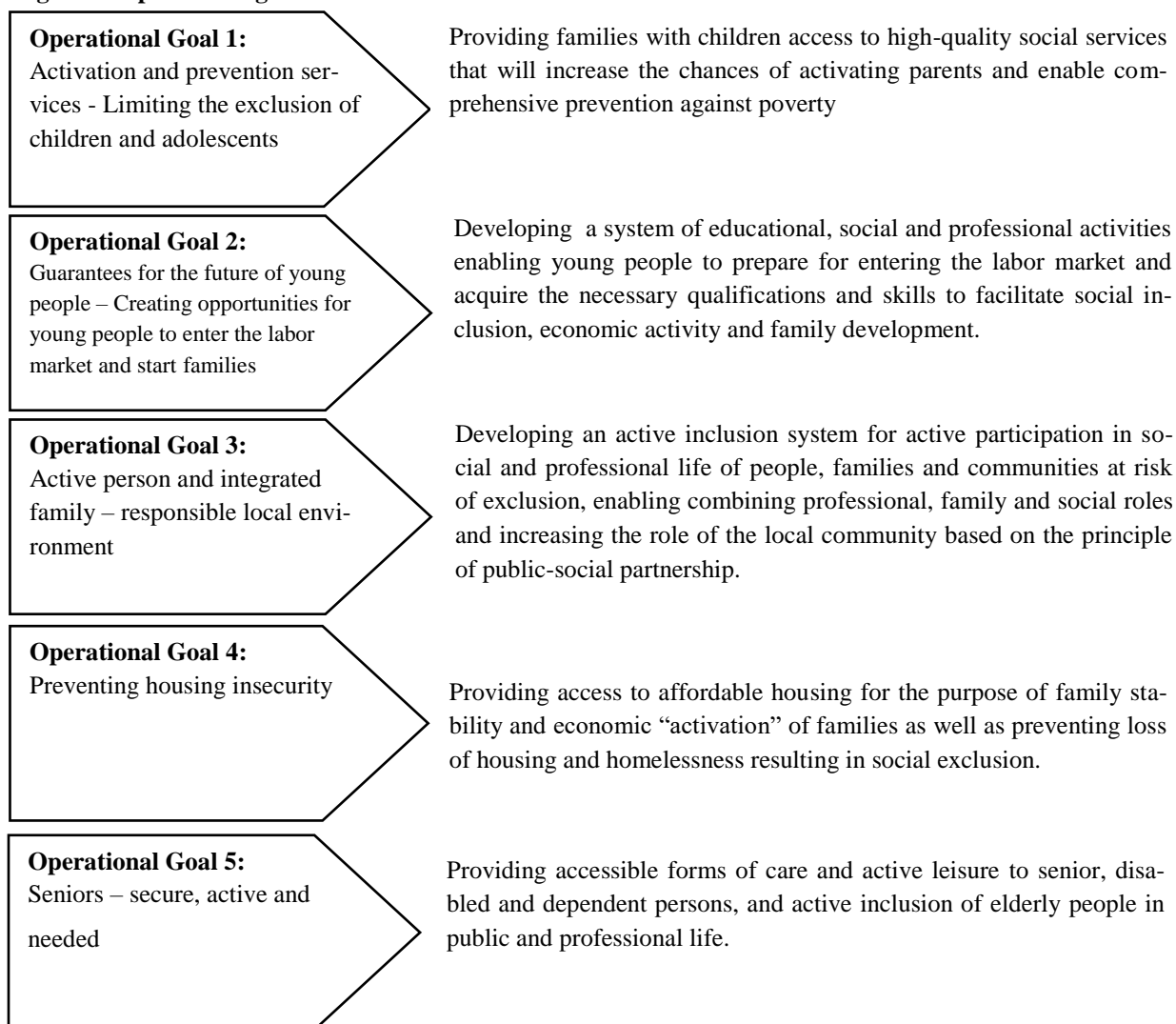
- problem definition - including preliminary defining of objectives, preliminary determination of the expected effects of interventions and their measures, specification of selection criteria between variants and definition of selection restrictions,

The flowchart illustrates the research methodology, divided into three stages: Formulation stage, Research stage, and Evaluation stage. The process begins with 'Initiation' leading to 'Problem definition'. From 'Problem definition', three arrows labeled 'Goals', 'Limitations', and 'Values and criteria' lead to 'Variants of activities / public interventions'. From there, an arrow labeled 'Variants' leads to 'Anticipation of effects'. From 'Anticipation of effects', an arrow labeled 'Consequences' leads to 'Evaluation of intervention'. Finally, an arrow labeled 'Suggestions for selection' leads away from 'Evaluation of intervention'. Feedback loops are shown: one from 'Evaluation of intervention' back to 'Problem definition', and another from 'Anticipation of effects' back to 'Variants of activities / public interventions'. The stages are defined by dashed vertical lines: 'Formulation stage' covers 'Problem definition'; 'Research stage' covers 'Variants of activities / public interventions' and 'Anticipation of effects'; 'Evaluation stage' covers 'Evaluation of intervention'.

Problem formulation stage

The starting point at the stage of formulating the problem is to set out the goals that are to be achieved as a result of the implementation of the planned public intervention. Currently in Poland the overarching objective of counteracting poverty, as outlined in *KPPUiWS2014*, is to reduce the number of people at risk of poverty and social exclusion by 1.5 million and increase social coherence by 2020 (KPPUiWS 2014). This is to be achieved through the successful pursuit of operational goals (Figure 3), which relate to specific results and specific public interactions (KPPUiWS 2014, pp. 41-52).

88

Figure 3. Operational goals

Source: KPPUiWS 2014, p. 45.

At the stage of formulating the problem, in addition to defining the objectives of the analysis and establishing indicators that allow measuring the results of public interventions, separate criteria should be defined that will enable the evaluation of a given activity. Table 1 presents the *ex-ante* evaluation criteria of public interventions most frequently mentioned in the literature.

Table 1. Ex-ante evaluation criteria of public interventions

Criterion	Description
Relevance	Evaluates the adequacy of the planned objectives and methods of implementing interventions in relation to the problems and socio-economic challenges that the intervention is to resolve.
Effectiveness	Evaluates the degree of implementation of the assumed objectives, the effectiveness of the methods used and the impact of external factors on the final results.
Efficiency	Evaluates the relationship between expenditures, costs, resources (financial, human, administrative) and the achieved effects of intervention.

Source: own study based on: Olejniczak 2008, p. 93.

Another important issue to be considered at problem formulation stage is the limitations that may occur in the planning process and then in the implementation of public interventions. In the literature, particular attention is paid to the following limitations (Sternik 2008, p. 504): (1) access to reliable data; (2) lack of uniform indicators to evaluate the phenomenon; (3) budget constraints; (4) mental limitations occurring in the environment in which the intervention is implemented; (5) legislative limitations.

The number of limitations may be significant and they can be permanent or short-term; they may also be subject to modification over time or as a result of new legislative decisions (Dudzińska 2015, pp. 161-167).

Research stage

The main goal of the research stage is to estimate the effects of planned public action variants, both short- and long-term. A number of qualitative and quantitative methods can be used for estimation. In the case of the first group, the estimation is based largely on qualitative data. The most popular methods of this type used in *ex-ante* analysis are: personal in-depth interviews and focused group interviews (Bienias, Strzęboszewski and Opalka 2012, pp. 99-100). They are used, among others, in (Stronkowski and Zych 2014) and (*Ewaluacja...*, 2014). In addition, the literature recommends qualitative methods such as expert panels (Płoszaj 2008, p. 300, Zybala 2012, p. 331, Bienias, Strzęboszewski and Opalka 2012, p. 106), as well as experimental and quasi-experimental methods (Haughton and Shahidur 2009, p. 259).

Data derived from quality sources complements - but does not replace - quantitative evaluations. In order to quantify the consequences caused by the proposed public activity, different types of models are normally used, but it is important that the model allows determining the values of indicators defined at the stage of formulating the problem.

The literature contains many examples of models used in *ex-ante* analysis, but they mainly concern the impact of public policies financed e.g. from EU funds. These are primarily economic models, among which several classes can be distinguished, including: real business cycle (RBC) models, regional models, partial equilibrium models, computational general equilibrium (CGE) models, or dynamic stochastic general equilibrium (DSGE) models. For more see e.g. (Piech 2008, pp. 179-194; Haughton and Shahidur 2009; Bienias, Strzęboszewski and Opalka 2012). It is not always possible to estimate on their basis the effects of specific public actions undertaken on a scale smaller than the macro scale. Some of the models mentioned in the literature have been discussed further in this article in terms of their suitability for the analysis of interventions aimed at counteracting poverty.

Evaluation stage

In the evaluation phase, the best variant of intervention should be selected against the pre-defined goals expressed as a set of accepted selection criteria, depending on the evaluation method used.

Various methods of evaluating public activities can be found in the literature, among them cost-benefit analysis, cost-effectiveness analysis, economic impact analysis or multi-criteria analysis (Zybala 2012; Bienias, Strzęboszewski and Opalka 2012). It is also possible to abandon the conventional evaluation of variants. In such cases, the results obtained in the previous phase of the analytical procedure are summarized in the form of a comparative table. Qualitative methods, e.g. expert panels, may prove a helpful decision-making tool in this regard.

Models in evaluating the effects of activities aimed at combating poverty

Economic models are normally used to quantify the consequences caused by the proposed public actions. Table 2 lists the models most frequently mentioned in the literature. Those models were not developed specifically to study the impact of public actions on poverty, but they can nevertheless, to a smaller or larger extent, be used to determine certain indicators in

this respect. The table indicates: type of model (static/dynamic), selected indicators calculated by the model, level to which the model refers (local, regional, national, international), availability of model documentation, IT support, and usefulness to study the impact of public intervention on poverty prevention. A brief characterization of the models included in the list was made below

EDUMOD is a DSGE model of the Polish economy developed in 2015. It allows to simulate the socio-economic effects of quantifiable elements of public policies, with particular emphasis on policies related to the formation and development of human capital, educational choices and labor market policies. The model was developed by the Polish Institute for Structural Research (IBS) and the task itself was commissioned by the Polish Institute for Educational Research. It can be used for both short- and long-term forecasts (up to 30 years) (Ramsza, Kowal and Lis 2015).

EU-ImpactMod is a DSGE model developed in 2008 by the Polish Institute for Structural Research (IBS). Its structure comprises six sectors containing demographic and labor-market modules. It allows to simulate the impact of demographic changes and the most important events on the labor market on the economy. It was also used to study the impact of cohesion policy implementation on the main indicators of the Polish "National Development Plan 2004-2006" and "National Cohesion Strategy 2007-2013" (Bukowski 2008, Bukowski, Dyrda and Kowal 2010, Bukowski and Wierus 2011).

EUROMOD is a model originally developed in 1996 by the Institute for Social and Economic Research, operating at the University of Essex (UK) and still developed to this day. The results generated by the model are available at www.euromod.ac.uk. The model allows us to study the effects of tax policy changes both at EU and national level (Sutherland and Figari 2013). The model has its own website: www.euromod.ac.uk.

HERMIN is a macroeconomic model to assess the impact of cohesion policy on socio-economic development. The model relies on historical data from the agricultural, industrial and market service sectors. It was developed in 1982 by the Economic and Social Research Institute in Ireland, but it was also used in other countries, such as Greece, Spain, Ireland, Portugal, as well as in transition countries (e.g. Hungary, Poland, Slovakia, Latvia, Estonia) for medium-term forecasts (up to 10 years) (Piech 2008, p. 189, Bradley, Zaleski and Tomaszewski 2005, pp. 21-22). The model has its own website: www.hermin.pl.

INES is a model developed in 1998 by the *Institut National De La Statistique Et Des Études Économiques* and used in the French Ministry of Social Affairs. It is based on data from households. It covers issues such as redistribution system, labor market, taxes and social benefits. It also allows short-term forecasting (up to 3 years) (David, Lhommeau and Starzec 1999, Fontaine and Sicsic 2016).

MaMoR2 is a CGE model developed in 2006 by the Polish Institute for Market Economics (IBNGR). It allows analysis of some economic aspects in a regional and national perspective, e.g.: supply of goods, investments, private consumption, domestic demand and exports, production factors, the public sector, prices and wages. It relies on annual data (Kaczor 2006, Kaczor i Socha 2008, Piech 2008, pp. 193-194).

The tax-and-benefits model of the Polish Ministry of Finance was developed in 2012. It can be used to analyze changes in the scope of taxation and personal income tax regulations, family benefits and carer's allowance, social benefits in various socio-economic cross-sections. It relies of GUS data derived from the study of household budgets in Poland (Konopczak and Skibicki 2012).

The theoretical model of the Polish economy developed in 2002 by the Polish Institute for Market, Consumption and Business Cycles Research (IBRKK) is a hybrid model that combines neoclassical theory with New-Keynesian theory based on changes in demand. It was commissioned by Polish Ministry of Economy and is used in Poland for medium-term

macroeconomic forecasts (up to 10 years), in particular in the field of foreign trade (Piech 2008, p. 193; Karpińska-Mizielińska et al. 2006, pp. 104-105).

MYRIADE is a model developed in 2001 by the French National Agency for Family Allowances (*La Caisse Nationale Des Allocations Familiales*), used to evaluate social policy. It allows analysis of the consequences of changes in social contributions, taxes, credit concessions, social and family benefits in the long-term time horizon (up to 2060). It is also used by the French Central Statistical Office (Legendre 2001, pp. 33-50, Blanchet 2014, pp. 69-73).

NECMOD is an econometric model used by the National Bank of Poland (NBP) for inflation and GDP projections. It is based mainly on labor market data from BAEL (Polish Labor Force Survey), public finance sector data, prices of consumer goods according to CPI basket and NBP financial data (Greszta et al. 2012, Piech 2008, p. 186). The time range of forecasts generated by the model is up to 12 quarters (Przybylska-Kapuścińska and Szyszko 2009, p. 122).

SIMPL is a tax-and-benefits model developed in 2003 by the independent research and development foundation *CenEA* (Center for Economic Analysis in Szczecin, Poland). It is used to estimate the impact of changes in the tax system on the budget of individuals, families and households. The model makes it possible to examine how the existing tax-benefit system affects social inequalities, poverty and income distribution (Domitrz et al., 2013, pp. 261-286, Myck, Kundera and Oczkowska 2013, pp. 2-3; Bargain et al. 2007).

SWITCH is a model, developed in 1987 by the Economic and Social Research Institute (Ireland). It can be used to determine the income of each family depending on the current tax system and social policies. Used annually to evaluate the impact of proposed reforms on the family budget in the long-term time horizon. It relies on statistical office data regarding income and living conditions (Callan et al. 2001, Callan et al. 2010).

SYSIFF is a model of the French redistribution system used to evaluate *ex-ante* political reforms and modeling direct taxes, social security contributions, indirect taxes, local taxes and family benefits. It also allows to study the impact of money reimbursements on poverty. Developed in 2006 by the Paris School of Economics (Piccoli, Canova and Spadaro 2009, Canova, Piccoli and Spadaro 2015).

TÁRSZIM is a Hungarian tax-and-benefits model developed in 1995 by the Information Center for Social Research (TARKI) in Budapest. It is used for analyses in the area of income tax, indirect taxes and financial regulations of social benefits. It mainly uses household data (Szivós, Rudas and Tóth 1998, Benedek, Scharle and Szabó 2007).

TAXBEN (IFS) is a model developed in 1983 by the Institute for Fiscal Studies (United Kingdom) to conduct distribution analyses of profits and losses resulting from tax reforms. It also allows to study poverty among children and single mothers until 2020. It relies on data from households (Giles and McCrae 1995, Brewer et al. 2009).

Table 2. Models used in estimating the effects of public activities

Model name	Model type	Selected indicators	Documentation	Level	IT support (software tools)	Usefulness for analyzing the effects of counteracting poverty
EDUMOD	Dynamic	employment rate of the population aged 15-64 (%); education of people aged 15 and over (%)	Yes	National, Regional	Application EduMod C, C#	Indirect
EU-ImpactMod	Dynamic	total employment rate (percentage points); at-risk-of-poverty rate relative to total social transfers (percentage points).	Limited	National	—	Direct

Model name	Model type	Selected indicators	Documentation	Level	IT support (software tools)	Usefulness for analyzing the effects of counteracting poverty
EUROMOD	Static	poverty risk rate in %, risk of poverty among children in %	Yes	International (EU countries)	MS Excel	Direct
HERMIN	Static and dynamic	Number of new jobs, change in GDP.	Yes	National, Regional	WINSOLVE	Indirect
INES	Static	poverty rate, inequality rates	Limited	National, Regional	–	Direct
MaMoR2	Static	employment rate of people aged 15-64 (%), unemployment rate of people aged 15-64 (%).	Limited	National, Regional	–	Indirect
Tax-and-benefits model of the Polish Ministry of Finance	Static	average per capita income (in PLN), change in per capita income relative to baseline scenario (in PLN and in %), relief cost (in PLN million).	Limited	National	MS Excel	Direct
Theoretical model of the Polish economy	Statyczny	GDP growth rate in %, employment of people aged 15-64 in %.	Limited	National	–	Indirect
MYRIADE	Static and dynamic	unemployment rate in%, demographic indicators, incl. migration rate (in people).	Limited	National	Application in C++	Indirect
NECMOD	Dynamic	GDP (percentage points), exchange rate (%), CPI inflation (percentage points)	Yes	National	–	Indirect
SIMPL	Static	poverty rate	Limited	National	MS Excel, Access, Visual Studio	Direct
SWITCH	Static	poverty and social exclusion indicators	Limited	National	–	Direct
SYSIFF	Static	poverty indicators	Limited	National, Regional, Local	MS Excel	Direct

Model name	Model type	Selected indicators	Documentation	Level	IT support (software tools)	Usefulness for analyzing the effects of counteracting poverty
TÁRSZIM	Static	average tax per household, average household tax rate by number of children	Limited	National	MS Access	Indirect
TAXBEN	Static	child poverty rate (%), material deprivation rate (%).	Limited	National, Regional	Application in Delphi	Direct

Source: own study.

When discussing the contents of Table 2, it should be emphasized that it is very difficult to find a complete documentation for any of the presented models. The available literature lacks detailed descriptions of their assumptions, structure and functioning, whereas available data tends to be general and selective, which results in most of these models being "black boxes". It is therefore difficult to fully evaluate their suitability for analyzing the impact of public interventions on poverty. Nevertheless, the analysis of the available data allows to put forward certain basic conclusions.

Most of the analyzed models are static and so they can provide only point-based forecasts for a definite moment in time (year), which does not allow taking into account the secondary effects of public actions resulting from the internal structure of the studied effects system, especially when the analysis concerns a long-term time horizon. With dynamic models, only one, i.e. EU-ImpactMod, allows direct determination of indicators related to poverty, but it is possible to apply it at national level only, while many public interventions for reducing poverty are regional, or even local, and it would be advisable to rely on tools developed for carrying out analyses at these levels.

Some of the presented models use IT tools, mainly MS Excel spreadsheet. The advantage of this solution is fairly simple functionality although cause-and-effect relationships defined in analytical models created using spreadsheet are unidirectional, which does not fully reflect the mechanisms of public intervention effects that result from multilateral feedbacks, time delays and non-linearity of relationships between the basic elements of a complex socio-economic reality.

In summary, it can be stated that there is an evident need to develop a model that would be dedicated directly to the impact of public activities on poverty and would allow *ex-ante* evaluation not only at international or national level, but especially at regional and/or local level. It is also important for that model not to be one-off so that it can be used to anticipate the effects of various public interventions for poverty reduction.

Conclusions

Implementation of public interventions aimed at reducing poverty requires the involvement of significant public-financial, human and material resources. It is obvious that it should be preceded by a reliable analysis of the expected effects, which is not easy given that poverty is a highly complex phenomenon. Both the reasons and the effects of occurrence are interrelated and together form a network of dependencies, often non-linear of feedback nature. In addition, the effects of the activities undertaken can be observed only after a relatively long time, the reason for which analyzing a system that complex requires the use of a method that can cope with the complexity of this phenomenon in dynamic terms.

In order to quantify the consequences caused by the proposed public actions, different types of models tend to be used. However, these models are mainly static, based on an analyt-

ical approach to problem-solving, in which a finite mathematical form giving a specific point-based forecast is a preferred way of model formalization. The issue of the usefulness of analytical methods to solve complex problems has been discussed many times in the literature. H. Simon (1982, p. 92), for example, argues that in analytical methods we deal with a phenomenon called “mathematical aphasia”, consisting in a tendency to over-simplify the model until theoretical problems disappear, and with them any relationship with reality. J. Forrester (1971, p. 88), on the other hand, expresses the view that an effective study of a complex problem lies outside the boundaries of traditional analytical methods and he suggests instead using a method based on a heuristic approach - a computer simulation.

Work is currently underway regarding the assumptions for the construction of a tool to analyze the impact of public interventions on poverty that will be based on a computer simulation model.

References

- Bargain O., Morawski L., Myck M., Socha M. (2007), *As SIMPL As That: Introducing a Tax-Benefit Microsimulation Model for Poland*, IZA, Bonn.
- Benedek D., Scharle Á., Szabó P., (2007), *Microsimulation in Government Decision Making in Hungary*, 1st General Conference International Microsimulation Association, Vienna.
- Bienias S., Strzęboszewski P., Opalka E. (ed.), (2012), *Ewaluacja – Poradnik dla pracowników administracji publicznej*, Ministerstwo Rozwoju Regionalnego, Warsaw.
- Blanchet D. (2014), *La microsimulation dynamique: principes généraux et exemples en langage R*, Institut National de la Statistique et des Études Économiques, Paris.
- Bradley J., Zaleski J., Tomaszewski P. (2005), *Podręcznik korzystania z udoskonalonego modelu HERMIN*, Wrocławska Agencja Rozwoju Regionalnego, Wrocław.
- Brewer M., Browne J., Joyce R., Sutherland H. (2005), *Micro-simulating child poverty in 2010 and 2020*, IFS, London.
- Bukowski M. (2010), *Employment in Poland 2008*, IBS, Warsaw.
- Bukowski M., Dyrda S., Kowal P. (2010), *EU-ImpactMod – opis modelu*, Polish Institute for Structural Research (IBS), Warsaw, available at: www.archiwum.ewaluacja.gov.pl (19.10.2016).
- Bukowski M., Magda I. (2013), *Zatrudnienie w Polsce – ubóstwo a praca*, IBS, Warsaw.
- Bukowski M., Wierus K. (2011), *Wpływ realizacji polityki spójności na kształtowanie się głównych wskaźników dokumentów strategicznych - Narodowego Planu Rozwoju 2004-2006 i Narodowej Strategii Spójności 2007-2013 oraz innych wybranych wskaźników makroekonomicznych na poziomie krajowym i regionalnym*, IBS, Warsaw.
- Callan T., Keane C., Walsh J., Lane M. (2010), *From Data to Policy Analysis: Tax – benefit Modelling Using SILC 2008*, “Statistical and Social Inquiry Society of Ireland”, 40.
- Callan T., Keeney M., Nolan B., Walsh J. (2001), *Reforming tax and welfare*, The Economic and Social Research Institute, Dublin, available at: <https://www.esri.ie/pubs/PRS42.pdf> (19.10.2016).
- Canova L., Piccoli L., Spadaro A. (2015), *An ex-ante evaluation of the Revenu de Solidarité Active by micro-macro simulation techniques*, “IZA Journal of European Labor Studies”, no 4.
- David MG., Lhommeau B., Starzec Ch. (1999), *Le Modèle de Microsimulation INES*, Institut National De La Statistique Et Des Études Économique, Paris 1999, available at: http://www.insee.fr/fr/themes/document.asp?ref_id=f9902_tome_2 (19.10.2016).
- Domitrz A., Morawski L., Myck M., Semeniuk A. (2013), *Dystrybutywny wpływ reform podatkowo-świadczeniowych z lat 2006-2011*, „Bank i Kredyt”, 44(3), pp. 261-286.

Dudzińska A. (2015), *Instytucjonalne bariery w realizacji polityki publicznej*, „Studia z Polityki Publicznej”, 3(7).

Ewaluacja ex-ante Regionalnego Programu Operacyjnego Województwa Zachodniopomorskiego 2014-2020, Instytucja Zarządzająca Regionalnym Programem Operacyjnym Województwa Zachodniopomorskiego, Warsaw 2014.

EUROPA 2020 – Strategia na rzecz inteligentnego i zrównoważonego rozwoju sprzyjającego włączeniu społecznemu (2010), European Commission, Brussels.

Findeisen W., Quade E.S. (1996), *Metodologia analizy systemowej*, in: Findeisen W. (red.), *Analiza systemowa – podstawy i metodologia*, PWN, Warsaw.

Fontaine M., Sicsic M. (2016), *Nowcasting the poverty rate by microsimulation*, 2nd Meeting of Providers of OECD Income Distribution Data, OECD, Paris.

Forrester J.W. (1971), *Planungunterdem Einflusskomplexer Sozialer Systeme*, in: Ronge V., Schmieg G. (red.), *Politische Planung in Theorie und Praxis*, Piper Verlag, München.

Giles Ch., McCrae J. (1995), *TAXBEN: the IFS microsimulation tax and benefit model*, IFS, London, available at: <http://www.ifs.org.uk/publications/572> (19.10.2016).

Górniak J., Keler K. (2008), *Rola systemów wskaźników w ewaluacji*, in: Olejniczak K., Kozak M., Ledzion B. (red.), *Teoria i praktyka ewaluacji interwencji publicznych*, Wydawnictwa Akademickie i Profesjonalne Spółka z o.o., Warsaw.

Greszta M., Hulej M., Lewińska R., Michałek A., Pońsko P., Rybaczyk B., Schulz B. (2012), *Reestymacja kwartalnego modelu gospodarki polskiej NECMOD 2012*, National Bank of Poland (NBP), Warsaw 2012, available at: https://www.nbp.pl/polityka_pieniezna/dokumenty/raport_o_inflacji/necmod_reestymacja_2012.pdf (27.10.2016).

Hatry H.P. (2007), *Performance Measurement: Getting Results*, Urban Institute Press, Washington D.C.

Haughton J., Shahidur R. Khandker, (2009), *Handbook on Poverty and Inequality - Poverty Monitoring and Evaluation*, The International Bank for Reconstruction and Development/The World Bank, Washington.

Kaczor T. (2006), *Model MaMoR2 – Informacje o konstrukcji i założeniach*, IBNGR, Warsaw

Kaczor T., Socha R. (2008), *Badanie wpływu narodowego planu strategicznych ram odniesienia 2007-2013 na wybrane wskaźniki dokumentów strategicznych*, IBNGR, Warsaw, available at: <http://www.archiwum.ewaluacja.gov.pl/Wyniki/Documents/MaMoR1.pdf> (19.10.2016).

Karpińska-Mizielńska W., Smuga T., Burzyński W., Ważniewski P., Barteczko K., Duchnowska E., Przystupa J., Marzec A., Marczewski K. (2006), *Ocena szacunkowa narodowych strategicznych ram odniesienia 2007-2013. Raport końcowy*, IBRKK (former Instytut Koniunktur i Cen Handlu Zagranicznego), Warsaw.

Keehley P. (2008), Abercrombie N., *Benchmarking in the Public and Nonprofit Sectors: Best Practices for Achieving Performance Breakthroughs*, Jossey-Bass, San Francisco.

Konopczak K., Skibicki J. (2012), *Mikrosymulacyjny model podatkowo-zasilkowy Ministerstwa Finansów*, MF, Warsaw.

Kościelecki P., Warzybok B. (ed.) (2011), *Jak ewaluować i monitorować efekty projektów sektora B+R i szkolnictwa wyższego?*, Polish Ministry of Science and Higher Education, Warsaw.

Legendre F., (2001), *MYRIADE: le modèle de microsimulation de la CNAF [Un outild'évaluation des politiques sociales]*, “Recherches et Prévisions”, no 66, s. 33-50.

Łatuszyńska M., Fate S. (2016), *Przeciwdziałanie ubóstwu w polityce społecznej na poziomie unijnym i krajowym*, „Studia Prace Wydziału Nauk Ekonomicznych i Zarządzania Uniwersytetu Szczecińskiego”, no 46.

Matejczuk A., Stronkowski P., Zych M. (2014), *Ewaluacja ex-ante Programu Operacyjnego „Pomoc Żywnościowa”*, Coffey International Development Sp. z o. o., Warsaw.

MIPS (2014), *Krajowy Program Przeciwdziałania Ubóstwu i Wykluczeniu Społecznemu 2020. Nowy wymiar aktywnej integracji*, Polish Ministry of Labor and Social Policy, Warsaw.

Myck M., Kundera M., Oczkowska M. (2013), *Finansowe wsparcie rodzin w Polsce: obecny system i przykłady modyfikacji w systemie podatkowym*, CenEA, Szczecin, available at: <http://www.cenea.org.pl/> (19.10.2016).

Olejniczak K. (2008), *Mechanizmy wykorzystania ewaluacji*, Wydawnictwo Naukowe Scholar, Warsaw.

Panek T. (2011), *Ubóstwo, wykluczenie społecznej i nierówności. Teoria i praktyka pomiaru*, Oficyna Wydawnicza SGH, Warsaw.

Panek T. (2014), *Statystyka Społeczna*, PWN, Warsaw.

Piccoli L., Canova L., Spadaro A. (2009), *SYSIFF 2006: A Microsimulation model for the French tax system - MicroSimula*, Paris School of Economics, Paris.

Piech K. (2008), *Ewaluacja oddziaływania funduszy unijnych – teoria i praktyka modelowania makroekonomicznego*, in: Olejniczak K., Kozak M., Ledzion B. (ed.), *Teoria i praktyka ewaluacji interwencji publicznych*, Wydawnictwa Akademickie i Profesjonalne Spółka z o.o., Warsaw.

Płoszaj A. (2008), *Ewaluacja ex ante RPO Lubuskie 2007-2013*, in: Olejniczak K., Kozak M., Ledzion B. (ed.), *Teoria i praktyka ewaluacji interwencji publicznych*, Wydawnictwa Akademickie i Profesjonalne Spółka z o.o., Warsaw.

PUE, *Programy Regionalne*, Portal Funduszy Europejskich 2014, <https://www.funduszeuropejskie.gov.pl>.

Przybylska-Kapuścińska W., Szyszko M. (2009), *Rozwój systemów prognozowania inflacji w wybranych krajach*, „Ruch Prawniczy, Ekonomiczny i Socjologiczny”, LXXI(4).

Ramsza M., Kowal P., Lis M. (2015), *Model symulacyjno-prognostyczny polskiej gospodarki uwzględniający zjawiska związane z kapitałem ludzkim*, IBE, Warsaw.

Simon H. (1982), *Podejmowanie decyzji kierowniczych*, Nowe nurty, PWE, Warsaw.

Sternik A. (2008), *Ewaluacja interwencji w obszarze rozwoju zasobów ludzkich*, in: Olejniczak K., Kozak M., Ledzion B. (ed.), *Teoria i praktyka ewaluacji interwencji publicznych*, Wydawnictwa Akademickie i Profesjonalne Spółka z o.o., Warsaw.

Sutherland H., Figari F. (2013), *EUROMOD: the European Union tax-benefit microsimulation model*, “International Journal of Microsimulation”, 6(1).

Szivos P., Rudas T., Tóth IG. (1998), *A Tax-benefit Microsimulation Model for Hungary*, Workshop on Microsimulation in the New Millennium: Challenges and Innovations, Cambridge, available at: <http://www.tarki.hu/research/microsim/micro2.html> (19.10.2016).

Ubóstwo ekonomiczne w Polsce w 2014 r.(2015), Warsaw.

Using EUROMOD to now cast poverty risk in the European Union, Eurostat, Luxembourg 2013.

Zybała A. (2012), *Polityki publiczne*, Polish National School of Public Administration, Warsaw.

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Czy warto rezygnować z OFE? Stopa zwrotu i ryzyko kapitałowej części systemu emerytalnego w Polsce w latach 1999-2013

Streszczenie

Otwarte Fundusze Emerytalne są jednym z trzech filarów polskiego systemu emerytalnego zreformowanego w 1999 roku. Comiesięczne składki pobierane z wynagrodzenia stanowią kapitał inwestowany przez Fundusz, głównie w obligacje skarbowe i akcje notowane na Giełdzie Papierów Wartościowych w Warszawie. Funkcjonowanie OFE na rynku kapitałowym może wiązać się zarówno z prawdopodobieństwem krótkoterminowego spadku wartości składek, jak i długoterminowym wzrostem ich wartości. Od 2014 roku OFE stał się instrumentem dobrowolnym. Każdy pracujący i odprowadzający składki emerytalne może zdecydować, czy chce skorzystać z usług funduszu. Zmiany w systemie OFE wzbudziły szereg pytań i kontrowersji wokół przyszłości kapitałowego filaru emerytalnego w Polsce. Celem głównym niniejszego opracowania jest weryfikacja różnic stóp zwrotu OFE oraz próba oszacowania ryzyka kapitałowej części systemu emerytalnego w Polsce. Zgodnie z wyżej zdefiniowanym celem pracy postawiono główną hipotezę badawczą, zgodnie z którą z punktu widzenia klienta OFE nie ma znaczenia wybór otwartego funduszu emerytalnego pod względem jego rentowności. W celu weryfikacji hipotezy posłużono się analizą korelacji liniowej, regresji liniowej, analizy ANOVA oraz testów na normalność rozkładu stóp zwrotu OFE. Horyzont badawczy obejmuje lata 2000-2013.

Słowa kluczowe: system emerytalny, kapitał, fundusze emerytalne, stopa zwrotu

Is it worth abandoning OFE? The rate of return and the risk of the capital part of the pension system in Poland in 1999-2013

Abstract

Open Pension Funds (OFE) are one of the three pillars of the Polish pension system which was reformed in 1999. Monthly dues collected from the remuneration are to be the capital invested by the Fund, mostly in Treasury bonds and shares listed on the Warsaw Stock Exchange. The functioning of the funds on the capital market can be associated with both the probability of short-term decline in the value of contributions, as well as a long-term rise in value. Since 2014, OFE have become an unsolicited instrument. Everyone who works and makes contributions can decide whether they want to use the services of the fund. Changes in the OFE system have raised a number of questions and created controversy over the future of the capital pension pillar in Poland. The main objective of this study is to verify the differences in rates of return created by OFE and attempt to estimate the risks to the capital part of the pension system in Poland. In line with the aforementioned objective, the hypothesis of this paper states that from the point of view of a client, the choice of an open pension fund is irrelevant as far as profitability. The hypotheses were verified through the use of linear correlation analysis, linear regression, ANOVA and tests for normality distribution of OFE return rates. The scope of the research covers the period of 2000-2013.

Keywords: pension system, capital, pension funds, rate of return (return rate)

JEL CODE: G23, G28, H55, H61

Introduction

One of the three pillars of the Polish pension system reformed in 1999 is Open Pension Funds (Polish: *Otwarte Fundusze Emerytalne*, OFE). Funds invest capital primarily in government bonds and shares listed on the Warsaw Stock Exchange. The functioning of open pension funds in the capital market may be related to both the probability of a short-term decline in the value of premiums as well as its long-term increase. As of 2014, OFE became a voluntary instrument, which means that every working person who pays pension contributions can decide whether to use the services of the fund or not. Changes in the OFE system raised a number of questions and controversies about the future of the capital pension pillar in Poland. The main objective of this article is to verify the differences in OFE return rates and attempt to estimate the risk of the capital part of Poland's pension system. In line with this objective, the main research hypothesis was put forward, according to which, from the standpoint of the OFE client, the choice of the open pension fund is irrelevant in terms of profitability. Three auxiliary hypotheses were also proposed for the purpose of this work. These were: (1) Annual return rates of pension funds depends on the economic circumstances of the country (2) OFE annual return rates depend on the capital market situation (3) OFE cumulative return rates have retained an upward tendency. In order to verify the hypotheses, the analysis of linear correlation, linear regression, analysis of variance (ANOVA) and tests for the normality of the OFE return rate distribution were used. The research horizon covers the period of 2000-2013. The historical values of OFE accounting units published by KNF (Polish Financial Supervision Authority), stock exchange quotations of the WIG index as well as data on GDP dynamics published by GUS (Polish Central Statistical Office) were used for the research. The study covered the period of 2000-2013.

Changes in the Polish pension system

Until 1999, the pension system in Poland worked on the pay-as-you-go basis. It was based on the principle of an intergenerational contract consisting in the fact that the employee pays contributions that are intended to cover current pension schemes (Antonów 2002, p. 2, Golinowska 1997, Wiktorow 1996). The contemporary labor market - marked by very low economic activity, high unemployment, a significant share of people working in agriculture and increasing dynamics of economic emigration among young people – has provided grounds to change the current social security system. The necessity of further increases in the premium rate for balance reasons would consequently lead to a further decline in the competitiveness of the Polish economy and an increase in the likelihood of companies falling into the "gray zone" (Grzebieniak 2007, pp. 97-105). In addition, retirement privileges and early retirement facilitation schemes resulted in the increased number of post-working age population and the decreased share of economically active people. Also the aging process of the population was becoming evident in the meantime, having been aggravating this disproportion ever since (Bugaj 2004, pp. 22-24).

The reform of the Polish Social Insurance System Act, implemented on January 1, 1999, identifies three pillars of what was once a uniform system (Olejniak 2009, pp. 77-85). It reflects the so-called mixed model, under which the premium is directed to the pay-as-you-go system as well as to the capital system. The main premise of the solution adopted in Poland was the limitation of the risk arising from dependence on the demographic situation for the capital part, and from adverse changes in the capital market for the pay-as-you-go part⁹. In

⁹ According to some critics of the capital model in the pension system, the introduction of privately managed pension funds did not solve the problem of the impact of demography on the long-term liquidity of pension systems, or it even proved harmful (see more in: Orenstein 2013). E.g. A. Oręziak (2014) even argues the people can in no way be considered beneficiaries of the introduction of open pension funds. According to that author, the development of the private pension sector has a clear anti-social bearing.

addition, the mixed model was hoped to stimulate economic growth, including through the development of the financial market (Kołodko and Tomkiewicz 2014, p. 5).

For this reason, the basis of the first of the pillars is FUS (Polish Social Insurance Fund), obligatory for all employees with the exception of the agricultural sector. The second pillar consists of OFE, i.e. open pension funds. In the third pillar, in addition to the group form of saving for retirement under PPE (Employee Pension Programs), there are two forms of individual capital savings supported by tax incentives. These are IKE (Individual Pension Accounts) and IKZE (Individual Pension Security Accounts) (Łuszczuk 2015, p. 46).

OFE – Open Pension Funds

OFE are to "accumulate funds and invest them in order to pay the members of the pension fund after they have reached retirement age (...) (*Act of 1997, art. 2, sec. 2*). Those born after December 31, 1968 were legally obliged to participate in an OFE, while the insured population born after December 31, 1948 and before January 1, 1969 (with the exception of people who were already retiring) were given free choice in that respect by the legislator (*Act of 1998, art. 111, sec. 2-3*).

The rules for the distribution of contributions to open pension funds have been subject to changes since the entry into force of the pension reform. From January 1, 1999 to April 30, 2011, 12.22% of the pension contribution included a pay-as-you-go part transferred to ZUS. 7.3% of the premiums accounted for the entire capital component of the OFE (Wieteska 2011, pp. 37-49). The Act of 25 March 2011 amending certain acts related to the functioning of the insurance system introduced changes regarding the method of its division.

As of 1 May 2011, the contribution part of the contribution transferred to OFE has been invested in the capital sub-account of ZUS (Table 1). Such measures were primarily aimed at improving the ratio of the deficit and public debt to GDP.

Table 1. Division of the OFE capital contribution under Act of 31 December 2011 (in %)

Period of payment	OFE	ZUS
May 2011 to December 2012	2,3	5,0
January-December 2013	2,8	4,5
January-December 2014	3,1	4,2
May 2015 to December 2015	3,3	4,0
From January 2016	3,5	3,8

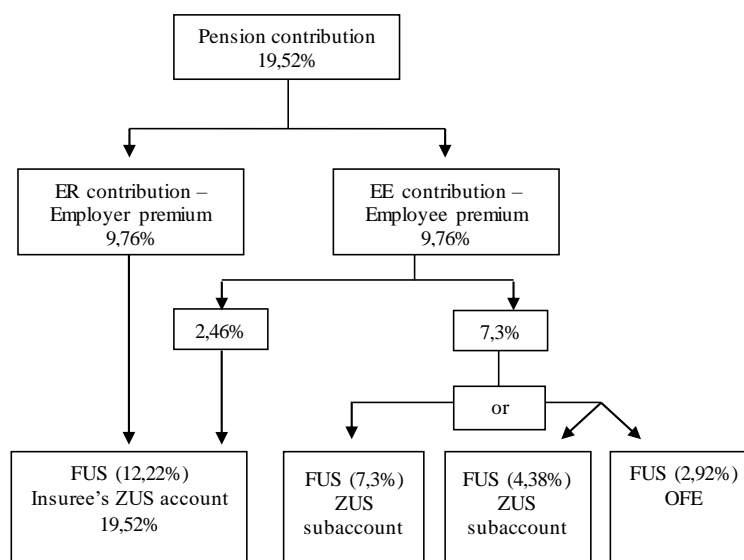
Source: own study based on: *Act of 2011, art. 21-22*.

In 2014, far-reaching changes in the functioning of OFE were made. The most significant relates to the cancellation by OFE of 51.5% of the settlement units recorded in the account of each member of the open pension fund as of January 31, 2014 and the transfer to ZUS of assets with the value corresponding to the sum of the value of redeemed settlement units. The legislator also normalized activities regarding assets transferred to ZUS (Olejnik 2009, pp. 77-85). The latter, taking the form of Treasury securities (bonds issued by the State Treasury), were submitted by ZUS to the State Treasury in exchange for a guarantee of payment from ZUS of retirement benefits corresponding to the value of these assets recorded on subaccounts. The remaining group of transferred assets was transferred by ZUS to FRD (Polish Demographic Reserve Fund) (Nowicki 2014, p. 15).

Pursuant to the Act (of 2013, art. 11, sec. 1-2), voluntary participation in OFE was also introduced. On the basis of the declaration on the selection of the Open Pension Fund filed by the insuree, 2.92% of the contribution basis is paid by ZUS to OFE, while 4.38% is recorded on the subaccount in ZUS (Act of 2013, art. 5, sec. 3, item (a)). An important change resulting from the Act of 2013 is also the so-called security slider. In the period of 10 years before re-

tiement age of an OFE member, the funds accumulated in the Funds are to be gradually transferred to ZUS (Act of 2013a, art. 4, sec. 12). The Act also prohibits investment by OFE in government bonds and other debt instruments guaranteed by the State Treasury. This means that the Funds will be able to invest to a greater extent, among others, in shares, local government bonds, road and corporate bonds.

Figure 1. Pension contribution breakdown under Act of 13 December 2013



Source: own study based on: *Act of 6 December 2013, art. 5.*

Amendments under the aforementioned Act of 25 January 2013 also concerned the policy and investment limits of OFE. The legislator gave Funds the opportunity to invest more *aggressively*. The limits of the total value of OFE assets invested in shares are presented in Table 2. In addition, new restrictions were introduced on Fund investments in assets denominated in foreign currency. Some of these assets invested in such instruments could not exceed 10% of the value of the Fund's assets until December 31, 2014 and 20% in the period from January 1, 2015 to December 31, 2015.

Table 2. Share of shares in the values of OFE assets under Act of 25 January 2014

Period	Share (in %)
until 31 December 2014	< 75
until 31 December 2015	< 55
until 31 December 2016	< 35
until 31 December 2017	< 15

Source: own study based on: *Act of 6 December 2013, art. 35*

In relation to the investment policy of OFE, modified were also the rules concerning the reference index (benchmark) the results of individual Funds are compared with. In addition, the Act does not provide for any minimum rate of return on investment. OFE should, however, specify in the information prospectus a declaration of investment policy principles, an investment objective and indicators to which their rates of return will be related. The lattermost, together with the account balance, information on investment risks and the amount of fees, must be sent to members of the Funds. Published information about the lattermost should present their financial situation in a comprehensible, objective and reliable manner (see *Act of 2013, art. 28, items 1-5*).

The above remarks clearly indicate that further legislative changes in the pension system limit the share of its capital part. Consequently, the operation of OFE is also marginalized. In the debate on the validity of the coexistence of both pillars, there are voices hinting at the possibility of withdrawing from the OFE model and improving the pay-as-you-go system based on intergenerational solidarity.

For this reason, the subsequent part of this article attempted to analyze OFE annual return rates depending on the economic circumstances of the country and the situation on the capital market.

Analysis of OFE return rate differences

First, an attempt was made to analyze the differences between the rates of return of OFE assets, as shown in Table 3. Analysis of variance (ANOVA) was used for this purpose. To verify the hypothesis on the normality of the distribution of OFE return rates in individual years, the Kolmogorow-Smirnov (K-S) test, Lilliefors test and the Shapiro-Wilk test were carried out for the analyzed Funds.

Table 3. OFE annual return rates in 2000-2013 (w %)

OFE	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Allianz Polska OFE	15	7	14	11	12	11	6	7	-12	13	11	-4	18	6
AEGON OFE	13	3	13	10	14	13	15	6	-13	14	10	-5	16	5
Pekao OFE	10	9	7	10	17	12	21	7	-14	14	11	-5	16	7
OFE Pocztylion	17	2	10	10	14	15	17	5	-13	13	11	-6	15	8
AXA OFE	15	8	10	10	16	14	16	6	-13	14	10	-3	15	6
Amplico OFE	11	2	13	12	15	16	16	7	-14	14	11	-5	17	8
Generali OFE	16	6	13	12	15	15	18	6	-13	15	9	-4	15	7
ING OFE	16	8	17	11	14	16	17	5	-15	14	12	-5	17	8
OFE WARTA	18	1	10	12	16	14	17	4	-14	13	11	-4	16	7
OFE PZU Złota Jesień	10	10	14	12	14	14	17	7	-14	14	11	-5	16	7
PKO BP Bankowy OFE	8	4	17	11	16	12	15	4	-14	15	11	-5	16	8
Aviva OFE Aviva BZ WBK	13	10	12	10	13	15	15	7	-15	13	11	-5	17	6
Nordea OFE	10	10	15	11	13	14	15	6	-13	13	12	-4	18	8

Source: own study based on KNF data.

In the vast majority of cases (except for 2006 in the Shapiro-Wilk test and 2010 in the Lilliefors test), the analyzed rates indicate there is no reason to reject the hypothesis on the normality of the distribution of OFE return rates in individual years (Table 4).

Table 4. Results of tests on the normality of OFE return rates in 2000-2013

Year	K-S	Lilliefors	W	p
2000	p > ,20	p > ,20	0,951711	0,624435
2001	p > ,20	p > ,20	0,877875	0,066745
2002	p > ,20	p > ,20	0,974209	0,938918
2003	p > ,20	p > ,20	0,932455	0,366820
2004	p > ,20	p > ,20	0,967400	0,861434
2005	p > ,20	p > ,20	0,975708	0,951849
2006	p > ,20	p > ,20	0,831882	0,016726

2007	$p > ,20$	$p > ,20$	0,915604	0,218699
2008	$p > ,20$	$p > ,20$	0,983895	0,993211
2009	$p > ,20$	$p > ,20$	0,964600	0,822612
2010	$p > ,20$	$p < ,01$	0,894274	0,111611
2011	$p > ,20$	$p > ,20$	0,972801	0,925301
2012	$p > ,20$	$p > ,20$	0,960958	0,768382
2013	$p > ,20$	$p > ,20$	0,948367	0,573768

Source: own study based on KNF data.

As a consequence, a homogeneity study was carried out on the distributions of return rates for individual funds based on the Levene and Brown-Forsythe tests. They indicated the values of $p=0.99$, thereby confirming the homogeneity of the distribution of return rates in the analyzed periods. In turn, the F test was used, giving the result of 0.06. ANOVA showed no significant differences between the considered average OFE return rates ($p = 1.0 > \alpha = 0.05$). The average rates of return for individual OFE do not differ significantly either. Therefore, there is no one OFE pair among the 13 subjects whose rates of return would assume significantly different values. The hypothesis referred to differences in profitability between individual Funds should therefore be rejected.

It should be emphasized that the ANOVA result stems from the applicable legal provisions. The investment policy of open pension funds limited the investment restrictions before the changes introduced in 2014, strictly defining the type and number of financial instruments directly related to the risks associated with placing funds in specific groups of instruments. The minimal acceptable profitability of investments was provided by the mechanism of the minimum required rate of return. The former was the rate of return 50% lower than the weighted average rate of return for all funds, or by four percentage points, depending on which of these values was lower. The weighted average rate of return for all Funds in the last 36 months is published by the Commission at the end of each final month of the quarter. In a situation where the rate of return of the Fund was lower than the minimum required, the shortfall was covered first by funds from the reserve account created for this purpose (to which funds from PTE were transferred), and second from PTE's own funds.

Analysis of the relationship between OFE return rates and the economic and capital market situation

In order to verify the existence of the relationship between the rates of return and the economic situation, the analysis of linear regression and Pearson's correlation of OFE return rates and GDP dynamics in the period 2000-2013 was performed. The changes in GDP are presented in Table 5. Correlation analysis indicated the lack of a linear dependence of OFE return rates on changes in the GDP level in the analyzed period. The obtained results indicated a correlation of 0.012 in the absence of its significance by determining the value of $p(0.87) > \alpha$. Therefore, there is no linear correlation of the condition of the economy measured by GDP change with the rate of return generated by OFE. The linear regression analysis also showed no dependence of the above variables, indicating $p(0.87) > \alpha$ and the directional coefficient of the regression function at 0.05. In connection with the results obtained, the hypothesis on the dependence of return rates on the economic situation should be rejected.

Table 5. Change in GDP and WIG index in 2000-2013 (in %)

Year	GDP change	WIG return rate
2000	2,40	-3,47
2001	0,20	-26,94
2002	2,20	9,68
2003	4,70	38,99

2004	4,00	38,56
2005	4,40	20,22
2006	6,60	28,43
2007	6,50	-0,87
2008	2,90	-56,79
2009	3,30	42,39
2010	4,70	22,03
2011	4,90	-26,74
2012	0,70	-0,66
2013	1,60	16,54

Source: own study and calculations based on GUS and Warsaw Stock Exchange data.

The analysis of the dependence of OFE return rates on changes in the WIG index indicated their strong correlation at 0.79, with $p(0.00) < \alpha$. The linear regression analysis for the level of 295.58 confirms the hypothesis that the change in OFE return rates accompanies the corresponding change in WIG return rates. In addition, the regression coefficient of the regression function was 0.24, which means that the rise/decline in the WIG index by one percentage point would increase/decrease the value of OFE assets by 0.24 percentage points. Table 6 shows the cumulative rates of return of individual OFE in 2000-2013¹⁰.

Table 6. Cumulative OFE return rates in 2000-2013 (in %)

OFE	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Allianz Polska OFE	15	23	41	56	74	94	125	140	111	140	166	154	200	219
AEGON OFE	13	16	31	45	65	87	116	129	99	127	149	137	176	191
Pekao OFE	10	20	29	42	66	86	125	141	106	134	159	145	185	206
OFE Pocztylion	17	19	31	44	65	89	121	131	102	129	155	139	176	197
AXA OFE	15	24	36	50	74	98	130	144	114	143	168	159	198	216
Amplifico OFE	11	12	27	42	64	90	120	136	103	133	159	147	189	212
Generali OFE	16	23	38	55	79	105	143	157	123	157	181	170	210	231
ING OFE	16	24	45	62	84	114	150	163	124	155	186	173	218	245
OFE WARTA	18	20	32	48	72	96	130	140	106	133	159	148	188	210
OFE PZU Złota Jesień	10	21	38	54	77	101	135	152	116	145	173	158	199	220
PKO BP Bankowy OFE	8	12	31	46	69	90	119	126	95	124	149	137	176	198
Aviva OFE Aviva BZ WBK	13	24	39	52	73	99	130	147	109	136	163	150	192	210
Nordea OFE	10	21	40	55	75	98	129	141	110	136	163	153	197	222

Source: own study based on KNF data.

In accordance with the data presented in Table 6, it should be noted that OFE generated positive cumulative return rates in each of the analyzed periods. In addition, linear regression analysis was used to determine the trend of the cumulative return rate. For confidence level at

¹⁰ The studies on cumulative return rates presented in this article do not refer to the value of the unit assigned to each insuree, but to the value of the OFE investment portfolio. Therefore, the analyzed rates of return are the same for every OFE participant, including new insurees. It is worth noting that the rates of return represent historical values, so for a given period they present the same information for the insuree or the person joining the insurance scheme.

0.95, empirical value of the t-tests at 14.48 and the F-test at 259.83, it should be recognized that the change in OFE return rates retained an upward tendency. The linear regression coefficient of the linear regression function was estimated at 0.149 (adjustment of the regression function R^2 was 0.96).

Linear regression confirmed that open pension funds generated positive cumulative return rates in each of the analyzed periods. It was also examined whether there are statistically significant differences between OFE return rates in periods of WIG index decline and increase. The performed Kolmogorow-Smirnow and Lilliefors tests, along with the Shapiro-Wilk test, indicated the lack of normality of distributions in both groups of return rates. The Kruskal-Wallis test was applied and indicated the significant differences between changes in the value of OFE assets depending on the capital market condition ($p=0.00$). The Levene and Brown-Forsythe tests indicating $p=0.00$ confirmed the lack of homogeneity of the distributions of return rates for individual funds. Subsequently, the Welch test was used, giving the result of 49.5. ANOVA indicated the existence of significant differences between the considered average OFE return rates ($p\ 0.0 > \alpha=0.05$). The latter in the periods of WIG increase were significantly higher than OFE return rates in the years of WIG value decline. Furthermore, the average return rates of open pension funds were always positive, i.e. in the periods of WIG value increase, they were 12.5% on an annual basis, and 3.9% for the decline periods. Taking into account all these results, it should be concluded that the cumulative OFE return rates retained an upward tendency in the analyzed period.

Conclusions

In light of the obtained significant and unambiguous research results on the rates of return of open pension funds (OFE) and their risk in the period of 2000-2013 conducted on a group of 13 funds, it should be stated that:

- Open Pension Funds generated positive cumulative rates of return in 1999-2013,
- average rates of return of individual OFE do not differ significantly,
- changes in OFE return rates do not depend on the economic situation expressed in changes in GDP,
- changes in rates of return depend on changes in the prices of shares listed on the Warsaw Stock Exchange, but they do occur with four times less strength,
- changes in the rates of return in the periods of WIG value decline and increase were on average 4% and 12.5%, respectively.

References

Act of 13 October 1998: Ustawa z dnia 13 października 1998 r. o systemie ubezpieczeń społecznych, Journal of Laws of 1998, no 137, item 887.

Act of 25 March 2011: Ustawa z dnia 25 marca 2011 r. o zmianie niektórych ustaw związanych z funkcjonowaniem systemu ubezpieczeń społecznych, Journal of Laws of 2011, no 75.

Act of 28 August 1997: Ustawa z dnia 28 sierpnia 1997 r. o organizacji i funkcjonowaniu funduszy emerytalnych, Journal of Laws of 1997, no 139, item 934 as amended

Antonów K. (2002), *Finansowe aspekty ubezpieczeń społecznych*, „Praca i Zabezpieczenie Społeczne”, no 11.

Bugaj R. (2004), *Ocena reformy ubezpieczeń społecznych*, „Gospodarka Narodowa”, no 1-2.

Golinowska S. (ed.) (1997), *Reforma systemu emerytalno-rentowego*, Warsaw.

Grzebieniak A., (2007), *Polski system ubezpieczeń społecznych – zalety i wady*, Studia Gdańskie, vol. IV, Gdańsk.

Kołodko G. W., Tomkiewicz J. (2014), *Repartycyjny i kapitałowy system emerytalny. Synergia czy antagonizm?*, „Kwartalnik Nauk o Przedsiębiorstwie”, no 1.

Łuszczuk M. (2015), *Zmiany w funkcjonowaniu Otwartych Funduszy Emerytalnych – implikacje dla finansów publicznych w Polsce*, Studia Ekonomiczne, Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach, Katowice.

Nowicki D. K., 2014, *Kapitałowy system emerytalny po zmianach – wybrane aspekty prawne*, Polish Financial Supervision Authority, Warsaw.

Olejniki I., (2009), *Otwarte fundusze emerytalne w opinii konsumentów*, „Wiadomości Ubezpieczeniowe”, no 4.

Orenstein, M.A., (2013), *Prywatyzacja emerytur. Transnarodowa kampania na rzecz reformy ubezpieczenia społecznego*, Polskie Towarzystwo Ekonomiczne, Warsaw.

Oręziak L., (2014), *OFE – Katastrofa prywatyzacji emerytur w Polsce*, Instytut Wydawniczy Książka i Prasa, Warsaw.

Wieteska S. (2011), *Tendencje kształtowania się wysokości opłat pobieranych przez Otwarte Fundusze Emerytalne*, Folia Oeconomica, nr 254, Łódź.

Wiktorow A. (1996), *System emerytalno-rentowy – przesłanki i możliwości reformowania*, „Transformacja Gospodarki”, no 65, Gdańsk.

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Wyzwania i perspektywy demograficzne państw europejskich

Streszczenie

Celem artykułu jest wskazanie na wybrane procesy demograficzne, których konsekwencje mają i będą mieć w przyszłości zasadniczy wpływ na funkcjonowanie państw europejskich. Znaczenie poszczególnych krajów związane jest bezpośrednio z ich potencjałem demograficznym, którego wielkość ulega gwałtownym zmianom w ostatnich latach. Prawidłowa diagnoza występujących problemów demograficznych wymaga zastosowania właściwych narzędzi poznawczych służących do ich opisu. Do wyjaśnienia zachodzących współcześnie procesów demograficznych autor zastosował nie tylko klasycznie stosowane narzędzia demograficzne, ale wykorzystał również inne rzadziej wykorzystywane metody m.in. metody demografii potencjalnej. Porównując poszczególne państwa europejskie uwypuklono różnice w zakresie ich potencjalnych zdolności do reprodukcji, wielkości obciążenia demograficznego czy zaawansowania procesów starzenia się populacji. Zaproponowano również miarę, która może stanowić punkt odniesienia przy wyznaczaniu ustawowego wieku przejścia na emeryturę. Aktualne prognozy demograficzne wskazują na niekorzystne perspektywy rozwoju demograficznego dla wielu państw europejskich oraz dla całego kontynentu.

Słowa klucze: demografia potencjalna, starzenie się populacji, wiek emerytalny, prognozy demograficzne

The challenges and demographic prospects of European countries

Abstract

The aim of the article is to indicate selected demographic processes, their consequences and how they will have a major future impact on the functioning of the European countries. The importance of individual countries is directly connected to their demographic potential, the size of which has been changing rapidly in recent years. A proper identification of the existing demographic problems requires the use of appropriate cognitive tools for their description. To explain the ongoing contemporary demographic processes the author applied not only traditional demographic measures, but also other less frequently used approaches among other methods of potential demography. Comparing different European countries highlights the differences in terms of their potential ability to reproduce, the age dependency ratio or advanced aging populations. The author proposed a measure which may be a reference point in determining the statutory retirement age. Current demographic projections indicate unfavorable demographic prospects for many European countries and for Europe in general.

Keywords: potential demography, population aging, pension age, demographic forecasts

JEL CODE: J11, J14

Introduction

The basic characteristic of demographic processes in Europe is the declining rate of their development, whose one of the consequences is the unfavorable changes in population age structure. In most European countries, an increasing proportion of people are already of post-working age or close. Europe's population growth is slowing down, with some areas of the continent experiencing depopulation. The demographic potential of Europe is losing importance compared to other continents, especially against the dynamic increase in population

in third-world countries. As a result, in many European countries an increased risk of instability can be expected, i.e. in health care, social security or the pension system. The European countries are trying to counteract these trends, e.g. by increasing spending on pronatalist policies, encouraging the influx of immigrants or raising statutory thresholds for retirement.

The purpose of this article is to indicate selected demographic processes, such as an aging population or an increase in the age dependency ratio of working-age people, whose consequences may threaten the stability of European countries. However, the correct identification of demographic problems requires using appropriate cognitive tools to describe them. To explain the ongoing demographic processes, the author applied not only traditional measures, but also less frequently used methods of analyzing population phenomena, such as methods of potential demography (Panush, Peritz 1996, p. 27, Murkowski 2015, pp. 15-24, Blangiardo, Rimoldi 2013) or alternative ways of measuring the advancement of the processes of human population ageing (Abramowska-Komon 2011). The main advantage of the potential demography methods is their ability to assign different degrees of importance to individual age groups of a given population, depending on their life potential. On the other hand, the advantage of the alternative measurement of the population aging process is age diversity, i.e. the border between middle-aged people and elderly, or old, people for particular populations. To estimate future demographic trends, the Eurostat population forecast "EUROPOP2013" was used, prepared for the European Union (EU) countries and members of the European Free Trade Association (EFTA). In addition, the age bracket from 20 to 65 years old was assumed as working age for the purposes of this article.

Demographic potential

The importance of individual countries is directly related to their demographic potential, the size of which has been changing rapid over the last couple of decades. Demographic potential can be defined as the ability of the population to reproduce its size while maintaining favorable age relations in the population structure (in particular, the relations between groups of people of pre-working, working and post-working age). The demographic potential of individual countries is usually determined by analyzing the dynamics of the number of people in a given population, but it should be noted that this is a simplified approach and it does not fully reflect the complexity of the concept at hand. In potential demography, the concept of total life potential is used as an expression of demographic potential, which means the total remaining lifetime of the members of a given population. The measure reflects not only the size of a given population, but also characterizes its structure by sex and age, depending on the size of the average continued life span of its particular age groups. In addition, the average life potential, which is the average remaining number of years to live of a typical country resident, is also used for comparison between individual countries (it is the quotient of the total life potential and the average population). This measure can be a synthetic indicator of the demographic potential of a given population. Detailed principles of calculating the total life potential and its various forms can be found in the study by Egon Vielrose (1956).

The population of the 28 EU countries in 2014 was approximately 508 million, with an approximate total of 20,949 million years to live. Over the next decades, the EU population will increase slightly, reaching around 525 million in 2050, while its total life potential will increase to over 22,530 million years. The anticipated changes in population numbers up to 2050 indicate that we will face a phenomenon of depopulation in the countries of the eastern part of the EU (in particular post-socialist countries) plus Germany, Spain and Portugal. Depopulation processes will be most strongly marked in the Baltic States, while the Polish population will decrease to less than 35 million people in 2050 - a decrease by 8.5% compared to 2014. At the same time, the total life potential of the Polish population will drop even more, to about 1,350 million years - a decrease by as much as 11.5% compared to 2014. This change will occur despite the forecasted increase in the average continued lifetime of Polish residents

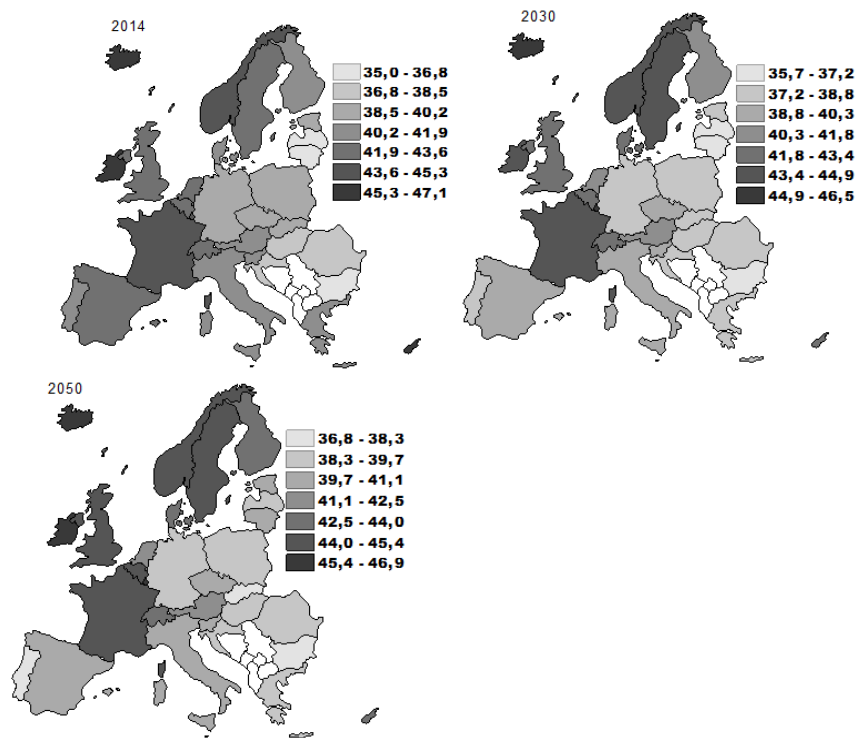
by approximately 5 years for women and 7 years for men, which indicates the aging of population age structure. On the other hand, a contrary trend is to be observed in the countries of Northern and Central Europe whose population is expected to increase. This includes countries like: the United Kingdom, Norway, Iceland, Sweden, Switzerland, France and the Benelux countries. It should be expected that, in 2050, the population of Great Britain will be as high as 77 million - the most numerous from all analyzed countries. Populations of France and Germany are forecasted at approximately 74.5 million, although they will significantly differ in terms of total life potential in favor of France as the country characterized by a clearly younger population age structure. Analogous relations will also be observed in 2050 for the following pairs of countries: the Netherlands and Romania, the Czech Republic and Switzerland, Norway and Portugal, Ireland and Bulgaria (Table 1).

Table 1. Population and its life potential

Country	Population [mln]			PC [mln years]			Country	Population [mln]			PC [mln years]		
	2014	2030	2050	2014	2030	2050		2014	2030	2050	2014	2030	2050
Austria	8,5	9,3	9,7	354	380	402	Latvia	2,0	1,6	1,5	72	59	58
Belgium	11,2	12,9	14,8	476	556	656	Malta	0,4	0,5	0,5	18	19	20
Bulgaria	7,2	6,5	5,8	254	230	217	Germany	81,0	79,7	74,5	3177	3063	2909
Croatia	4,2	4,1	3,8	162	155	150	Poland	38,0	37,5	34,8	1518	1443	1344
Cyprus	0,9	0,9	1,0	39	39	44	Portugal	10,4	9,8	8,8	420	372	332
Czech Republic	10,5	10,8	11,1	416	421	454	Romania	19,9	19,0	17,9	743	719	707
Denmark	5,6	6,1	6,4	236	255	280	Slovakia	5,4	5,3	4,9	215	200	179
Estonia	1,3	1,2	1,1	51	46	45	Slovenia	2,1	2,1	2,1	84	82	84
Finland	5,5	5,9	6,2	227	246	267	Sweden	9,7	11,0	12,5	417	482	562
France	66,2	70,5	74,4	2931	3074	3322	Hungary	9,9	9,7	9,3	364	363	365
Greece	10,9	10,1	9,1	442	389	354	UK	64,6	70,6	77,3	2793	3 062	3432
Spain	46,5	44,5	45,6	1992	1759	1829	Italy	60,8	64,2	67,0	2486	2 580	2735
Netherlands	16,9	17,6	17,4	718	728	731	UE	508	519	526	2094 9	2103 6	2183 0
Ireland	4,6	4,6	5,0	213	208	228	Iceland	0,3	0,4	0,4	15	17	19
Lithuania	2,9	2,2	1,9	108	79	77	Norway	5,1	6,4	7,7	228	286	349
Luxembourg	0,6	0,8	1,1	25	36	49	Switzerland	8,2	9,6	10,9	354	412	476

Source: own study based on Eurostat data

In 2014, European countries could be divided into two groups depending on their demographic potential. The post-socialist countries had an average life potential clearly below 40 years. In addition, this group also included the population of Germany, which, despite high average life expectancy of its citizens, was marked by an unfavorable population age structure. On the other hand, the countries of the northern, southern and eastern parts of Europe showed high values of the demographic potential of their inhabitants from 40 and up to 47 years for the populations of Iceland and Ireland. It is expected that in the following years, despite the increase in the average life expectancy in all analyzed European countries, a group of countries with a relatively small life potential will include as of 2030 not only the countries of Central and Eastern Europe, but also the countries from the southern part of the continent. In turn, high values of demographic potential will be observed mainly in the countries of western and northern part of Europe (Figure 1).

Figure 1. Average life potential

Source: own study based on Eurostat data.

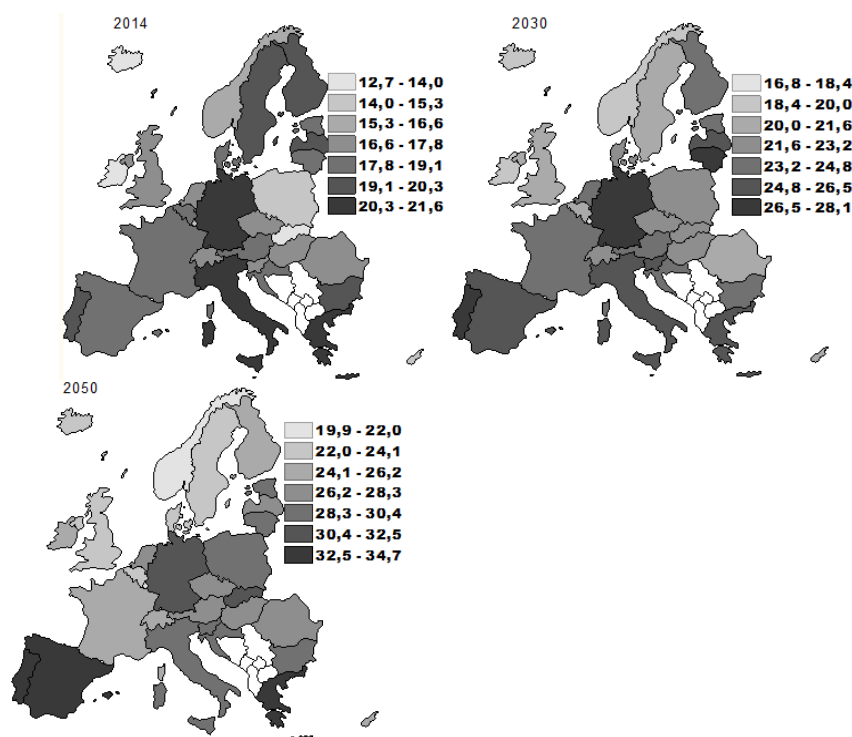
Population aging

The aging of societies - an increase in the percentage of elderly people in the population - is a process widely discussed by demographers, economists and social politicians alike due to the fact its consequences have a significant impact on the functioning of many expensive government programs, such as the pension system or the elderly care system. Proper measurement of the advancement of this phenomenon therefore seems to be of paramount importance, especially in the times of extremely dynamic improvement in mortality rates and healthy life expectancy (HALE). The most frequently used measure for the study of the advancement of aging processes in human populations is the percentage share of people aged 60 or 65 and over in the entire population. However, the very act of labelling a person as “elderly”, or “old”, is considered fluid and it changes along with the increase in average continued life expectancy. From the standpoint of this process, today's sixty-year-olds cannot be ascribed the same meaning as those who lived a hundred years ago; the same goes sixty-year-olds in developed countries and those living in places with a significantly lower life expectancy. For the proper measurement of the advancement of population aging, it is extremely important how we define elderliness, or what age we recognize as the border between middle age and old age. Defining the demographic perspectives of European countries in the field of the aging of their populations, two measures of the advancement of this process were used: a traditional measure, the percentage share of people aged 65 and over in the population, and an alternative measure proposed by Wolfgang Lutz, Warren Sanderson and Sergei Scherbova (2005a, 2005b, 2008, 2008), i.e. the percentage share of people who have an average 15 expected remaining of life. In the alternative approach to this process, along with the increase in longevity, the minimum age of people who are considered elderly increases as well.

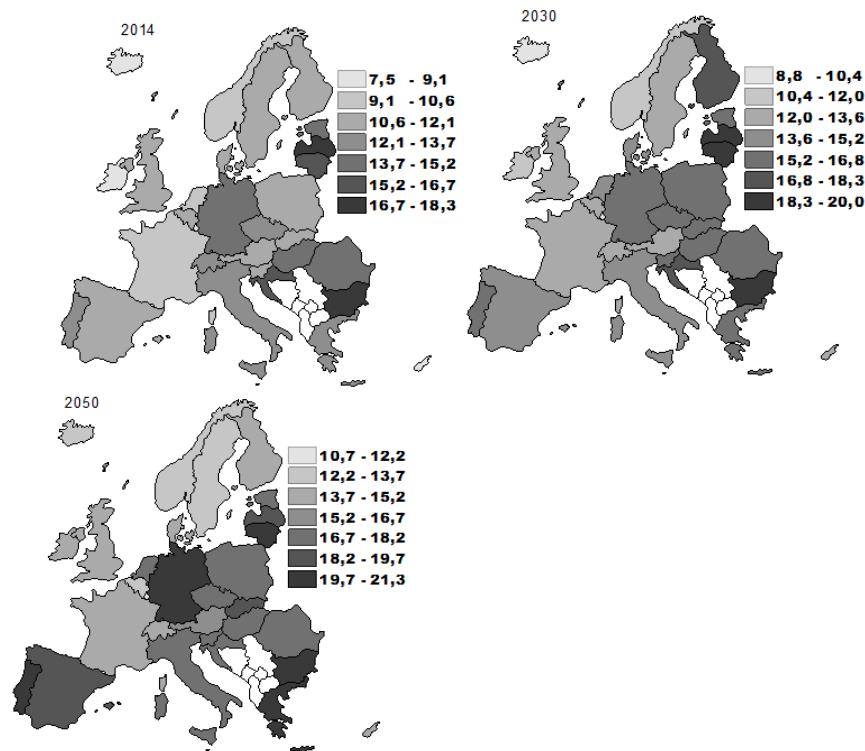
92 million and 62 million people would be recognized as “old” in 2014 under the traditional approach and the alternative approach, respectively (Table 2). The results of measuring

the advancement of the aging process of the population are closely correlated with the definition of an “old person” that is considered appropriate. Among 28 EU countries, in 2014 there was as much as 18.7% of people aged 65 and over, while only 12.3% of the population of the 28 EU countries was aged 15 or less. In countries like Germany, Italy, Greece and Portugal, people over 65 years old made up for over 20% of the population in 2014. On the other end of the spectrum, Ireland, Iceland, Slovakia and Cyprus were among the countries with the youngest population age structure (Figure 2). In contrast, using the alternative approach to measuring population aging resulted in a drastic change in the territorial diversity of European countries as regards this process. In 2014, the countries of Eastern and Central Europe - in particular Bulgaria, the Baltics, Romania, Croatia, Hungary and Germany – had the highest proportions of elderly people. As a threshold for old age, the values of approximately 64 years for men and about 68 years for women are assumed, rather than 75 years for women or 70 years for men as for some Western European countries. The reason for this are the differences in average continued life expectancy. On the other hand, the group of countries with a low percentage share of people with 15 expected remaining years of life will involve primarily western and northern parts of Europe, namely Ireland, France and the Scandinavian countries (Figure 3).

Figure 2. Percentage of people aged 65 and over in the population



Source: own study based on Eurostat data

Figure 3. Percentage of people with 15 or less expected remaining years of life in the population

Source: own study based on Eurostat data

Table 2. Number of people over 65 and with 15 or less expected remaining years of life

Country	Number of people 65+			Number of people 15–			Country	Number of people 65+			Number of people 15–		
	2014	2030	2050	2014	2030	2050		2014	2030	2050	2014	2030	2050
Austria	1,6	2,2	2,7	1,0	1,2	1,6	Latvia	0,4	0,4	0,4	0,3	0,3	0,3
Belgium	2,0	2,8	3,4	1,3	1,6	2,0	Malta	0,08	0,11	0,12	0,04	0,07	0,07
Bulgaria	1,4	1,6	1,7	1,3	1,3	1,2	Germany	17,0	22,4	23,7	12,2	13,0	14,9
Croatia	0,8	1,0	1,1	0,6	0,7	0,7	Poland	5,8	8,5	10,4	4,1	5,8	5,8
Cyprus	0,12	0,19	0,26	0,07	0,11	0,15	Portugal	2,1	2,6	3,1	1,4	1,6	1,9
Czech Republic	1,9	2,4	3,0	1,3	1,7	1,9	Romania	3,3	4,0	5,0	2,9	3,1	3,3
Denmark	1,0	1,4	1,5	0,6	0,9	0,9	Slovakia	0,7	1,1	1,5	0,6	0,8	0,9
Estonia	0,2	0,3	0,3	0,2	0,2	0,2	Slovenia	0,4	0,5	0,6	0,2	0,3	0,4
Finland	1,1	1,4	1,5	0,6	1,0	0,9	Sweden	1,9	2,4	2,8	1,1	1,5	1,7
France	12,0	16,4	18,7	6,6	9,3	10,9	Hungary	1,7	2,1	2,6	1,5	1,6	1,6
Greece	2,3	2,6	3,1	1,5	1,6	1,9	UK	11,4	15,1	18,5	7,0	8,9	10,8
Spain	8,5	11,3	15,2	5,0	6,2	8,8	Italy	13,1	16,3	20,0	8,1	9,5	12,2
Netherlands	3,0	4,3	4,7	1,8	2,6	3,0	UE	95,0	124,8	147,9	62,3	76,0	89,1
Ireland	0,6	0,9	1,2	0,4	0,5	0,7	Iceland	0,04	0,07	0,09	0,02	0,04	0,05
Lithuania	0,5	0,6	0,5	0,5	0,4	0,4	Norway	0,8	1,2	1,7	0,5	0,7	1,0
Luxembourg	0,08	0,13	0,21	0,05	0,07	0,11	Switzerland	1,4	2,1	2,8	1,1	1,2	1,6

Source: own study based on Eurostat data (in millions of people).

It is expected that the percentage of people aged 65 and over will systematically increase in EU countries, only to reach approximately 24% in 2030 and approximately 28% in 2050. However, changes in the fraction of people with 15 or less expected remaining years of life indicate that the aging process of European countries will become less dynamic in the future. It can be predicted that the proportion of people with a continued life expectancy of 15 years or less will make up for about 15% of the EU population in 2030, and just about 17% in 2050. The territorial diversification of the advancement of the aging processes of individual European countries will also change. The percentage of people aged 65 and over will reach approximately 27% of the population in some countries in 2030, and even up to 34% for Spain, Portugal or Greece in 2050 (Figure 2). However, in 2050, countries with a high proportion of people with 15 or less expected remaining years of life will predominantly include the countries of Eastern, Central and Southern Europe (Figure 3). Then, on the basis of both criteria of advancement of the aging processes of European populations, the least “old” countries in 2050 should be mainly countries of the northern part of Europe and some countries located in the western part of the continent.

Age dependency ratio

The extent of the age dependency ratio can be measured using traditional methods illustrating the relationship between the number of people of non-working and working age, or by the potential age dependency ratio indicator proposed by the author, which expresses the ratio of the number of years to live of the members of non-working age in a given population to the number of years to live of the members of working age in the same population. Assuming the limits for working age to be from 20 to 65, we can calculate the value of this rate using the following formula (Murkowski 2011, 2012a):

$$W_{OB_{Pot}} = \frac{P_{0-19} + P_{65+}}{P_{20-64}}, \text{ where:}$$

(2)

P_{0-19} – number of years to live under 20 years of age;

P_{65+} – number of years to live over 65 years of age;

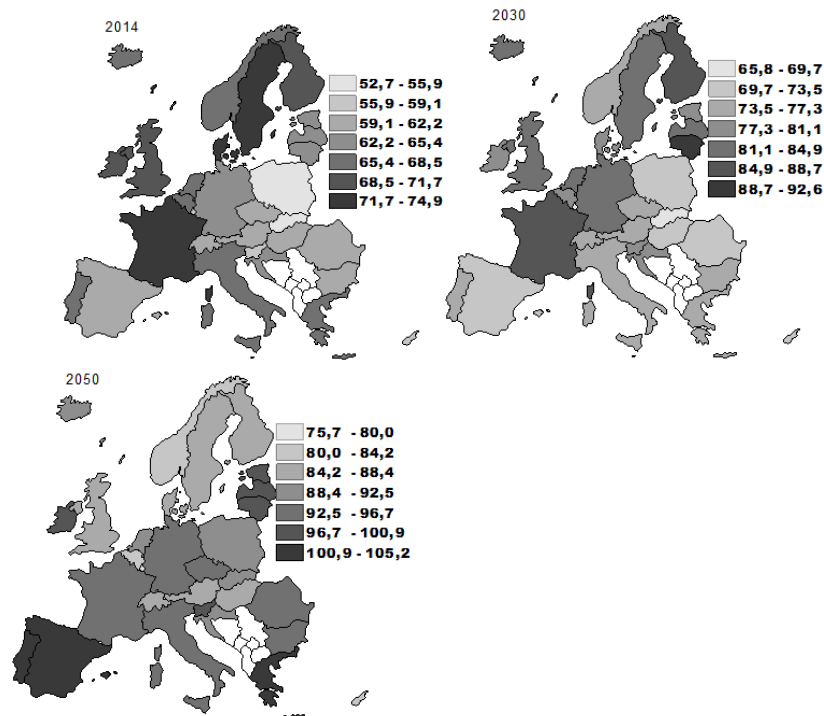
P_{20-64} – number of years to live from 20 to 65 years of age.

Detailed rules for determining the appropriate values of the number of years to live at a particular age can be found in the study by E. Vilrose (1956), while the description of the use of the indicator and its advantages are contained also in other studies by this author (Murkowski 2011, 2012a). The potential age dependency ratio is essentially a traditional age dependency ratio but “weighted”, where the weight is the average number of years to live of the population of working and non-working age. Its advantage is the assignment of different age dependency ratios of individuals depending on their age and the average number of years to live for working and non-working age. Therefore, a 5-year-old does not carry the same “burden” as a 65-year-old, i.e. someone who is soon to be of non-working age and someone who has just reached working age.

In 2014, there were almost 66 persons of non-working age per 100 working-age EU citizens, of which 34 were of pre-working age and 31 of post-working age. The countries of the eastern part of Europe and Spain had the lowest age dependency ratio of people of working age with people of non-working age in 2014 (Figure 4). Then, for every 100 working-age years to live in 2014 there was about 86 non-working-age years to live. However, the lower age dependency ratio expressed by the traditional measure was not always accompanied by low values of the potential measure, as can be seen with the population of Spain characterized by a relatively low age dependency ratio expressed by the traditional measure (in connection, among others, with a decrease in the number of people of pre-working age) and at the same

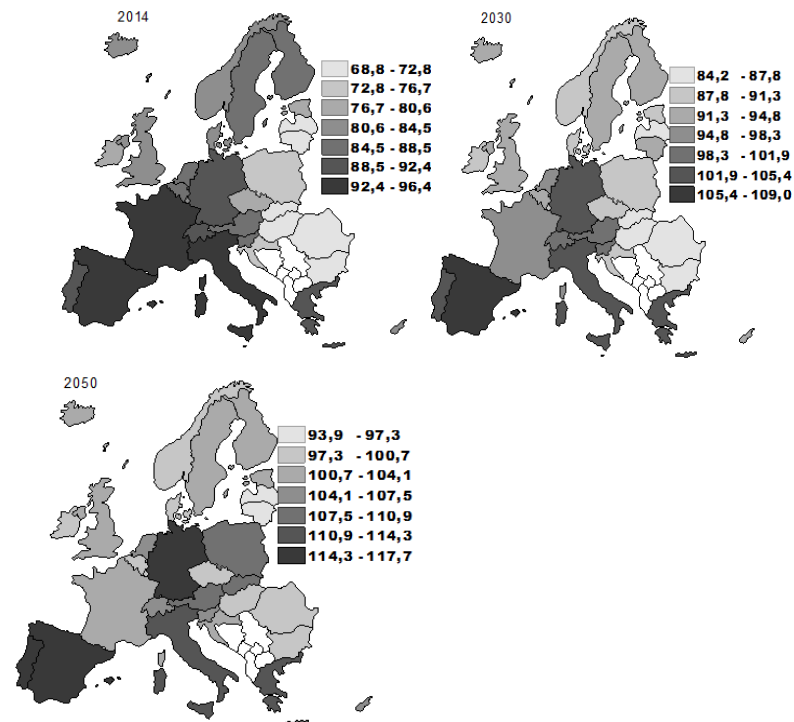
time high in the case of the potential measure (many generations of people who are currently of working age, but are close to being of post-working age) .

Figure 4. Traditional age dependency ratio



Source: own study based on Eurostat data

Figure 5. Potential age dependency ratio



Source: own study based on Eurostat data

It is expected that, in 2050, for every 100 people of working age there will be as many as 93 people of non-working age, mainly of post-working age. In addition, as of approximately

2035, the EU population will have a smaller number of remaining years of life between 20 and 65 than under 20 and over 65 (the potential age dependency ratio will exceed 100). In 2050, for 100 years to live at working age there will be as many as 107 years to live at non-working age. The territorial diversification in terms of the size of the age dependency of European countries will also change. In the future, the most favorable demographic situation in this respect will be observed in the countries of the northern part of Europe, for which a relatively low age dependency will be recorded in 2050. On the other hand, the most unfavorable relations in this respect will occur in countries such as Germany, Portugal, Greece or Spain (Figure 5).

Retirement age from a demographic perspective

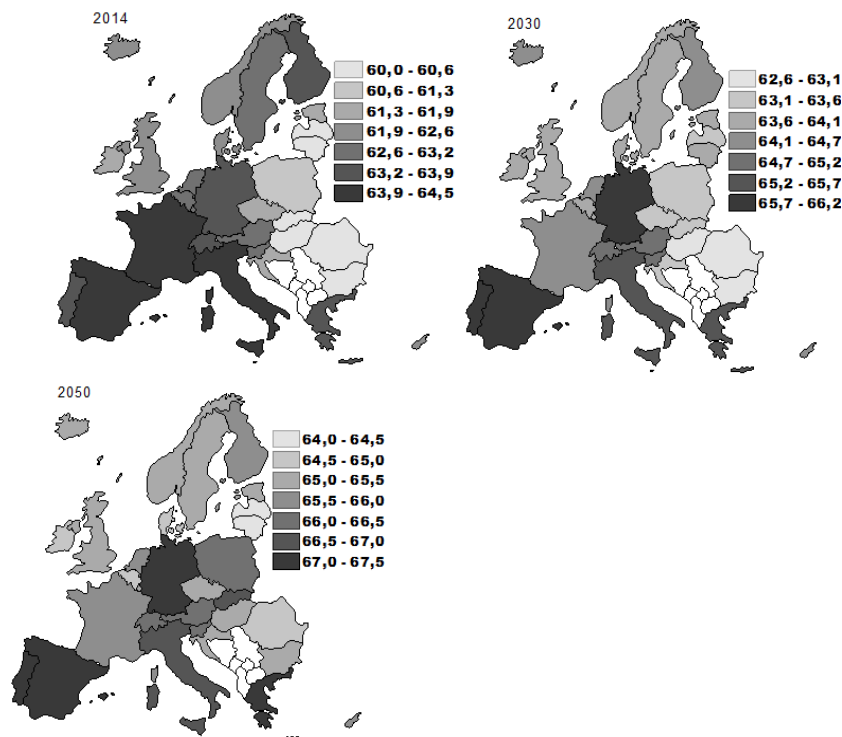
The aging of societies directly affects the pension system, making it necessary to raise the statutory retirement age. From a demographic point of view, the argument for politicians to raise the statutory age thresholds for retirement is to increase the value of the average life expectancy. However, it is not just the fact that we live longer that necessitates raising the retirement age. Population age structure is extremely important in this respect, and it is the relationship between the number of people potentially able to work and the number of people receiving retirement benefits that give rise to reforms changing the statutory retirement age. Assuming that, for a given population, the total number of remaining years of life at non-working age should not exceed the total number of remaining years of life at working age, a measure has been proposed that can serve as a benchmark when determining the statutory retirement age. This tool indicates the age for which the population has at a given time the same number of years to live in the period from 20 until that age than when aged under 20 or over that age. For the purpose of this study, this age was marked as a postulated minimum retirement age. The high values of this measuring tool are due not only to the process of increasing human longevity, but they are also a consequence of a disadvantageous population age structure.

In 2014, the values of the postulated minimum statutory retirement age ranged from 60 years in Romania to 64.5 years in Italy. As a rule, high values of this measure were recorded in the countries of the western and northern parts of Europe, and they were lower for post-socialist countries. It is nevertheless expected that the increase of this value will be much more marked in the future for the countries of Eastern rather than Western Europe. It is forecasted that the postulated minimum retirement age will be at 64-65 in 2050 in countries such as Belgium, Denmark, Ireland, Lithuania, Latvia and Romania. On the other hand, high values at above 67 years will occur in Greece, Spain, Germany and Portugal (Figure 6). In addition, it is expected that in the next decades the increase in its value for these countries may reach a maximum of about 0.5 years for the next ten years.

Table 3. Postulated minimum retirement age

Kraj	2014	2020	2030	2040	2050	Kraj	2014	2020	2030	2040	2050
Austria	63,1	63,6	64,8	65,4	66,2	Luxembourg	62,6	62,9	63,6	64,2	65,0
Belgium	62,8	63,0	63,7	64,2	64,9	Latvia	60,4	61,5	63,1	63,9	64,3
Bulgaria	60,3	61,5	63,0	64,3	65,1	Germany	63,5	64,5	65,7	66,4	67,0
Croatia	61,3	62,1	63,3	64,4	65,3	Poland	61,1	61,9	63,5	65,0	66,3
Cyprus	62,1	62,9	64,2	65,2	65,8	Portugal	63,4	64,1	65,7	66,8	67,5
Czech Republic	61,6	62,3	63,5	64,5	65,1	Romania	60,0	61,0	62,6	63,9	64,7
Denmark	62,3	62,8	63,6	64,3	64,9	Slovakia	60,2	61,3	63,2	65,0	66,5
Estonia	61,3	62,3	63,6	64,7	65,4	Slovenia	63,1	63,7	64,8	65,5	66,0
Finland	63,2	63,6	64,2	64,7	65,5	Sweden	63,0	63,3	63,9	64,5	65,1
France	63,9	63,9	64,6	65,1	65,6	Hungary	60,3	61,2	62,8	64,1	65,0
Greece	63,4	64,0	65,4	66,5	67,0	UK	62,5	63,1	63,9	64,6	65,2
Spain	64,0	64,6	66,2	67,1	67,1	Italy	64,5	64,6	65,6	66,3	66,7
Netherlands	63,0	63,5	64,4	65,1	65,7	Iceland	62,2	63,3	64,1	64,7	65,2
Ireland	61,7	62,4	63,6	64,4	64,6	Norway	62,5	62,8	63,6	64,2	65,1
Lithuania	60,5	61,9	63,8	64,1	64,0	Switzerland	63,7	64,2	64,9	65,5	66,0

Source: own study based on Eurostat data

Figure 6. Postulated minimum statutory retirement age

Source: own study based on Eurostat data

Conclusions

Along with the processes of increased life expectancy, healthy life expectancy or medical advancement, one should expect an upward shift of the demarcation line separating middle-aged people from the elderly. The previous approach of recognizing as “old” people aged 60 or even 65 should be considered outdated, especially in the most developed countries. In addi-

tion, one should expect a future increase in the economic activity of people who are today considered “old” in many countries. Due to the change in population age structure and increased human longevity, the increase in the statutory retirement age should also be expected. However, the author does not consider it appropriate to correlate the thresholds of the statutory retirement age with the value of the average continued life expectancy, as planned in some European countries. High values of average continued life expectancy do not necessarily translate into unfavorable relations between the number of people of working and non-working age in countries previously characterized by a relatively high birth rate. In Sweden, for example, life expectancy will increase by 2050, most likely by an average of 4 years, while the postulated minimum retirement age will increase by 2 years only. In conclusion, it can be said that an aging society can pose not so much a problem but rather a challenge for Europe – a challenge to ensure that the elderly whom we consider “old” today do not prematurely retire from economic activity. In some European countries, however, the problem may be the “upward” aging of the population in the age pyramid, caused by the birth rate insufficient from the perspective of generational replacement. This problem will be more evident in those countries where the numerical imbalance between some generations cannot be compensated by the increase in the economic activity of older people.

References

- Abramowska-Kmon A. (2011), *O nowych miarach zaawansowania procesu starzenia się ludności*, „Studia Demograficzne”, no 1 (159).
- Blangiardo G. C., Rimoldi S. M. L. (2013), *The potential demography: a tool for evaluating differences among countries in the European Union*, „Genus”, LXVIII (No. 3).
- Lutz W., Sanderson W., Scherbov S. (2008), *The coming acceleration of global population ageing*, „Nature”, no 451.
- Murkowski R. (2011), *Ocena obciążenia demograficznego ludności Polski na lata 2010-2025*, in: Modelowanie i prognozowanie gospodarki narodowej, Prace i Materiały Wydziału Zarządzania Uniwersytetu Gdańskiego, Sopot.
- Murkowski R. (2012a), *Obciążenie demograficzne w Polsce*, „Wiadomości Statystyczne”, no 5.
- Murkowski R. (2012b), *Wiek emerytalny ludności w państwach Unii Europejskiej w kontekście obciążenia demograficznego i przeciętnego trwania życia*, „Ruch Prawniczy, Ekonomiczny i Socjologiczny”, no 3.
- Murkowski R. (2013), *Wiek emerytalny w Polsce w kontekście przemian struktury ludności według wieku*, in: Chybalski F., Marcinkiewicz E. (ed.) *Współczesne zabezpieczenie emerytalne. Wybrane aspekty finansowe, ekonomiczne i demograficzne*, Lod University of Technology, Łódź.
- Murkowski R., (2015), *Potencjał życiowy ludności państw Unii Europejskiej w latach 1995-2009*, unpublished doctoral dissertation, Faculty of Economics at Poznan University of Economics and Business;
- Panush N., Peritz E. (1996), *Potential Demography: A Second Look*, „European Journal of Population”, no. 12;
- Sanderson W., Scherbov S., (2005a), *A new perspective on population ageing*, „Demographic Research”, no. 16.
- Sanderson W., Scherbov S. (2005b), *Average remaining lifetimes can increase as human populations age*, „Nature”, no. 435 (7043).
- Sanderson W., Scherbov S. (2008), *Rethinking Age and Aging*, „Population Bulletin”, no. 63.
- Vielrose E. (1958), *Zarys demografii potencjalnej*, Państwowe Wydawnictwo Naukowe, Warsaw.

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Bezrobocie długotrwale osób starszych w województwie lubuskim

Streszczenie

Bezrobocie długotrwale jest uznawane za jeden z najpoważniejszych problemów na współczesnym rynku pracy. Ekonomisci widzą w nim źródło poważnej deprecjacji zasobów ludzkich na rynku pracy oraz pauperyzacji dotkniętych nim rodzin. Zmiana struktury wieku zasobów pracy i prognozowany dla Polski proces ich zmniejszania się, zaowocowały zwiększonym zainteresowaniem aktywnością zawodową osób starszych. Analiza danych z ostatnich lat wskazuje na rosnący poziom zaangażowania zawodowego tej grupy, równocześnie jednak potwierdza, że osoby starsze często doświadczają bezrobocia długotrwałego. Celem artykułu jest określenie skali i struktury bezrobocia długotrwałego osób starszych na lubuskim rynku pracy oraz identyfikacja czynników zwiększających ryzyko tego rodzaju bezrobocia. Analizie poddano również rozwiązania ukierunkowane na wsparcie zatrudnienia tej grupy społecznej.

Słowa kluczowe: rynek pracy, osoby starsze, aktywność zawodowa, bezrobocie

Long-term unemployment of the elderly in Lubuskie Province

Abstract

Long-term unemployment is considered one of the most serious problems of the contemporary labor market. Economists see it as a source of serious depreciation of human resources in the labor market and the pauperization of the affected families. Changing the age structure of labor resources and the projected reduction of their size in Poland, have resulted in increased interest in working activity of older people. The analysis of data from recent years points to an increasing level of professional involvement of this group, but also reveals that older people are more likely to experience long-term unemployment. The article aims to describe the size and structure of long-term unemployment of older people in Lubuskie Province labor market and identify the factors determining the risk of this type of unemployment. Also analyzed are solutions aimed at supporting the employment of this social group.

Keywords: labor market, the elderly (older people), economic activity, unemployment

JEL CODE: J6, J14, J16

Introduction

Unemployment, as an immanent part of the labor market, has become a long-standing problem for a large part of Europeans. As argued by M. Thyssen, EU Commissioner responsible for employment, social affairs, skills and labor mobility, long-term unemployment is one of the most difficult and urgent problems caused by the economic crisis. This is determined both by the scale of that phenomenon as well as the associated large risk of poverty and social exclusion (*Bezrobocie długotrwale ...*, 2015). Reentering the labor market is particularly difficult in the case of older people unemployed for more than 12 months, which is why in Poland, as in many European countries, the elderly have been included in the group of people in a difficult situation in the labor market. The purpose of this article is to determine the scale of long-term unemployment in Lubuskie Province and to identify factors that increase the risk of long-term unemployment among older people. The hypothesis concerning the threat of long-term unemployment increasing along with the age of the unemployed was tested. The considerations began with the approximation of what long-term unemployment is, paying attention

to the factors that underlie it. Based on selected statistical data collected periodically and compiled by the Regional Labor Office in Zielona Góra and retrieved from the Local Data Bank, an analysis of the size and structure of long-term unemployment was carried out, taking into account the category of the unemployed elderly. Attention was also paid to activities aimed at increasing their employability.

The complexity of long-term unemployment

The time without work is one of the most important characteristics of unemployment, used to evaluate the situation in the labor market, determine the nature and type of unemployment, identify its causes and effects, and focus actions in the area of labor market policy. Given that, unemployment is divided in the literature as follows:

- short-term - up to 3 months,
- medium-term - up to 6 months,
- extended-term - up to 12 months,
- long-term - over 12 months,
- chronic - over 2 years.

In broad terms, long-term unemployment is a situation in which a person has unsuccessfully sought employment for a year or longer¹. However, this interpretation requires further specification. When using the criterion of job search length, two cases should be considered. On the one hand, a long-term unemployed person is someone who has been registered as unemployed continuously for over 12 months since the last registration. On the other hand, this category of the unemployed also includes those who have been registered as unemployed for a total of over 12 months over a specified number of years (Bron, Wiśniewski, Wojdyło-Preisner (2014, p. 9)).

Thus, two forms of long-term unemployment can be distinguished: continuous unemployment and multiple unemployment, the latter including unemployed people who are re-registered as such in employment offices. The above approach was reflected in the provisions of the Act on Employment Promotion and Labor Market Institutions, where a long-term unemployed person is considered someone who has remained registered as unemployed by Polish regional employment offices (PUPs) for more than 12 months in the last 2 years, excluding periods of professional internship and adult vocational training (*Act on Employment Promotion ...*, 2004).

It should be emphasized that long-term unemployed people are one of the most disadvantaged groups in the labor market. Many factors determine this. On the one hand, the long-term unemployed tend to have a low level of education, lack of individual skills and a reduced motivation to work, as well as problems with work organization, which all make it difficult for them to readapt to the pace of work. On the other hand, lack of documented experience and interpersonal and social skills caused by social exclusion often mean that employers are reluctant to employing such people. As a consequence, those experiencing unemployment for a long time are a group that proves particularly challenging for an active labor market policy. Restoring these people to full economic activity requires, among other things, improvement of the effectiveness of activities undertaken by employment offices (Kabaj 2001). From a macroeconomic perspective, the increase in the long-term unemployment rate is favored by the low number, or absence, of specific types of job offers or an excessive number of people applying for a similar job and a low level of remuneration.

¹ The concept of long-term unemployment is widely discussed, among others, in: M. Wojdyło-Preisner (2009), *Profilowanie bezrobotnych jako metoda przeciwdziałania długookresowemu bezrobociu*, Wydawnictwo Naukowe UMK, Toruń, pp. 18–22, and in *Bezrobotni pozostający bez pracy powyżej 12 miesięcy od momentu zarejestrowania się*, (2009) Ministerstwo Pracy i Polityki Społecznej, Warsaw.

It is worth noting that the specificity of long-term unemployment means that despite the economic recovery and signs of improvement in the labor market, the scale of this phenomenon is not always reduced. This is due to the fact that long-term unemployed people often find it very difficult to reenter the labor market for the reasons already mentioned. Particularly worrying is the growing long-term unemployment rate against decreasing total unemployment, which indicates that the outflow of the unemployed to the employed mainly concerns short-term unemployment.

Long-term unemployment causes the pauperization of an individual or a whole family, often resulting in social isolation and affecting the mental condition of the unemployed. In addition, it contributes to the threat of social pathology by reducing the chances of finding a new job, and thus limits the ability of individuals and families to find a way out of a difficult material situation and social environment. As a consequence, the long-term unemployed often become reliant on social welfare (Węgrzyn 2006, p. 226). It should be emphasized that, according to the human capital theory, long-term unemployment means the devaluation of skills and qualifications acquired during education and/or professional work. Decreased quality of human capital causes a decrease in the attractiveness of the unemployed person in the labor market and their reduced employability. This, in turn, is closely related to the gradual decrease of motivation for active job search and often results in the practical and mental exclusion of the unemployed person from the labor market. The large extent of long-term unemployment in Poland, as in other European countries, stems from the economic, social and political significance of this problem. It affects not only the standard of living of people and the dynamics of economic development, but also largely determines “social mood” and popularity of governments as such. Counteracting long-term unemployment requires a well-thought-out commitment of the forces and resources of all labor market actors, with the coordinating role of the state as the main actor in this regard.

The size and structure of long-term unemployment in Lubuskie Province

Pursuant to the Act of 2004 on Employment Promotion and Labor Market Institutions, the long-term unemployed were included in the category of people in a special situation in the labor market (*Act on Employment Promotion ...*, 2004). The time without work is one of the most important factors affecting the effective employment. The longer the period of unemployment, the more difficult it is to succeed in finding a new job. The number of long-term unemployed people changes along with the change in the total number of the unemployed, which is related to the dynamics of economic growth and the change in the labor market situation. This is confirmed by the analysis of data presented in Table 1. Both for Poland’s domestic labor market and Lubuskie Province alone, there was a gradual decrease in total unemployment in 2006-2008, accompanied by a decreasing share of the long-term unemployed. A similar trend has been observed as of 2014. In contrast, 2009-2012 is the period of increase in the number of unemployed people, including those seeking employment longer than one year. It is also worth noting that the share of long-term unemployed people was lower in Lubuskie Province than in Poland in general. In 2006, more than one million unemployed Poles, i.e. 49.3% of all the unemployed, sought employment for more than a year, and 42.3% of all the unemployed sought employment for that period in Lubuskie Province. In the entire period under consideration, the share of long-term unemployed people in Lubuskie Province was lower by a few percentage points from the one recorded in Poland’s domestic labor market.

Table 1 Long-term unemployment in Lubuskie Province and Poland in 2006-2015

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total number of unemployed persons (in thousands)										
Poland	2 309,4	1746,5	1473,7	1892,6	1954,7	1982,6	2136,8	2157,9	1825,2	1563,3
Lubuskie	72,8	52,3	46,3	61,6	59,2	59,1	60,6	59,8	47,1	39,4

Province										
Number of long-term unemployed persons (in thousands)										
Polska	1139,4	787,2	501,3	488,9	568,7	685,2	757,2	827,0	760,0	620,8
Lubuskie Province	30,9	19,5	12,4	12,9	14,1	16,0	17,2	18,1	16,1	12,2
Share of long-term unemployed persons in total number of unemployed persons (in %)										
Polska	49,3	45,1	34,0	25,8	29,1	34,6	35,4	38,3	41,6	39,7
Lubuskie Province	42,3	37,3	26,8	21,3	23,9	27,1	28,4	30,3	34,3	31,1

Source: own study based on Local Data Bank data at GUS website: <https://bdl.stat.gov.pl>

The analysis of labor market processes shows that changes in long-term unemployment are correlated with changes in the labor market, although the decline in the number of long-term unemployed people is somewhat delayed. This is because, in the process of economic growth, the reserves of the workforce with a higher qualifying potential and a relatively short period of unemployment are first utilized. It is only after some time that the number of people who have been unemployed for 12-24 months will decline (Bron, Wiśniewski, Wojdyło-Preisner, (2014 p. 10)). Data presented in Table 1 also indicates that the scale of decline in both the total number of the unemployed and the long-term unemployed was higher in Lubuskie Province than in Poland. In 2006-2015, the unemployed population decreased in Poland by 32.3%, and by 42.9% in Lubuskie Province, whereas the long-term unemployed population was reduced in Poland and Lubuskie Province by 45.5%, and 60.5%, respectively.

In spite of this, long-term unemployment remains one of the key problems for the labor market in Lubuskie Province. A more in-depth analysis of data on the share of unemployed people in a special situation in the labor market indicates high values for both the long-term unemployed and the unemployed aged over 50 (Table 2).

Table 2. Share of unemployed persons in a special situation in the labor market in Lubuskie Province (as at the end of September of a given year) (%)

	2011	2012	2013	2014	2015	2016
Without secondary education	59,6	60,2	59,4	59,4	x	x
Long-term unemployed	47,3	47,1	48,3	53,4	51,4	49,9
Without professional qualifications	31,6	31,3	31	31,6	x	x
Without professional experience	24,7	22,7	21,7	21,4	x	x
Aged over 50	23,9	24,7	24,9	27,7	29,9	29,4
Aged under 25	20	18,8	18	15,5	14	13,1
Single parent with at least one child	12,5	12,9	13,9	14,2	x	x
Women who did not have taken up employment after childbirth	10,4	10,6	11,2	12,2	x	x
Persons with disabilities	7,7	1,8	2	2,5	x	x
Persons who have not taken up employment after serving criminal sentence	1,7	1,8	2	2,5	x	x
Unemployed persons aged over 30	x	x	x	x	26,6	25,9
Recipients of social assistance benefits	x	x	x	x	2	1,8
With at least one disabled child under 18	x	x	x	x	0,2	0,1

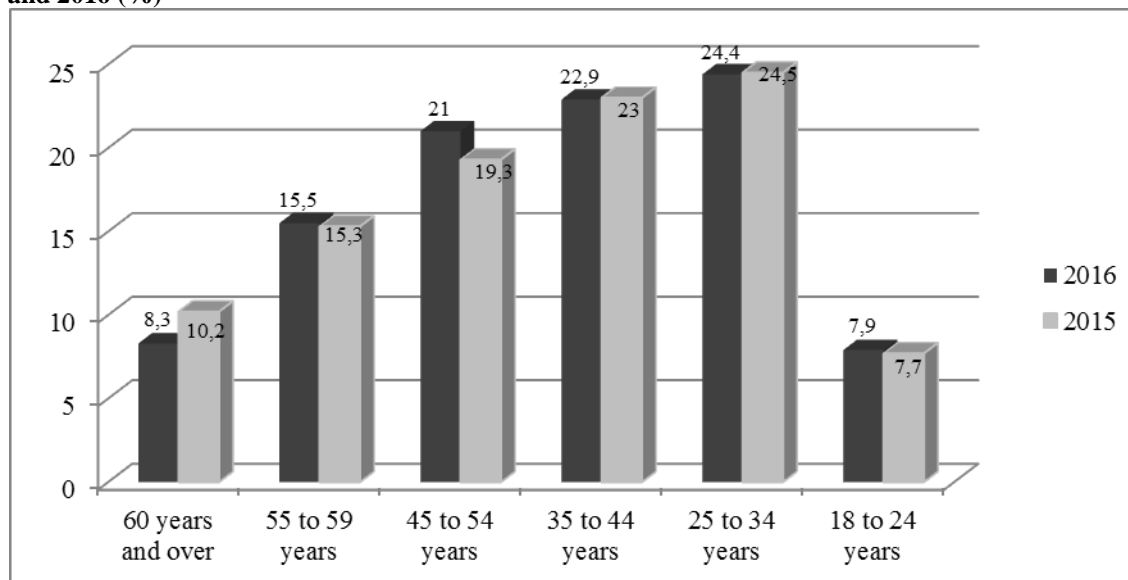
Source: own study based on data of Regional Labor Office in Zielona Góra.

At the end of the third quarter of 2016, there were 15,598 long-term unemployed people registered in Lubuskie Province, who constituted 49.9% of the total unemployed. In relation to the same quarter in 2014, a decrease by 3.5 percentage points was observed. Taking into consideration the gender of the long-term unemployed and the unemployed aged 50 and more, a certain regularity can be noticed in the form of women's predomination among the long-term unemployed and men's among the unemployed 50-year-olds².

² The share of women in the group of long-term unemployed persons was as follows in the third quarter of subsequent years: 2013 - 57.8%, 2014 - 57.1%, 2015 - 58.1%, 2016 - 59.9%, whereas the share of men in the group of unemployed persons aged 50+ in the corresponding period was: 2013 - 61.8%, 2014 - 60.0%, 2015 - 59.7%, 2016 - 60.0%.

The analysis of data illustrating the structure of long-term unemployment by age in the third quarter of 2015 and 2016 indicates the majority of the people in this group were aged 25-34 and 35-44. On the other hand, the share of people aged 55 and more in the analyzed period was slightly above 15%.

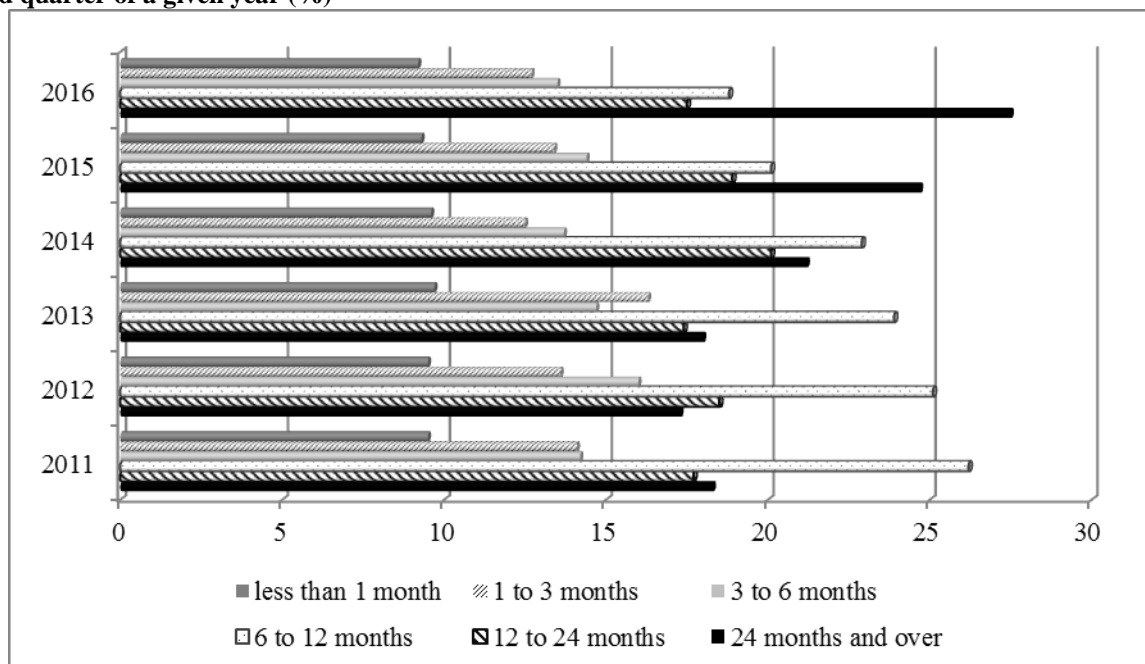
Figure 1. Structure of long-term unemployed persons by age in Lubuskie Province in the third quarter of 2015 and 2016 (%)



Source: own study based on data of Regional Labor Office in Zielona Góra.

Although the share of people aged over 55 in the group of the long-term unemployed is not the highest in Lubuskie labor market, a more in-depth analysis of the changes related to the time of unemployment of this age group may still raise concerns. The unfavorable trend in this respect is confirmed by a significant increase in 2011-2016 of the share of the unemployed aged over 50 of who sought employment for more than 2 years (Figure 2).

In the analyzed period, the share of long-term unemployed 50-year-olds increased by 9.2 percentage points, with a 7.4 percentage point decrease in the share of those who remained unemployed for more than 6 months but less than a year.

Figure 2. Share of unemployed persons aged above 50 by time without work in Lubuskie Province, in the third quarter of a given year (%)

Source: own study based on data of Regional Labor Office in Zielona Góra.

The share of unemployed 50-year-olds without work in the remaining time periods was relatively constant during the period under consideration. In trying to explain the potential causes of long-term unemployment, also among the elderly, the education structure of this category of the unemployed should be examined. The analysis of data collected in Table 3 shows that the highest share among the long-term unemployed concerned people with lower secondary education or lower. A similar correlation was observed in 2015 for the group of unemployed 50-year-olds, while in 2016 the largest share of unemployed 50-year-olds had a basic vocational education. At the same time, for both categories of the unemployed, the minority were those with higher education and general secondary education.

Table 3. Long-term unemployed persons and unemployed persons aged over 50 by education and professional experience in Lubuskie Province in 2015 and 2016 (as at the end of September)

	2015		2016	
Education	Long-term unemployed persons			
Total	19832	100%	15598	100%
Higher	1378	6,9%	1202	7,7%
Post-secondary and secondary vocational	3920	19,8%	3064	19,7%
Secondary general	1603	8,1%	1310	8,4%
Basic vocational	6275	31,6%	4780	30,6%
Lower secondary and below	6656	33,6%	5242	33,6%
Education	Unemployed persons aged over 50			
Total	11521	100%	9202	100%
Higher	428	3,7%	384	4,2%
Post-secondary and secondary vocational	2346	20,4%	1850	20,1%
Secondary general	523	4,5%	435	4,7%
Basic vocational	4104	35,6%	3279	35,6%
Lower secondary and below	4120	35,8%	3254	35,4%
Professional experience	Long-term unemployed persons			
Total	19832	100%	15598	100%
1 year or less	3050	15,4%	2567	16,5%

1-5 years	4108	20,7%	3293	21,1%
5-10 years	2977	15,0%	2367	15,2%
10-20 years	3792	19,1%	2824	18,1%
20-30 years	2547	12,8%	1928	12,4%
30 years or more	751	3,8%	568	3,6%
None	2607	13,2%	2051	13,1%
Professional experience	Unemployed persons aged over 50			
Total	11521	100%	9202	100%
1 year or less	684	5,9%	567	6,2%
1-5 years	645	5,6%	534	5,8%
5-10 years	1023	8,9%	871	9,5%
10-20 years	2961	25,7%	2382	25,9%
20-30 years	3808	33,1%	2981	32,4%
30 years or more	2022	17,5%	1534	16,6%
None	378	3,3%	333	3,6%

Source: own study based on data of Regional Labor Office in Zielona Góra.

A high percentage of unemployed people with low education is unfavorable for the labor market and can be perceived as a qualifying and staffing barrier for the economy. Employees with a low level of education and lacking proper professional qualifications are characterized by a low level of labor productivity. Consequently, even if they take up a job, they are often condemned to relatively low wages and temporary forms of employment. In economic theory, it is emphasized that long-term unemployment can limit wage increase. According to the threshold wage model, as the time of job-seeking increases, the threshold wage³ and wage aspirations of the unemployed decrease. The reason may be loss of benefits, exhaustion of savings or realization that one's wage demands are excessive. As a result, long-term unemployed people improve their competitiveness in the labor market, but this may weaken their wage increase opportunities (Kwiatkowski 2002, pp. 167-169). It should be added that the low level of education of these resources may be a factor limiting the possibilities of implementing active labor market policy programs aimed at reducing unemployment in this group (Hasińska, Sipurzyńska-Rudnicka 2011, p. 159).

An important determinant of the situation of the individual in the labor market, their chances of employment and the threat of unemployment is professional experience. The analysis of the data from Table 3 indicates that short professional experience may be a significant obstacle to finding employment in the case of long-term unemployed people. Over 20% of them had a professional experience of 5 years or less. The situation differs for the group of unemployed 50-year-olds where the majority had work experience in the range of 20 and 30 years.

The analysis of the size and structure of long-term unemployment in Lubuskie Province allowed to test the hypothesis put forward at the outset of this article. On the one hand, data on the size of long-term unemployment showed that it affects more severely people aged 25-34 than people aged over 50 in the region considered. On the other hand, a more in-depth analysis of the structure of unemployment among fifty-year-olds by time of unemployment confirms the growing threat to this age group posed not only by long-term but also chronic unemployment. From the previous considerations it also follows there were people with shorter professional experience among long-term unemployed people, with that experience at 20-30 years for unemployed fifty-year-olds. In addition, the low level of education of the unemployed implied a longer period of unemployment. Analysis of the gender structure of unemployment showed that women predominated in the group of long-term unemployed people, while men predominated in the group of the unemployed aged 50+.

³ The threshold wage is the subjective amount of remuneration below which work does not pay off.

Consequences and ways to reduce long-term unemployment among older people

Long-term unemployment reflects a broad spectrum of negative effects in the economic and social sphere in a special way.

From a macroeconomic perspective, long-term unemployment means incomplete utilization of labor resources, which in turn leads to a reduction in the actual GDP so that it is below the potential one, i.e. achievable in conditions of full employment. According to Okun's law, for each percentage point by which the unemployment rate is above the natural rate of unemployment, the real GDP is 3% lower than the potential GDP (Hall, Taylor 2000, p. 146). The NAIRU⁴ theory of unemployment assumes that the level of long-term unemployment influences the level of underemployment equilibrium. The increase in the long-term unemployment share in the unemployment resource leads to an increase in the postulated real wages and, consequently, to an increase in NAIRU unemployment. This is because the long-term unemployed lose some of their professional qualifications and skills down the road, and they are thereby relatively weak competitors for employed and short-term unemployed people in the fight for jobs. With higher long-term unemployment, the wage demands of employees are higher, resulting in an increase in NAIRU unemployment (Kucharski 2015, pp. 178-179).

In addition, long-term unemployed people contribute both to a reduction in budget revenues due to non-payment of taxes as well as to a significant increase in social transfers under the social assistance system and state intervention in the labor market (Dolny, Wiśniewski, Wojdyło-Preisner 2014, p. 13).

Long-term unemployment also means rapid economic degradation of individuals and families, and the expansion of the poverty sphere. Sometimes it is experienced by households already functioning in the sphere of scarcity, and other times, as a result of long-term unemployment, "new poverty" is experienced in those households that have so far managed to meet their needs. Long-term unemployment brings along with it the loss of entitlement to benefits, which leads to further reduction of expenses, as a result of which unemployed people are more prone to start seeking illegal alternatives of employment. The increase in unemployment also prompts a decline in the human capital of the unemployed. With the prolongation of time without work, unemployed people lose some of their professional skills and experience. As a consequence, the long period of unemployment is conducive to professional degradation and marginalization of individuals and entire social groups (Szyłko-Skoczny 2004, p. 67).

These consequences are particularly severe in the case of older unemployed people, whose position in the labor market is additionally aggravated because of their age. As mentioned earlier, people over the age of 50 often experience not only long-term but also chronic unemployment. Loss of work at this age significantly limits the chances of returning to full economic activity. For this reason, the Polish legislator decided to develop and introduce solutions aimed at increasing the employability of this group. The framework of this study does not allow for an in-depth review of all these solutions, but one should nevertheless mention the ones addressed to the unemployed aged over 50. These people can take advantage of different forms of subsidized employment in the form of public works and interventions, albeit the effectiveness of these solutions is not particularly convincing since employers tend to use subsidized employment mainly because of the associated financial benefits. As a consequence, such jobs are created only as long as they receive financial support from the state. Older unemployed people may also take advantage of professional internships, which give their participants the chance to gain experience, qualifications and a source of income. At the same time, however, these internships do not constitute employment within the meaning of

⁴NAIRU - Non-Accelerating Inflation Rate Of Unemployment - - NAIRU unemployment occurs when wages corresponding to employees' demands are equal to wages in line with economic realities, i.e. with stabilized dynamics of inflation processes.

the Polish Labor Code, while the period of allowance awarded during the internship period counts towards the period of work required to acquire or retain employee rights, and therefore the person does not lose the status of the unemployed. The mentioned instruments of active labor market policy aimed at people aged 50+ were supposed to enable them to reenter the labor market, but - as demonstrated by the NIK audit – the reentry is, to a large extent, short-term. Unemployed people aged over 50 who participate in active forms of counteracting unemployment do not have much chance of obtaining permanent employment. After using various forms of “activation”, in the vast majority of the cases they took up fixed-term employment only to register again with employment offices. Furthermore, a significant part of those people continued to use other forms of employment support programs (Niewiadomska 2015, pp. 171-172). It should be added that the difficulties in taking up employment by the elderly unemployed are also linked with the stereotypical perception of older people who are seen by employers as less attractive to hire. Then, the reluctance of employers to employ older people is further reinforced by the protection of employees in the pre-retirement age, as provided for by the Polish Labor Code. Employers are very limited in dismissing older employees by not being able to terminate a contract of employment with someone who has no more than 4 years left until reaching the retirement age.

Conclusions

Total unemployment, including long-term unemployment, depends on the condition and structure of the economy and its ability to create jobs. Analysis of the size and structure of long-term unemployment in Lubuskie labor market allowed for the formulation of several conclusions. First, the number of long-term unemployed people changed along with the change in the total number of the unemployed, with the scale of decline in Lubuskie Province higher in the analyzed period compared to data gathered for Poland. Second, the share of long-term unemployment fifty-year-olds in the total share of the unemployed was not the highest, although the analysis of the unemployment structure in this group by time without work confirmed the unfavorable trend in the form of a growing share of older people seeking employment for more than two years. Third, the length of the unemployment period was closely related to the qualifications of the unemployed. In short, the higher the qualifications, the lower the risk of long-term unemployment. The percentage rates of long-term unemployed people were significantly higher among the unemployed with lower secondary education and lower than among people with a relatively higher level of education, while those with higher education were the least threatened by long-term unemployment. In the resource of the long-term unemployed, a particularly unfavorable situation concerned fifty-year-olds whose professional experience ranged from 20 to 30 years. The analysis of the structure of unemployment in Lubuskie labor market demonstrated women’s predominance in the group of the long-term unemployed, and men’s predominance in the group of the unemployed aged 50+. The difficult situation of the long-term unemployed and the low effectiveness of the current active labor market policies contributed to the emergence of a new concept of activities in the form of profiling the unemployed. One of the key reasons for its implementation in Poland was the registration in employment offices of a large number of unemployed people who had little or no interest in reentering the labor market. Presuming that early intervention addressed to all the unemployed would be very costly, it was considered that profiling the unemployed - i.e. early identification of people most exposed to long-term unemployment and then selection on that basis the most effective forms of assistance for these people – was necessary. This alternative approach is assumed to help limit the inflow of people to the sphere of long-term unemployment. According to the literature, profiling the unemployed includes any formal procedure of conduct on the basis of which the risk of long-term unemployment is determined (Rudolph 2001). These procedures may be based on the knowledge and experience of an employment service worker, group selection and/or econometric modeling. Profiling the unem-

ployed has become one of the elements of an active labor market policy included in Polish law⁵, pursuant to which employment offices must establish a profile of assistance to an unemployed person no later than 60 days after their registration. When establishing the profile, the office analyzes the situation of an unemployed person and their chances on the labor market, taking into account:

- distance from the labor market, i.e. factors that hinder entering or reentering the labor market,
- readiness to enter or reenter the labor market, i.e. factors indicating the need and willingness to work.

Profiling the unemployed helps in demarcating a specific path of assistance. The Act introduces three profiles: assistance profile no. 1 for active persons, assistance profile no. 2 for persons in need of support and assistance, and assistance profile no. 3 for persons who are distant from the labor market. In the case of the long-term unemployed, activities undertaken in cooperation with social assistance centers, non-governmental organizations and private employment agencies are of particular importance. However, the effectiveness of profiling the unemployed depends not only on the effectiveness and efficiency of the labor market institutions, but also on the very attitude of the long-term unemployed.

References

Act of 20 April 2004: *Ustawa z dnia 20 kwietnia 2004 r. o promocji zatrudnienia i instytucjach rynku pracy*, Journal of Laws of 2015, item 149, as amended

Act of 26 June 1974: *Ustawa z dnia 26 czerwca 1974 r. – Kodeks pracy*, Journal of Laws of 2014, item 1502, as amended

Bezrobocie długotrwałe: Europa pomoże 12 milionom osób długotrwałe bezrobotnym wrócić do pracy (2015), European Commission Press Release, Brussels

Bezrobotni pozostający bez pracy powyżej 12 miesięcy od momentu zarejestrowania się, (2009), Ministry of Labor and Social Policy, Warsaw

Bron A., Wiśniewski Z., Wojdyło-Preisner M. (ed.) (2014), *Ryzyko długotrwałego bezrobocia w Polsce. Diagnoza i metody zapobiegania*, Wydawnictwo Centrum Rozwoju Zasobów Ludzkich, Warsaw.

Hall R. E., Taylor J.B. (2000), *Makroekonomia*, Wydawnictwo PWN, Warsaw.

Hasińska Z., Sipurzyńska-Rudnicka K. (2011), *Rynek pracy województwa dolnośląskiego w latach 1999-2009*, Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław.

Kabaj M.(ed.), (2001), *Badanie bezrobocia długotrwałego*, IPISS Report

Kucharski L.(2015), *Bezrobocie długookresowe w Polsce w latach 2004-2013*, Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach no 210, Katowice.

Kwiatkowski E. (2002), *Bezrobocie. Podstawy teoretyczne*, Wydawnictwo PWN, Warsaw.

Niewiadomska A. (2015), *Efektywność polityki aktywizacji zawodowej starszych wiekiem zasobów pracy w Polsce*, in: Charkowska-Smolak T., Grobelny J.(ed.), *Człowiek na rynku pracy. Wyzwania i zagrożenia*, Wydawnictwo LIBRON – Filip Lohner, Krakow.

Rudolph H. (2001), *Profiling as an instrument for early identification of people at risk of long-term unemployment*, in: Weinert P., Baukens M., Bollérot P., Pineschi-Gapenne M., Walwei U. (ed.), *Employability: From theory to practice*, Library of Congress, USA.

Szyłko-Skoczny M. (2004), *Polityka społeczna wobec bezrobocia w Trzeciej Rzeczypospolitej*, Oficyna Wydawnicza ASPRA–JR, Warsaw.

⁵ Cf. Act of 20 April 2004 on Employment Promotion and Labor Market Institutions (art. 33 sec. 2c), Ordinance of the Minister of Labor and Social Policy of 14 May 2014 on profiling the assistance for the unemployed.

Węgrzyn G., (2006), *Bezrobotni długotrwale - problem XXI wieku*, in: Kopycińska D. (red.), *Regulacyjna rola państwa w gospodarce*, Wydawnictwo Uniwersytetu Szczecińskiego, Szczecin.

Wiśniewski Z., Wojdyło-Preisner M. (ed.) (2014), *Diagnozowanie stopnia zagrożenia długotrwałym bezrobociem. Teoria i Praktyka*, Wydawnictwo Centrum Rozwoju Zasobów Ludzkich, Warsaw

Wojdyło-Preisner M. (2009), *Profilowanie bezrobotnych jako metoda przeciwdziałania długookresowemu bezrobociu*, Wydawnictwo Naukowe UMK, Toruń.

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Ile państwa w państwie?

Streszczenie

Autorzy artykułu pragną skłonić do refleksji i zastanowić się nad zadaniami jakimi powinno zajmować się państwo. Poruszane kwestie dotyczą bezpieczeństwa, administracji, państwa opiekuńczego i finansów publicznych. Wiele poruszanych aspektów wydaje się na czasie, zwłaszcza dyskusja wokół spółek skarbu państwa. Pojawia się wiele pytań, między innymi: na ile ingerencja państwa sprzyja rozwojowi i obywatelom, a w jakim stopniu spowalnia gospodarkę i ogranicza swobody obywatelskie.

Słowa klucze: bezpieczeństwo, liberalizm, podatki, państwo opiekuńcze

How much state within a state?

Abstract

In this article, the authors aimed to induce reflection on some strategic and development challenges the Polish state should deal with. The issues discussed in this paper concern safety, administration, welfare state and public finance. Many of the aspects seem to be current topics, especially regarding state-owned enterprises. A number of questions emerges, among them: to what extent state interference is conducive to development and citizens' well-being, and to what it slows down the economy and limits civil liberties.

Keywords: safety, security, liberalism, taxes, welfare state

JEL CODE: A12, A13, A19

Introduction

In European civilization, the functioning of man in the state organism has always raised dilemmas and considerations among social thinkers. It is difficult today to deny and criticize the sense of the existence of the state. At the same time, however, Leszek Balcerowicz, famous contemporary Polish economist, debates the essence of the state in light of the fact the estimated market value of the Polish economy is USD 431 billion against Apple's USD 613 billion. In Asia, meanwhile, there is Zomia, a cross-border area covering parts of Vietnam, Cambodia, Laos, Thailand, China and Burma, with a population of one hundred million people living beyond the control of their respective states, regimes and the law. The research problem comes down to an attempt to address the question of the role of the state nowadays, with it being developed on many a social and economic level. The hypothesis that guided the authors was a statement that the role and functions of the modern state are at their maximum (are the reverse of the minimum), and thus they are not always effective and become too expensive. This study attempts to examine the models of the state which, in their extreme form, arouse approval and worship of citizens on one hand, and aversion and hostility on the other.

The state as seen by thinkers

In philosophical considerations, the concept of the state has never existed, and to this day it lacks unambiguously determined content. From ancient times philosophers have wondered how the state arises and how it exists, or what the main functions of the state are. One can risk the statement that philosophical disputes regarding the essence of the state are one of the most characteristic aspects of European civilization.

Plato thinks the state should be unity. It should therefore integrate all the elements that make up a coherent whole; connect in a harmonious relationship people who, as self-insufficient beings, need interdependencies. Plato seeks a perfect, unchanging solution and he is convinced of the possibility of dealing with this task. Plato despises democracy. He believes that it essentially means destruction - a gradual disintegration of society. The principle of equality is the absurdity that causes the ever-expanding rigmarole. Hierarchies fall down, all seriousness disappears. Differences become blurred. What is lower and inferior usurps all privileges. In democracy, the passion of the crowd plays a decisive role, reason loses its significance. In general turmoil, loud demagogues have the upper hand. The most basic instincts come to the fore. Democracy leads the state inevitably towards ruin. The power of demagogues, leaders of the spoiled crowd, is uncertain. Uninhibited passions such as anger, irritation and envy play the decisive role (Filipowicz 2003, p. 14).

The concept of the state as a community of the general good is developed by Plato's student - Aristotle. In *Politics*, he teaches the basic theses of his concept. Aristotle proceeds from the assumption that "every state is a community that arises with a view to accomplishing a certain good (since everyone, in every action, causes what is good in their view) and it is therefore obvious that all (communities) strive for a certain good, but above all the most superlative, entrusted with the most important of all tasks and encompassing all others. It is the so-called state and state community (Aristotle, 1964, p. 3).

Aristotle represents the theory of the creation of the state in a natural way; in a way that corresponds to the demands and needs of human personality. The previous forms of people associating into groups, such as family or in broader terms household (*oikia*), are also natural occurrences and they lead to the highest form of organization, i.e. the state. In this light, man by nature turns out to be a "state being" (*zoon politikon*), striving to live in a group, finding in it conditions for both personal and collective growth. People living outside of society and the state undoubtedly remain at some inappropriate and primitive stage of development. Thus, the community is the result of the natural behavior of the individual, whereas the state is the highest form of people's organization into a community in which the free man obtains the status of a citizen (Sylwestrzak 2003, pp. 59-60).

The state is to organize a good life for the people, that is give them a sense of security, material prosperity and conditions favorable to development. In this sense, a well-organized state should promote the expansion of the moral, cultural and property wealth of both citizens and the community. Aristotle, unlike Plato, does not share the former's contempt for tangible goods and perceives them to be a natural component of the properly functioning and developing community like a family, a commune, or a state. "The state arises to make life possible, and it exists to make life good". It is therefore an organization that unites individuals, families and social groups, and in this sense it is a whole that consists of parts, which awards it priority on the basis of the advantage of a whole over its parts (Zieliński 2006, pp. 40-41).

Like Plato, Aristotle sees many weaknesses of democracy. He believes that power belonging to the people does not always lead to results serving the people. The general public tends to favor short-sighted interests, being motivated by the desire to obtain even minor benefits. As a rule, the people, understood in holistic terms, are incapable of pursuing a long-term policy aimed at securing the interests of the city-state. The disadvantage of democracy is the ability of people who have majority and power to decide, but often with omitting or violating the

law. The public then becomes their own despot, the fact willingly used by demagogues in transforming democracy into tyranny.

The concepts of the state emerging in the early modern era were quite different. One of their most characteristic aspects was the emancipation of the individual. Individualism and the conviction that all problems concerning the state and law should be recognized from an individual's perspective became increasingly important.

Early modern reflection on the state focuses precisely on the problem of freedom. What extent of freedom can an individual enjoy? How should the relationship between freedom and power be shaped?

English thinker T. Hobbes provides an interesting answer to these questions. According to the author of *Leviathan*, emergence of the state means leaving the state of nature, in which conflict and unrestricted competition prevail. The image of the state of nature is obtained by asking the following question: how would people act if there were not one power they could be afraid of? It would be a pathetic scenario - in the state of nature, everyone is a threat to each other and competes for the same trophies. Fear and mutual distrust are the basis of survival. The state of nature is, according to Hobbes, a state of war. People are hostile towards each other - they know that someone else's success translates into their defeat, the reason for which they are constantly trying to fight one another. In the state of nature, says Hobbes, "constant fear and threat of violent death prevail. Man's life, meanwhile, is lonely, poor, sunless, bestial and short" (Hobbes 1954, p. 16). Only the emergence of an "artificial man" with superior "power", and therefore of the state, can put a stop to this. This is the background for the emergence of the state called Leviathan, the "mortal god" to whom everyone is strictly subordinated. Also because of this the engraving depicting that biblical monster in the work of Hobbes takes the form of a giant consisting of little pieces that are human individuals. The emergence of society and the state is identified, while the conclusion of a social contract means abandoning the state of anarchy and achieving a standard of orderly and safe life. Establishment of a sovereign by means of social contract causes the transformation of the community of people into a society - the state (Sylwestrzak 2003, p. 196).

In Hobbes' philosophical doctrine, a social contract is an exit dictated by reasonably predominant calculation for living in peace and unity instead of destructive anarchy. People conclude a "peer-to-peer" agreement, entrusting full power to the sovereign. It is not a bilateral agreement in which the ruler undertakes to observe such or other rules. The subordinates simply renounce the rights to their natural freedom, transferring them in entirety to the sovereign.

J. Locke approaches the question of social contract and state formation differently. He does not agree with Hobbs that by way of social contract man deprived himself of all rights, renouncing them in favor of the sovereign, who is the ruler. A contract so conceived would not make sense to man. Man enters the agreement when it protects the basic values that nature has provided him with. A social contract implies the protection of natural rights, which the individual does not relinquish, but rather obtains a stronger defense of them. The state, then, is not a divine or a creation of nature, but a result of man's reasonable behavior. It stems from the will of individual citizens and in this sense it is based on the individualism of civic actions, with citizens participating in the act of establishing a society and the state. Establishing the community requires, in Locke's view, the consent of each and every citizen, thus it becomes, to a large extent, an act of fulfilling the will of individual persons. However, the consent of the majority is enough to establish state institutions (Sylwestrzak 2003, p. 200).

As a pioneer of liberalism, Locke found a continuation in the Enlightenment thought, particularly influencing Montesquieu, Rousseau as well as ideologues of the American constitution, which was one of the first doctrines to present a mature list of the basic principles and goals of capitalist development.

An interesting concept of the creation of the state is represented by A. Smith. In his opinion, the state emerged at the time of the division of society into the rich and the poor so as to warrant the safety of property, order and subordination of citizens. Four causes make up this subordination: a) individual characteristics, such as physical strength and reason, although the latter has a basic meaning, b) age advantage, playing a relative role, c) wealth leading to almost total subordination of individuals, especially among primitive peoples, d) superiority of birth, which in fact indicates merely the tradition of inheriting wealth (Sylwestrzak 2003, p. 253).

The prime task of the state is to defend a society against rape and lawlessness. Security is the more jeopardized the greater the wealth of the state and the citizens. The army should protect the people against external aggression, although it is equally important to defend them against injustice and oppression from their fellow citizens. To this end, courts should be established based on a categorical separation of executive and judicial powers. The state should also maintain public institutions, regardless of costs, so as to secure communication channels and routes as well as promote education that favors the "free play" of social and economic forces (Sylwestrzak 2003, p. 254).

Disputes about the state – then and now

J.M. Keynes, founder of the theory of state intervention in the field of economics and state finance, emphasized (Smith 2007, p. 126):

- only a state that uses the services of scientists can demonstrate rationality,
- the state will properly manage the flow of income so as to foster prosperity and a better life for everyone
- state-owned investments are better than private ones,
- many missed investments have failed only because private individuals did not know each other or indulged in speculation,
- state institutions can, not only motivated by profit, correct market imperfections and prevent social unrest, reduce the size of forced unemployment by boosting employment and consumption,
- the state must interfere in the economic sphere because only in this way can it improve the degree of utilization of the existing production capacities,
- the action consisting in increasing the level of expenditure by the state in due time would provide impetus to growth in other sectors of the economy,
- for the state, it is not important to do similar things a little better, but to do things that are not currently done at all,
- in the sphere of private property, it is better if someone vents their tendency to tyranny on their bank account and not their fellow citizens.

In the contradictory conceptions, M. Friedman argued the state should (Friedman, 1999, p. 35, Friedman 1996, p. 67):

- ensure external security of the country,
- ensure order and domestic peace,
- control monopolistic prices, comply with anti-trust laws,
- protect free trade (eliminate tariffs and non-tariff barriers, counteract technical monopolies),
- account for private philanthropy,
- protect the free market and promote economic competition,
- protect private property.

James D. Gwartney and Richard L. Stroup (1994, pp. 78-117) write about the economic progress and the role of the government, mentioning that:

- the government contributes to economic progress when it protects the rights of the individual and provides the goods the market cannot provide,

- the government is not an intervention instrument,
- the cost of functioning of the government is a) a decrease in production in the private sector resulting from the use of government funds, b) the cost of taxes, and c) unrealized profits from transactions halted by the government that hindered trade,
- if there are no restrictions in the form of appropriate constitutional principles, the legislators head towards a budget deficit, which is often detrimental to the economy,
- when the government is strongly committed to supporting certain groups at the expense of other citizens, the available resources become subject to appropriation instead of serving production. Economic progress is then inhibited,
- the cost of redistributing government revenues will be much greater than the net benefits of those who will benefit from this activity,
- central planning in the economy means replacing the market with politics, i.e. wasting resources and hindering economic progress.

The questions posed by the opponents to excessive interference of the state boil down to: how can one oppose government programs? The state is there to help people. It is true - but which people? And for whose money? And with whose permission? And with what effect? (S'Souza 2006, p. 85). They also admit that: "At the same time, we realize that whatever the state deals with, it usually does not deal with it properly (I know only one exception to this rule: writing parking tickets)" (S'Souza 2006, p. 87).

For the opponents of the state, even the program of economic and social reforms introduced in the United States, aimed at counteracting the effects of the Great Depression of 1929, became the object of criticism. And while the New Deal temporarily restrained the negative effects of the economic crisis, the entire concept of "company rights, property rights and the role of the state faltered sharply" (Heilbroner 1993, p. 246). The supporters of the New Deal assure that huge budget expenditures brought new jobs and prompted economic development (Heilbroner 1993, p. 246), but then again, one can finance these jobs only by taking money from one group of people (taxpayers) and giving them to another, which means that there is no "net stimulus" whatsoever. In reality, these programs bring more bad than good because they divert capital from the private sector, which hinders the creation of "healthy jobs" (Woods 2007, p. 176). Government's "help" for industry sometimes has to be feared just as much as its hostility. This applies to the same extent to government loans. The government never lends nor gives the industry what it first has not taken from it (Hazlitt 2012, p. 46). When the government grants loans or subsidies to the industry, it actually taxes those private entrepreneurs who have succeeded in order to support those who have failed (Hazlitt 2012, p. 46).

A model example of where the state cares and is interested in the citizen is the welfare state, or social state - Sweden, in which economic activity relies on various forms of regulating private economics, extensive social measures and redistribution of social income, whereas funds for financing many social goals are obtained by means of tax progression. Sweden is a welfare state starting from detailed sexual education up until the constitutional status of the Lutheran Church (O'Rourke 2006, p.70). However, this model example of extensive state activity also fuels the battle of "libertarians", who draw attention especially to indoctrination through education and the media. State education is criticized for being based on a uniform teaching system where everyone learns the same material (the principles of Marxism were presented in textbooks for middle-school students). The media industry was regulated by the state for a long time and it was not until the 1990s that non-state television and commercial radio appeared. The state also took care of citizens' health by limiting the consumption of alcohol (sales based on rations stamps and "prescriptions" in pharmacies).

Discords about the place and role of the state in Poland

R. Woś in *"Dziecięca choroba liberalizmu"* (lit. childlike disease of liberalism) refers to the myth of "the evil, cruel state and the good, persecuted business": "Complaining about tax officers or high labor costs, critics do not really mean actual burdens. Maybe they simply do not trust that the Polish state will be able to use this money wisely. In doing so, we become convinced that our native bureaucracy is extremely inefficient (Woś 2015, p. 106).

A different approach was taken by priest J. Bocheński, who is very distrustful of the state: "An organization claiming the right to monopoly, physical coercion, rape. (...) The state imposes taxes, issues regulations, links, etc. Other social organizations (e.g. municipalities, Polish: *gmina*) may have some of these rights, but only in so far as the state allows them to, i.e. if they delegate part of their monopoly" (Bocheński 1994, p. 95).

In light of these considerations, W. Woźniński (2014, p. 4), in his work *"To nie musi być państwowe"* (lit. it does not have to belong to the state), made a very thorough institutional analysis of statehood, held in a similar vein. He demonstrated things that in fact do not need to belong to the state: "architecture, libraries, weapons, roads, children, education, energy, cinema, stock exchange, municipal institutions, railways, minerals, the space, books, forests, aviation, marriage, media, cities and towns, apartments, museums, music, drugs, slavery, environmental protection, social security, penalization, money, post, the police, law, religion, agriculture, health care, sport, fire brigade, theater, universities, water army, zoos".

Economist T. Cukiernik (2007) calculated that the Polish state handles, among other things, "manufacturing of clothing, footwear, thread, meat, sugar, vinegar, mustard, wire, processing machines, grinding wheels, springs, grinders, rolling bearings, cranes, furniture, lamps, ropes, plastics, rubber objects, bookbinding and construction machines, catering devices, electromedical appliances, orthopedic and communication equipment, artificial fertilizers, power cables, it is a publisher, printer, tourist office, food wholesaler, plant, horse and fish farmer, trades in agricultural equipment, seeds and farm animals".

At this point, we touch upon the dilemma of privatization, analyzed in depth by M. Bałtowski (2002, p. 81):

- most privatized Polish enterprises started to generate profits instead of losses (negative profitability turned into a positive one),
- average work efficiency increased by 94%,
- average remuneration after privatization increased by 11%,
- share of privatized enterprises in the market increased significantly (by 48%) and so did their exports (by 40%), which points to the growth of these companies,
- innovation noted a record growth, with the number of new technologies increase by 90% and new products by 80%,
- quality of products improved by 80%,
- machinery resources were modernized,
- investment expenditures increased significantly above depreciation, by 57%, while none had significant outlays above depreciation before privatization.

Recently, the notions of renationalization/nationalization have emerged in the context of OFE (open pension funds), PKP (Polish State Railways), energetics, the company Ciech, or the broadly understood privatized banking sector, among others. It should also be emphasized that in recent years there have been numerous expert voices calling for the revival of state ownership in the economy, with the tipping point in this respect reached in 2008-09.

Opponents to private property remind of irregularities resulting from the sale of national assets. Privatization in Central and Eastern European countries, unlike privatization in Western Europe, was carried out in absence of a capital market and very broadly outlined market mechanisms with excessive relative public sector participation against private property, limited financial resources of the society and, last but not least, little interest in attracting poten-

tial foreign investors due to relatively high costs of the capital utilized (Puślecki 1998, p. 110).

J. Winiecki (2001, p. 49) reminds that ruling elites in most third-world countries subordinated in the 1950s and 1960s, or even later, private banking systems, nationalized some banks and created various state banks, all in the name of the proclaimed development strategy. This was supposed to serve "acceleration", growth (a slogan also remembered in Poland from Gierek's campaign of the "great leap forward"), but it did otherwise, as expected by then not too many supporters of the free market (Winiecki 2001, p. 49).

The ideal of a Polish enterprise is a state-owned company with a monopolistic position, managed in strict accordance with political instructions. Politicians willing to provide instructions are plenty. Worse with contractors (Grzeszak 2016). Case study: Polish gas mogul PGNIG; the Minister of Finance expects the company to maximize fiscal revenues, the Minister of Treasury - dividend, the Minister of Environment - exploratory works and gas production, the Minister of Economy - energy security, the government - low gas prices for voters. As a result, the management board of the company pursues conflicting goals and the priorities are chosen depending on the political strength of individual ministers (Musialek 2015). One should add to this the insoluble problem of nepotism in state-owned enterprises (87 fully state-owned companies, 29 companies with a majority share of the state, 90 companies with a minority share of the state). R. Gwiazdowski (2016) argues in his article "*Niech żyje neipotyzm*" (lit. long live nepotism): "If they were to be managed in accordance with the principles of economic calculation, then they would not have to be state-owned".

The local-government reform put an end to the monopoly of the totalitarian state, creating in its place regional/local autonomy. Due to indebtedness, local government authorities began privatizing municipal companies: Łódź - *Zakład Wodociągów i Kanalizacji i Zakład Drogownictwa i Inżynierii*, Tczew - *ZKM Tczew* and *ZUOS*, Opole - sale of the town's majority share in *Energetyka Ciepła Opole*, Poznań - *Miejskie Przedsiębiorstwo Gospodarki Mieszkaniowej*, Sopot - cooperation with the private sector in municipal resource management, Warsaw: *Miejskie Przedsiębiorstwo Usług Komunalnych. Przedsiębiorstwo Gospodarki Maszyn Budownictwa*, *Miejski Kombinat Budowlany Zachód*, Kraków: city shares in *MKS Cracovia*. Privatization shows that although this process may prompt corruption, the prices provided by the public and private sectors are at the end of the comparable, but there is effective management resulting in downsizing of up to 50% (Sarnacka 2004, p. 126).

Conclusions

According to K.R. Popper (1993, p. 133) "unrestricted capitalism should give way to economic interventionism". G. Kolodko (2008, p. 242), meanwhile, tries to find the middle point in his reflections: "Today, certain state functions should be limited, while others must be strengthened. The former include e.g. engaging in research and development expenses, as some of these tasks are successfully overtaken by the commercial private sector. The latter must include outlays for environmental protection given that this problem cannot be dealt with by the commercial sector" L. Balcerowicz (1995, p. 25) sees at one extreme a state that permanently shuts off the "invisible hand" and let the problems fall on the "visible hand" of the well-developed political and economic bureaucracy, and at the other extreme a state that focuses only on a number of fundamental functions that no one else is able to undertake: creation and enforcement of law, national protection, foreign policy, etc. One must see in the state an important but limited resource. After all, the time and competence of the government and employers are limited, and so is the number, qualifications and knowledge of state officials. Also modest are the state's actual financial resources since it only has so much of them as it takes away from the people through various taxes (Balcerowicz 1995, p. 25). Analyzing the function of the state - be it in terms of adaptation, stabilization, allocation or redistribution -

one must not overlook the economic (economic growth or changes in the structure of the economy) and social (equal opportunities and protecting the most vulnerable individuals and social groups) context.

References

- Aristotle (1964), *Polityka* [Polish edition of *Politics*]
- Balcerowicz L. (1995), *Wolność i rozwój. Ekonomia wolnego wyboru*, Kraków.
- Bałtowski M. (2002), *Przedsiębiorstwa sprywatyzowane w gospodarce polskiej*, Warsaw.
- Bocheński J. (1994), *Sto zabobonów*, Kraków.
- Cukiernik T. (2007), *Prywatyzacja a'la PiS*, nr 4/2007, „Najwyższego CZAS!”
[http://tomaszcukiernik.pl/artykuly/artykuly – wolnorynkowe/prywatyzacja-ala-pis/](http://tomaszcukiernik.pl/artykuly/artykuly-wolnorynkowe/prywatyzacja-ala-pis/)
- Filipowicz S. (2003), *Państwo – kontrowersje i dylemat*, [in:] *Nauka o państwie i polityce*, Tymanowski J. (ed.), Łódź.
- Friedman M. (1999), *Kapitalizm i wolność*, Warsaw.
- Friedman R., Friedman M. (1996), *Wolny wybór*, Sosnowiec.
- Gwartney J.D., Stroup R. L. (1994), *Co każdy powinien wiedzieć o gospodarce*, Warsaw.
- Grzeszak A. (2016), *Państwo w państwie, Polityka*, published 20.09.2016
<http://www.polityka.pl/tygodnikpolityka/rynek/1676150,1,pis-dokonuje-rozbioru-panstwowej-gospodarki.read>
- Gwiazdowski R. (2016), *Niech żyje nepotyzm!*, *Rzeczpospolita*, published 20.09.2016
<http://www.rp.pl/Felietony/309209890-Robert-Gwiazdowski-Niech-zyje-nepotyzm.html>
- Hazlitt H. (2012), *Ekonomia w jednej lekcji*, Warsaw.
- Heilbroner R.L. (1993), *Wielcy ekonomiści. Czasy, życie, idee*, Warsaw.
- Hobbes T. (1954), *Lewiatan*, Warsaw [Polish edition of *Leviathan*]
- Keynes J.M. (2003), *Ogólna teoria zatrudnienia, procentu i pieniądza*, Warsaw.
- Kołodko G. (2008), *Wędrujący świat*, Warsaw.
- Luchinger R. (2007), *12 ikon ekonomii. Od Smitha do Stiglitz*, Warsaw.
- Musiałek P. (2015), *Przymiotnik „państwowe” ma być szansą, nie zagrożeniem*, published 22.12.2015 <http://jagiellonski24.pl/2015/12/22/przymiotnik-panstwowe-ma-byc-szansa-nie-zagrozeniem/>
- Popper K. R. (1993), *Spółeczeństwo otwarte i jego wrogowie*, t.1, Warsaw.
- Puślecki Z.W. (1998), *Wokół przyspieszonej prywatyzacji – „terapii szokowej” i gradualizmu w gospodarce okresu transformacji*, in: Drozdowicz Z. (ed.), *Liberalne wyzwania*, Poznań.
- O'Rourke P.J. (2006), *Wykończyć bogatych*, Kąty Wrocławskie.
- Smith D. (2007), *Free lunch, Ekonomia dobrze przyrządzona*, Gliwice.
- S'Souza D. (2006), *Listy do młodego konserwatysty*, Poznań.
- Winiecki J. (2001), *Polemiki w drodze (do kapitalizmu)*, Warsaw.
- Woods T.E. (2007), *Niepoprawna politycznie historia Stanów Zjednoczonych*, Warsaw.
- Woś R. (2015), *Dziecięca choroba liberalizmu*, Warsaw.
- Woźniński J. (2014), *To nie musi być państwowe*, Warsaw.
- Sarnacka A. (2004), *Projekty PPP w wybranych sektorach infrastruktury na świecie*, w: *Program prywatyzacji podmiotów komunalnych*, Gdańsk-Gdynia.
- Sylwestrzak A. (2003), *Historia doktryn politycznych i prawnych*, Warsaw.
- Zieliński E. (2006), *Nauka o państwie i polityce*, Warsaw.

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Strategiczne wyzwania Polski w pokryzysowych uwarunkowaniach rozwoju

Streszczenie

W artykule przedstawione zostały strategiczne wyzwania rozwojowe Polski ukształtowane w okresie transformacji systemowej i w okresie pokryzysowym, które blokują dalszy jej rozwój społeczno-ekonomiczny. Tylko sprostanie tym wyzwaniom stwarza Polsce szansę na przezwycięzenie pułapki średniego rozwoju (dochodu), która blokuje dalszy zrównoważony rozwój kraju. Szanse te wygenerować może wdrożenie nowych kierunków rozwoju tj.: reindustrializacji, proinnowacyjnych zmian strukturalnych w gospodarce, udomowienia banków, stworzenie narodowych innowacyjnych i konkurencyjnych specjalizacji gospodarczych, wykreowanie polskich prywatnych championów, konkurencyjnych w skali europejskiej i światowej oraz wzmocnienie aktywności polskiego sektora prywatnego w inwestycjach rozwojowych.

Słowa kluczowe: strategiczne wyzwania rozwojowe, pułapka średniego rozwoju, nowe kierunki rozwoju Polski

Poland's strategic development challenges in post-crisis conditions

Abstract

This article addresses Poland's strategic development challenges formed in the transition and post-crisis period. These challenges are obstructing further socio-economic development and only by meeting them will it be possible to overcome the middle income (development) trap, which hinders Poland's further sustainable development. These possibilities can be generated by the implementation of strategies and development programs: reindustrialization, pro-innovation structural changes in the economy, domestication of banks, creation of national innovative and competitive economic specializations, creation of Polish private champions who will be competitive on the European and the global scale as well as by the engagement of the Polish private sector in development investments.

Keys words: strategic development challenges, middle income (development) trap, new directions of development in Poland

JEL CODE: O38, O40

Introduction

The purpose of this article is to highlight Poland's strategic development challenges, which should be properly addressed in order to break out of the middle income (and development) trap, and thus speed up the processes of real convergence with the countries of the euro zone.

Development challenges are objective (i.e. independent of human will) socio-cultural, technical and economic trends, or tendencies, generated on a global scale, by which states and their economic and social entities create opportunities for them to achieve a high international competitiveness and, consequently, a high standard of living for the citizens. The goal of the country's development strategy is adapted to these challenges since only then is their long-term economic and social development possible. The capability and ability of a country to adapt to global development challenges depends on many conditions. These include, above all, the model of socio-economic policy implemented, development programming, support for

demographic development and human capital, and pro-innovation structural changes in the economy.

The global crisis proved that the previously functioning model of neoliberal speculative capitalism is detrimental to both society and capitalism itself and therefore has to be rejected (Prusek 2010, Kolodko 2010, Kowalik 2010, Żyżyński 2010). The post-crisis experience clearly demonstrates that these challenges cannot be left to the very strength of market mechanisms and the unbridled geopolitical competition of world powers. The independent operation of market mechanisms does not solve the problems of the future and is unable to meet the developmental challenges of humanity, in particular the income polarization of world societies, as unequivocally pointed out by T. Piketty (2015). The intensifying tensions may lead to a conflict of civilizations, which may turn out to be our last and completely devastating clash (Sachs 2007).

Social teachings of the Church contained in the Encyclical of John Paul II, "*Sollicitudo rei socialis*", rightly denounces the economic, financial and social mechanisms that "strengthen the state of wealth of some and the poverty of others". These mechanisms created by developed countries "favor the interests of those who maneuver them, and lead to the stifling and dependence of the economies of less developed countries." (John Paul II, 1987). In the Encyclical "*Caritas in veritate*" - "Love in Truth" - Pope Benedict XVI aptly states that it is the political community that should first care for resolving social problems, i.e. achieving the common good. Therefore, the serious imbalance is caused by the separation of economic activity, including wealth production, from political activity aimed at achieving justice through the redistribution of wealth. This type of ideology, which has incurred enormous social costs in global terms, is neoliberalism, expressed as extreme apologetics for profit at any price, without taking into account ethical requirements and man himself. The truth of development lies in its integrity: if it does not embrace the whole person and every human being, development is not a real development" (Benedict XVI 2009, p. 16). The global economic crisis demonstrated the decisive role of the state in repairing objective and subjective dysfunctions of a neoliberal market economy, which necessitates the reconsideration of the position of the public sector in the market economy in order to effectively face the challenges of the modern world (Benedict XVI 2009, p. 27).

The coexistence of market mechanisms and the conscious influence of the state on the functioning of the economy and social life is the standard of a modern state and its development policy in the post-crisis period. I believe that in the search for higher rationality and effectiveness of state functioning models, we must rely on rational pragmatism and reject market dogmatism. The current financial and economic crisis is also a crisis of democracy that has given in to the greed of financial markets and global corporations that "broke out" from all public control and subordinated politicians to their interests, and in doing so created an oligarchic system.

In order to overcome the contemporary crisis, it is necessary to direct the new development policy towards thinking in terms of the order and social and economic rationality upon which the concept of an ordoliberal and social inclusive market economy is based. The implementation of this concept of development requires a new socio-economic order and a fundamental strengthening of the power of the state and its institutions, which should be the foundation of new institutional conditions of management and should have an advantage over financial markets (Mączyńska, Pysz 2014). Joseph Stiglitz points out that inequalities are one of the factors in the waste of development potential and are conducive to the gradual dependence of states on capital (Stiglitz 2013).

Economic and social sciences have indicated the directions of required political changes conditioning the achievement of this new socio-economic order on a global scale, but there is a lack of will and executive action regarding these solutions on the part of decision-making

and political spheres, resulting from the oligarchic system still prevailing in the world's leading countries.

Development megachallenges in Poland in post-crisis conditions

The fundamental cause of the growth of barriers, and at the same time Poland's development challenges, has been the neoliberal model of socio-economic transformation imposed by the West, beneficial to the West, no doubt, but very painful and problematic for Poland. This model, based on the assumptions of the Washington Consensus, led to the formation of current development barriers in Poland, to be overcome in the post-crisis period in order to escape the trap of middle income and development.

The neoliberal transformation plan contradicted the Constitution of the Republic of Poland, which states that "[a] social market economy, based on the freedom of economic activity, private ownership, and solidarity, dialogue and cooperation between social partners, shall be the basis of the economic system of the Republic of Poland" (Constitution of the Republic of Poland 1997, Art.20). A similar contradiction concerns Art. 2 of the Constitution, which states that "[t]he Republic of Poland shall be a democratic state ruled by law and implementing the principles of social justice". This item stands in flagrant contradiction with the income and property polarization of Polish society and long-term high unemployment and high economic migration of young and educated generation of Poles. It is also difficult to recognize that this model is guided by the principle of sustainable development referred to in Article 5 of our Constitution.

In the neoliberal model of the functioning of the economy, the Polish state was treated instrumentally by the private sector, especially foreign capital and the financial and corporate oligarchy. Meanwhile, an ordoliberal state, efficient and independent of the financial and corporate oligarchy, is indispensable for the proper operation of an inclusive economy. On the other hand, a self-sufficient private economy, with a large share of innovative sectors, is needed to strengthen the democratic power of the state due to its high efficiency (Wilkin 2008). Thus, between the modern market economy and the state, there should be a sort of balance and feedback, both necessary conditions for their effectiveness. In this model, it is necessary to respect the self-financing principle of private business entities and to reject the possibility of subsidizing them with taxpayers' money. Neoliberal private sector practices involving the privatization of public revenues and the nationalization of their losses are unacceptable.

The main megadevelopment challenge for Poland is to overcome the set of mutually coupled developmental barriers related to demography, the labor market and income-property polarization of society, namely (Prusek 2012, pp. 51-63):

- demographic barrier related to the decline of the Polish population, negative population growth rate, aging population, low economic activity, high economic migration of young educated citizens abroad to the EU-15 countries. This barrier affects, in particular, the young generation of Poles who do not have a job that would satisfy their professional and wage needs and cannot afford to buy a flat and start a family, which in turn results in a negative rate of natural increase and a further chain of negative socio-economic consequences.
- income and wealth barrier resulting from the abnormally low wages compared to jobs parallel in terms of the nature and productivity in the EU-15 and large property polarization in the Polish society, which undermines the dynamics of economic development and stimulates the economic migration of the young generation and "brain drain",
- structural barrier resulting from the deindustrialization of the Polish economy and its negative social and economic consequences.

The demographic barrier may reduce the population of Poland down to 35 million by 2020, and down to 25-30 million by 2050. This would mean a decline in potential GDP, a

decline in demand and revenues of the public sector and the gradual collapse of the pension system. In the case of an increase in the dynamics of economic migration, which is more often permanent migration, the dynamics of demographic recession may increase as a result.

The barrier of the lack of highly productive and well-paid jobs and the increase in unemployment in Poland was a natural consequence of the poorly conducted processes of deindustrialization and privatization of the Polish economy (Prusek 2005). As a result, the industry's contribution to GDP fell from 53% in 1985 to around 20% today, despite the large inflow of foreign direct investment (FDI). Deindustrialization resulted in the loss of employment for more than 3 million Poles, which could not be compensated by the simple inflow of FDI and the development of the SME sector. The decrease in state budget revenues due to taxes and dividends from state-owned enterprises was also important. As a result, there has been a significant decrease in real income of the public sector in respect of CITs and PITs and a dividend that prevents that sector from performing certain social, economic and environmental functions.

I share the view of A. Karpiński that deindustrialization in Poland was premature, economically unjustified and detrimental to economic dynamics, especially regarding the labor market. Deindustrialization should be considered the greatest strategic mistake of Poland's political transition (Karpiński 2003; Karpiński, Paradysz, Soroka, Żółtkowski 2015). Another grave mistake was the failure to restructure state-owned enterprises that could possibly achieve international competitiveness and their hasty sale to foreign capital instead of empowering the Polish society.

The income-property barrier in Poland was caused by the administrative increase of prices for the means of production under the 1990 supply price reform and, at the same time, the asymmetrically low wage growth and its additional hindering, first by *popiwek* (super-normative wages tax) - incompatible with the market logic - and then through a restrictive anti-inflation policy (Prusek 2009).

For these reasons, the monetary policy conducted in the transition period was instrumentally correct., i.e. it applied theoretically appropriate instruments in an extremely irrational and non-market wage and income situation at the highest interest rates for loans in the world, which effectively inhibited economic development and entrepreneurship. Therefore, it failed to counteract normal inflation, but rather official one, by simultaneously increasing wages and adjusting them to the level of European prices and wages. This led to a global imbalance between demand and supply, constrained economic development and job creation, unemployment generation, which made it devoid of both economic and social rationality.

In the period of political transition in Poland, the chances of a gradual annual indexing of the minimum wage and wages adjusted to the level of wages in the EU were lost. Thus, despite the administrative adjustment of prices for the means of production in Poland to the world market prices, the level and structure of wages failed to be regulated in parallel, and therefore significantly diverged from the relative levels and structures in the EU-15 countries. As a result, the average wage level in Poland within 25 years of transition has not yet reached the EU average. This policy has also consolidated the irrational level and structure of wages, and thus distorted the real social labor productivity in Poland.

The first development barrier stemming from the huge stratification of income in the Polish society ranks Poland as the country with the largest wage redistribution in the EU according to OECD reports. It means that we dealt in Poland with the most restrictive neoliberal model in Europe, which at the same time entailed the most severe negative social consequences. Secondly, during the transition period in Poland, there was a significant increase in labor productivity, but it did not translate into wage growth in an equivalent way. This capitalist exploitation of workers, especially under *salarization* and *precarization*, exists to this day.

The second megadevelopment challenge for Poland is the need to increase the dynamics of economic and social development, ensuring the possibility of rapid economic cohesion not only with the EU average, but also with the countries of the euro zone and overcoming the middle income (development) trap we have found ourselves due to the lack of endogenous, pro-innovation restructuration of the economy in Poland and the lack of knowledge-based economy (KBE). On the other hand, the dynamic processes of the non-equivalized privatization of Polish enterprises and the inflow of FDI, widely benefiting from tax preferences in special economic zones (SEZs), caused the Polish economy to be dominated by foreign capital. In this way, Poland has become a dependent economy of the neocolonial type, from which more capital flows out than flows in, including EU funds (*Plan M. Morawieckiego 2016*).

The third megadevelopment challenge refers to the need to develop human and social capital, which is a decisive factor for sustainable development. It is mainly determined by the level of education of the society and its ability to cooperate. In this respect, we diverge *in minus* from European standards as far as quality is concerned. It is a development challenge that determines the civilization advancement of society and the implementation of technical, economic, organizational, legal and social progress.

The fourth megadevelopment challenge for Poland is the necessity to fundamentally strengthen public sector revenues so that the sector in question can properly implement constitutionally defined social, economic, defense and ecological functions. The only rational solution must consist in introducing higher and progressive taxation of companies (especially financial) and wealthier classes of society, increasing tax collection and *repolonizing* the financial sector as a whole.

The fifth megadevelopment challenge for Poland concerns the issue of resolving the debt of the public sector finances and reduce the high costs of its servicing, which are a consequence of the implementation of the neoliberal development model. The high level of this indebtedness poses a threat in the form of destabilization of public finance and drastic cuts in the event of exceeding statutory limits of indebtedness, and thus also social destabilization. Breaking these financial barriers can be achieved without social tensions and in a sustainable way only by adopting social democratic instruments for balancing public finances, and not neoliberal solutions that shift the costs of these adjustments to the poorer sections of society.

Under conditions shaped by the neoliberal transformation, the Polish state and its Polish economy, rather than the economy in Poland, require substantial economic strengthening so that they can overcome the abovementioned barriers and the state can carry out its constitutionally defined functions. Therefore, it is necessary to cure the Polish economy, subject it to pro-innovative restructuration and increase the share of the public sector in the revenues arising from that economy's operation. It is also necessary to improve the efficiency of the functioning of the state.

Poland's opportunities for development in post-crisis conditions

I believe that the only chance for Poland's development in post-crisis conditions is to work out and implement a state-controlled development strategy. This strategy of controlled change should aim at creating innovative national economic specializations competing on global markets. This is possible only with the active participation of the private sector, which should prefer endogenous and pro-innovative structural transformations of its enterprises accompanied by EU and national support.

In light of the above, Poland's only hope for development includes state-controlled endogenous and pro-innovation structural transformations supported by domestic and foreign capital. The scenario of controlled change assumes the strengthening of the state's position so that it can fulfill its constitutionally defined social and economic functions, and therefore pursue a development-oriented policy, mainly based on its own endogenous financial resources, rather than those granted, either entirely or mainly, by the European Union.

The initiation of a new strategy for the development of Poland requires direct development of the state and local governments, aimed at creating new strategic economic entities for the Polish economy. These include innovative investments in conventional, nuclear and renewable energy, arms industry, automation etc., as well as in innovative sectors. In these high-efficiency sectors, new and better (i.e. more efficient and better paid, plus sustainable because of their resistance to economic prosperity) jobs for university graduates should be created.

In the optimal scenario of controlled change, apart from the operation of market mechanisms, it is necessary for the state to control the income and wage policy, based on the wage and income cohesion strategy adopted under the social contract. In this scenario, the state should determine the annual increase in the minimum wage in the entire economy and the wage growth strategy in the public service sectors in line with its growing financial capabilities. This will then create conditions for wage increase in the production and service sectors through increased demand and growing profits of private companies. In this scenario, the migration of young people will gradually decrease and at the same time social activity and its innovativeness will increase, which will boost GDP, increase budget revenues and social security contributions, and, as a consequence, bring about a positive population growth rate. It is therefore a normative scenario ensuring a significant gap reduction in terms of living standards in Poland and EU-15 within approximately 10-15 years, depending on global conditions. This should be the policy of socio-economic and territorial cohesion that creates opportunities for development in Poland. Perhaps it will be further propelled by the wage harmonization policy postulated in the European Union, which is also to stop the delocalization of companies.

In the event of the failure to address these complex and multilayered socio-economic problems in the above-mentioned areas, the implementation of cohesion policy objectives in Poland will be long-lasting, ineffective and socially unacceptable, hence it may result in serious social and economic tensions (Prusek 2008; Prusek 2009).

Also G.W. Kołodko (2013) argues that a new cohesive development program is necessary in Poland, which must skillfully use the modern convergent megatrends in Poland's national interest. This will support economic dynamism, rather than inhibit it. The author further recommends a pro-growth reduction of inequality and development of human capital based on expenditures on education and culture derived from additional revenues of the tax office, instead of the increase in public debt which is to be limited consistently. This implies the updating of the tax system with regard to the liquidation of concessions, the combination of individual capital income with income from work and transfers, and their joint taxation on general principles, as well as extending the scale of tax progression. The implementation of this type of program will be possible only in the case of working out and consistently implementing the proprietary development program, which would gain public support and whose proper pursuit would be ensured by political and economic mechanisms of implementation.

These assumptions are largely met by M. Morawiecki's plan for responsible development (Polish: „*Plan na rzecz odpowiedzialnego rozwoju*”). I am convinced that this direction of strategic action is a fundamental priority in this development strategy. It assumes implementation of the priorities resulting from the five pillars of economic development, namely: reindustrialization, development of innovative companies, creation of capital for development, foreign expansion, and social and regional development (*Plan Morawieckiego* 2016, Ziolo 2016).

One should also be supportive of the expansion of the few Polish economic champions entering the global and European markets. At the same time it is necessary to eliminate the practice of discriminating Polish companies by dominant players on EU markets, which goes against the EU competitiveness policy but is nonetheless tacitly accepted by the European

Commission. This is clearly evidenced by the discrimination of the Polish company Fakro against the Danish Velux in the roof window market (FPoP 2016), in breach of EU competition law. Only through the endogenous development of the international competitiveness of Polish companies can we achieve the objectives of economic and social cohesion with the European Union countries and halt the demographic regress and migration processes of the educated youth, and consequently ensure long-term sustainable socio-economic and ecological development in the future. This cannot be achieved by the EU assistance itself, which may soon become relatively small anyway.

Poland's development prospects in post-crisis conditions are determined, on the one hand, by the new global market environment, i.e. the political and economic structure on a global and EU scale, which are still very labile and generate uncertainty. The second group of Poland's development opportunities will be determined by the effectiveness and efficiency of the implementation of M. Morawiecki's *Plan na rzecz odpowiedzialnego rozwoju*, its acceptance and support by domestic and foreign business environments, and the effectiveness of generating Polish capital for development purposes, including the effects of sealing the Polish tax system.

References

- Dlaczego w bogatych krajach Europy Zachodniej zarabia się 4 razy więcej niż u nas?* (2016), Fundacja Pomyśl o Przyszłości, Nowy Sącz.
- Encyclical of John Paul II (1987), „*Sollicitudo rei socialis*”, Libreria Editrice Vaticana.
- Encyclical „*Caritas in veritate*” of Pople Benedict XVI (2009), *O integralnym rozwoju ludzkim w miłości i prawdzie*, Libreria Editrice Vaticana.
- Karpiński A. (2003), *Co dalej z przemysłem w Polsce? Zarys strategii przemysłowej na lata 2005 – 2015*, w: Komitet Prognoz „POLSKA 2000 Plus” przy Prezydium PAN, Biuletyn nr 1, Dom Wydawniczy ELIPSA, Warsaw.
- Karpiński A., Paradysz S., Soroka W., Żółtkowski W. (2015), *Od uprzemysłowienia w PRL do deindustrializacji kraju*, Wydawnictwo Muza SA., Warsaw.
- Kołodko G.W. (2010), *Neoliberalizm i systemowy kryzys globalnej gospodarki*, in: Kołodko G.W. (ed.), *Globalizacja, kryzys i co dalej?*, Wydawnictwo Poltext, Warsaw.
- Kołodko G.W. (2013), *Strategia dla Polski 2013-2025*. Rzeczpospolita z 30.1.2013 roku.
- Konstytucja Rzeczypospolitej Polskiej* (1997), Warsaw.
- Kowalik T. (2010), *Kryzys systemu w perspektywie alterglobalizmu*, in: Kołodko G.W. (ed.), *Globalizacja, kryzys i co dalej ?*, Wydawnictwo Poltext, Warsaw.
- Mączyńska E., Pysz P. (2014), *Liberalizm, neoliberalizm i ordoliberalizm*, in: Mączyńska E. (ed.), *Ekonomia dla przyszłości, Fundamentalne problemy teorii ekonomii i praktyki gospodarczej*. 9th Congress of Polish Economists, Polish Economic Society (PTE) Warsaw.
- Piketty T. (2015), *Kapitał w XXI wieku. Krytyka polityczna*, Warsaw.
- Plan na rzecz odpowiedzialnego rozwoju* (2016), Ministry of Development, Warsaw.
- Prusek A. (2005), *Prywatyzacja polskiej gospodarki – cele, programy i ocena jej rezultatów*, Krakow University of Economics, Krakow
- Prusek A. (2008), *Spójność płac w warunkach integracji europejskiej jako wyzwanie rozwojowe dla Polski*, in: Pancer-Cybulskiej E. (ed.), *Spójność społeczna, gospodarcza i terytorialna w polityce Unii Europejskiej*, Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław.
- Prusek A. (2009), *Dywergencja płacowo-dochodowa w Polsce i scenariusze jej zmniejszania w warunkach integracji europejskiej*, Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie, no 863.
- Prusek A. (2010), *Źródła i skutki kryzysu ekonomicznego na świecie i w Polsce oraz możliwości jego przezwyciężenia*, in: Mikołajewicza Z. (ed.), *Nowe wyzwania dla polityki*

społeczno-gospodarczego rozwoju kraju i regionu opolskiego, Opolskie Roczniki Ekonomiczne, tom XVIII, PTE Oddział w Opolu, WSZiA, Opole.

Prusek A. (2012), *Główne wyzwania i bariery rozwoju społeczno-ekonomicznego Polski do 2020 roku*, in: Prusek A. (ed.), *Wyzwania i bariery rozwoju społeczno-ekonomicznego Polski do 2020 roku*, Uniwersytet Ekonomiczny w Krakowie i WSGiZ w Krakowie, Krakow.

Prusek A. (2009), *Dywergencja płacowo-dochodowa w Polsce i scenariusze jej zmniejszenia w warunkach integracji europejskiej*, Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie, no 863.

Sachs J.D., *Wspólne wyzwania, wspólne dobro*. Lecture of 2.10.2007, Krakow University of Economics

Stiglitz J.E. (2013), *The Price of Inequality*, Penguin, London.

Wilkin J. (2008), *Państwo a gospodarka – instytucjonalne podstawy autonomii i współzależności*, in: Rychard A.(ed.), *Strukturalne podstawy demokracji*, Wydawnictwo IFiS PAN, Warsaw.

Zioło Z. (2016), *Uwarunkowania strategicznych kierunków wdrażania „planu na rzecz odpowiedzialnego rozwoju”*, in: *Polityka rozwoju społeczno-ekonomicznego wobec nowych wyzwań*, Krakow University of Economics

Żyżyński J. (2010), *Neoliberalizm –ślepa uliczka globalizacji*, in: Kołodko G.W. (ed.), *Globalizacja, kryzys i co dalej ?*, Wydawnictwo Poltext, Warsaw.

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Problem osób niepełnosprawnych na rynku pracy w Polsce

Streszczenie

Obecna sytuacja osób niepełnosprawnych nadal jest niepokojąca. Zarówno w życiu codziennym, jak i zawodowym. Wciąż występuje wiele czynników, które zmniejszają szanse na ich rozwój i spełnienie zawodowe. Niestety starania poczynione, aby zwalczyć bariery w życiu zawodowym takich osób są niewystarczające. Stąd, widoczny jest też podział na pełnosprawnych i niepełnosprawnych pracowników na rynku pracy. Pogorszenie obecnej sytuacji może mieć również niekorzystny wpływ na gospodarkę narodową. Dlatego też celem niniejszego artykułu jest próba identyfikacji czynników mających wpływ na współczesny rynek pracy w Polsce oraz analiza i ocena sytuacji niepełnosprawnych w badanym aspekcie. Ponadto postawiono pytanie czy obecna sytuacja niepełnosprawnych na rynku pracy ulega poprawie? Założony cel badawczy realizowano z wykorzystaniem metod studiów literatury przedmiotu, dedukcji, opisu oraz prostych techniki statystycznych i wizualizacji. Artykuł poprzedzono wprowadzeniem i zakończono sformułowaniem propozycji rozwiązań dla obecnej polityki społeczno-ekonomicznej państwa.

Słowa kluczowe: rynek pracy, osoby niepełnosprawne, bezrobocie, aktywność ekonomiczna

People with disabilities in the labor market in Poland

Abstract

The current situation of people with disabilities is still worrying, both in everyday professional and non-professional life. There are still many factors that reduce the chances of the development and professional fulfillment of such persons. Unfortunately, the efforts made to overcome the barriers in the working life of people with disabilities are inadequate. Hence, also noticeable is the division between able-bodied and disabled workers in the labor market. The deterioration of the current situation may also have an adverse impact on the national economy. Therefore, the purpose of this article is to attempt to identify the factors affecting the contemporary labor market in Poland and to analyze and assess the situation of people with disabilities in the studied aspect. The article also posed the question of whether the current situation of people with disabilities in the labor market is improving. The assumed research objective was pursued using the methods of studying the literature, inference, description and simple statistical techniques and visualization. The article is preceded by an introduction and completed with the formulation of proposals for solutions to the current socio-economic policy of the state.

Keywords: labor market, people (persons) with disabilities, unemployment, economic activity

JEL CODE: E2, E23, R11

Introduction

It is a common observation that one of the most serious social problems for developed states in the modern world is the incomplete ability of their members (Żbikowski, Dąbrowski, Kuźmicki 2012, p. 6).

It is therefore necessary to effectively carry out the process of social integration, including the economic “activation” of people with disabilities. Currently, this problem is still considered a significant challenge in Poland as part of the country’s social policy. It is worth noting here that many years of efforts to develop an effective support system for people with

disabilities have proven insufficient. There is still no consistent or complete solutions that could be considered effective. The most important factors responsible for the situation of people with disabilities in Poland are: economic changes (including deregulation on the labor market), decentralization of power and modification of social and welfare functions of the state (Gąciarz, Ostrowska, Pańków 2008, p. 5).

The scale of disability as a social phenomenon is so high that, indirectly, it affects everyone in the socio-economic dimension. It has a huge impact on the individuals affected as well. Persons with disabilities encounter, among other things, limitations in fulfilling social roles. It should be understood as the influence on the range of tasks which can be performed and which are socially expected depending on age, gender or group position (Kawczyńska-Butrym 1998, p. 10). This translates into reduced chances of getting a job, lower productivity, low earnings, etc. At the same time, the state see itself obliged to direct increasing funds to help persons with disabilities. The state should place great emphasis on the situation of people with disabilities in the labor market. Otherwise that situation will reflect negatively on the national economy as a whole.

Therefore, this article attempts to identify factors affecting the contemporary labor market in Poland and to analyze and assess the situation of people with disabilities in the studied aspect. In addition, the question arose whether the current situation of people with disabilities in the labor market is improving. The data used in the study concerns persons with disabilities in the understanding of the 2011 NSP (Polish National Census) methodology. In addition, information from the Government of the Republic of Poland on measures taken in 2015 to implement the provisions of the resolution of the Sejm of the Republic of Poland of 1 August 1997, *Karta Osób Niepełnosprawnych* (Charter of Persons with Disabilities), was used. The above are the basic sources of information concerning disabled people. Selected analyses of this social group were enriched with a comparison with the general situation on the labor market in Poland. The assumed research objective was pursued using the methods of source literature study, inference,, description and simple statistical techniques and visualizations. Synthetic conclusions from the conducted analyses are included in the summary.

A disabled person and types of disabilities

The commonly available source literature contains a wealth of approaches to the definition of a disabled person in Poland. However, the most common ones are by the World Health Organization and GUS (Polish Central Statistical Office). The former treats a person with a disability as someone characterized by impaired life activity or whose degree of functional ability indicates a difficulty in performing social roles (Serafin, Łuczak, Kurkus-Rozowska, Konarska, Bugajska 2007, p. 13). However, according to GUS, a person with a disability can be defined as someone regarding whom the relevant decision has been issued by the competent authority. It is also someone without the relevant certificated, although additionally characterized by reduced ability in performing basic activities relevant to their age, e.g. working or studying (*http*). T. Majewski terms this similarly. According to him, a disabled person is someone whose reduced body ability or damage makes it difficult, impossible or restrictive for such person to perform daily and professional tasks (Majewski 1995, p. 12). The Polish legislator put it somewhat broader. According to the legal definition of disability contained in the Act of 27 August 1997 on Vocational and Social Rehabilitation and Employment of Persons with Disabilities, disabled people are characterized by: "permanent or temporary inability to fulfill social roles due to permanent or long-term impairment of the body ability, in particular resulting in inability to work" (*Act ... 1997*, art. 2, item 10). Another normative act concerning people with disabilities is the already mention Charter of Rights of Persons with Disabilities which defines persons with disabilities as individuals with impairment of physical or mental abilities, persisting periodically or permanently, as a consequence of which daily

life, work, learning, as well as fulfilling roles, are limited or impossible in accordance with legally and customary standards (*Karta...* 1997).

All these approaches to defining a disabled person place a major emphasis on the fact it must be someone who is in a state that hinders the performance of everyday life functions, e.g. at work or at school, as a result of a specific condition (e.g. accident, illness, congenital malformations). As regards formal requirements, it is necessary for the authorized state body to issue a disability certificate. That certificate unambiguously assigns the person to the group of disabled people, provided that that person's physical or mental condition has a clear (negative) impact on the performance of social roles (Serafin, Łuczak, Kurkus-Rozowska, Konarska, Bugajska 2007, pp. 13-14).

There is a number of ways to define a disabled person. According the 2011 *Narodowy Spis Powszechny Ludności i Mieszkań* (Polish National Census of Population and Housing), two ways, i.e. legal and biological, can be indicated (*Narodowy ...* 2011, p. 63):

- legal - applies to persons with a valid certificate issued by the competent authority;
- biological - applies to persons without certificates, but with a full or serious limitation of their ability to perform basic life activities by themselves.

The first approach can be considered as an objective assessment and the second as a subjective assessment.

The Polish legislator, in article 3 of the Act of 27 August 1997 on Vocational and Social Rehabilitation and Employment of Persons With Disabilities, set three levels of disability for disabled people: severe, moderate, and mild (*Act ...* 1997).

People with disabilities in Poland

In order to draw up the characteristics of people with disabilities in Poland, data from GUS and official statements of the Government of the Republic of Poland on measures taken in 2015 to implement the provisions of the resolution of the Sejm of the Republic of Poland of 1 August 1997, *Charter of Persons with Disabilities*, was used. The situation of people with disabilities was analyzed in terms of: age, structure, education, and economic activity. In light of the above, the following analyses of people with disabilities were developed:

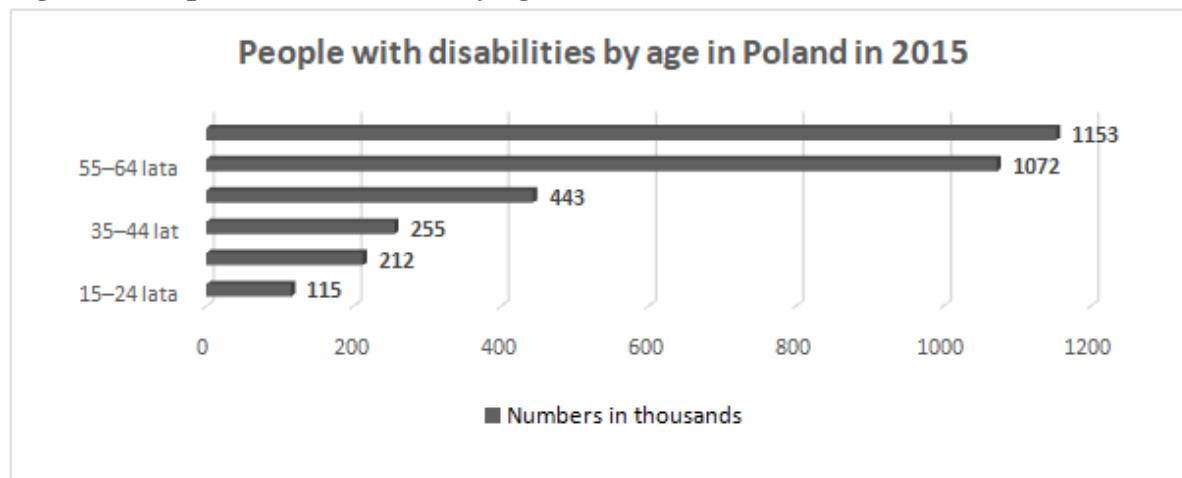
- people with disabilities by age in Poland in 2015,
- breakdown of people with disabilities in 2015,
- people with disabilities aged 16 and more by education in 2015,
- people with legal disabilities in Poland in 2001-2015,
- economic activity rates of people with disabilities aged 15 and more,
- economic activity of people with disabilities aged 16 and more by degree of disability in: 2005, 2013, 2014, 2015.

Based on Eurostat data, there were 42.228 million people with disabilities in the European Union countries in 2012 . This represented 12.8% of the total EU population. The participation of people with disabilities in Member States is quite diverse. Norway had the highest share of this social group (20.1%), while Italy the lowest (6.1%) (*http*). By contrast, in 2015 there were over 3.2 million people with legal disabilities aged 16 and more in Poland, which made up for 10.5% of the total population in that age group¹. Among the total population of people with disabilities, the highest number were men (50.6%), at 1.65 million. There were slightly fewer women (49.3%), at 1.60 million. A greater discrepancy occurred between city residents (63.4%) at 2.06 million people

¹ According to data from the Polish Labor Force Survey conducted quarterly by GUS.

and village residents (36.6%) at 1.19 million. For comparison, there were over 1.86 million people in the working age (economic age group²), which account for 8.2% of the population at that age in terms of the entire population of Poland (Figure 1).

Figure 1. People with disabilities by age in Poland in 2015

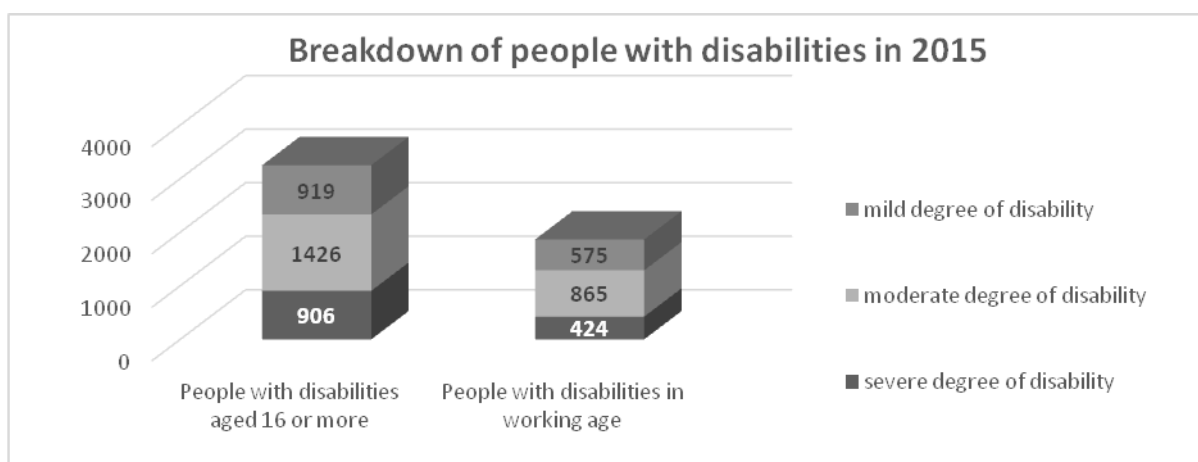


Source: Own study based on: BAEL, average annual data, analysis of the Office of the Government Plenipotentiary for Disabled People based on GUS data, data on the implementation of the Charter of Rights for 2015, p. 5.

When analyzing people with disabilities by age, it can be seen that two age groups (i.e. 55-64, and 65 and more) make up over 2/3 of the sample. It was more than the total working population (1.86 million people). In the era of the common problem of population aging, it is no surprise that the most numerous group was the age group of 65 and more. The smallest population was the group of 15-24 year-olds (115,000 people). A significant part of the total population of people with disabilities was included in the non-mobile working group (i.e. 45-65 years). These people are reluctant to changing their place of residence and willing to change their current job.

It is worth analyzing the structure of people with disabilities at this point, taking into account the degree of disability (Figure 2).

Figure 2. Breakdown of people with disabilities in 2015



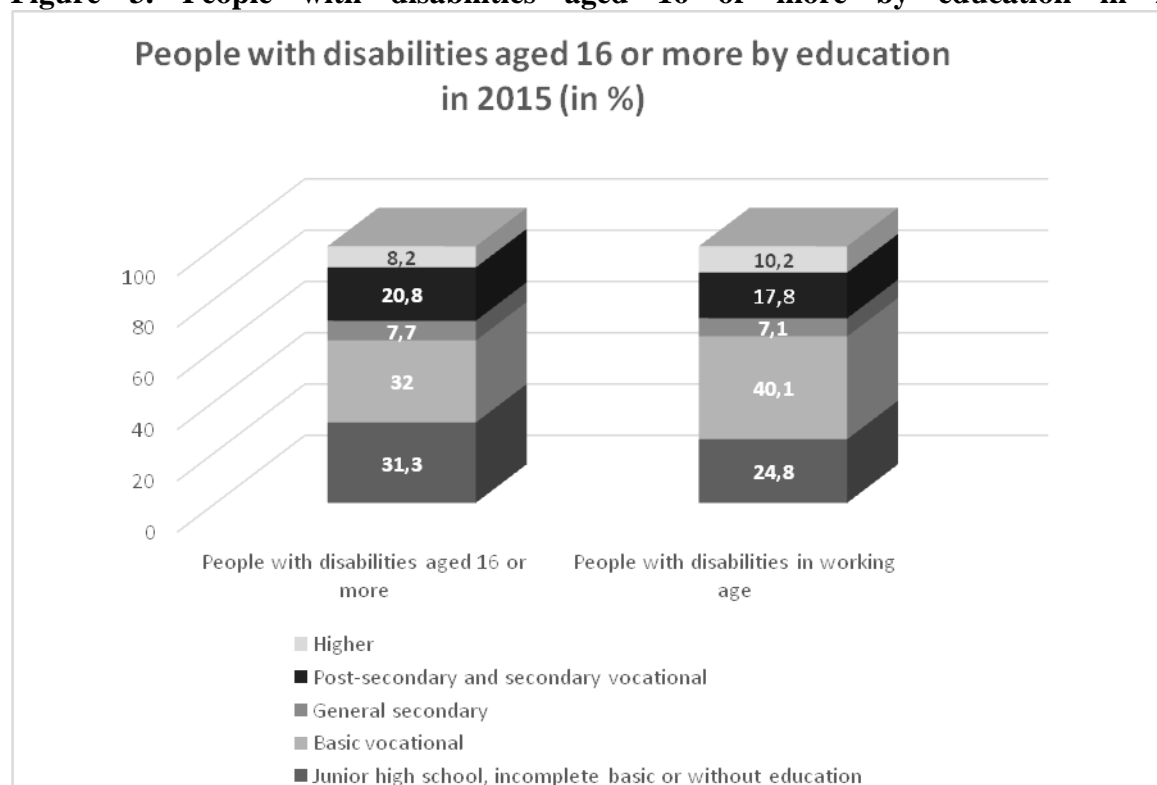
Source: Own study based on: BAEL, average annual data, analysis of the Office of the Gov-

² 18-59 years old for women and 18-64 for men.

ernment Plenipotentiary for Disabled People based on GUS data, data on the implementation of the Charter of Rights for 2015, p. 6.

Figure 2 shows that people with a severe (906,000) and mild (919,000) degree of disability are very similar in terms of numbers. Taking into account the percentage distribution of the surveyed groups, it should be stated that people with a severe degree of disability in working age make up nearly 47% of the total number of holders of the same disability certificate. A similar scenario occurs in the case of the proportion of mild and moderate degrees in working age to the total surveyed population (approx. 60% - 62%). In both groups the highest number of people were those with moderate disability. The analysis of people with disabilities by education is presented below (Figure 3).

Figure 3. People with disabilities aged 16 or more by education in 2015

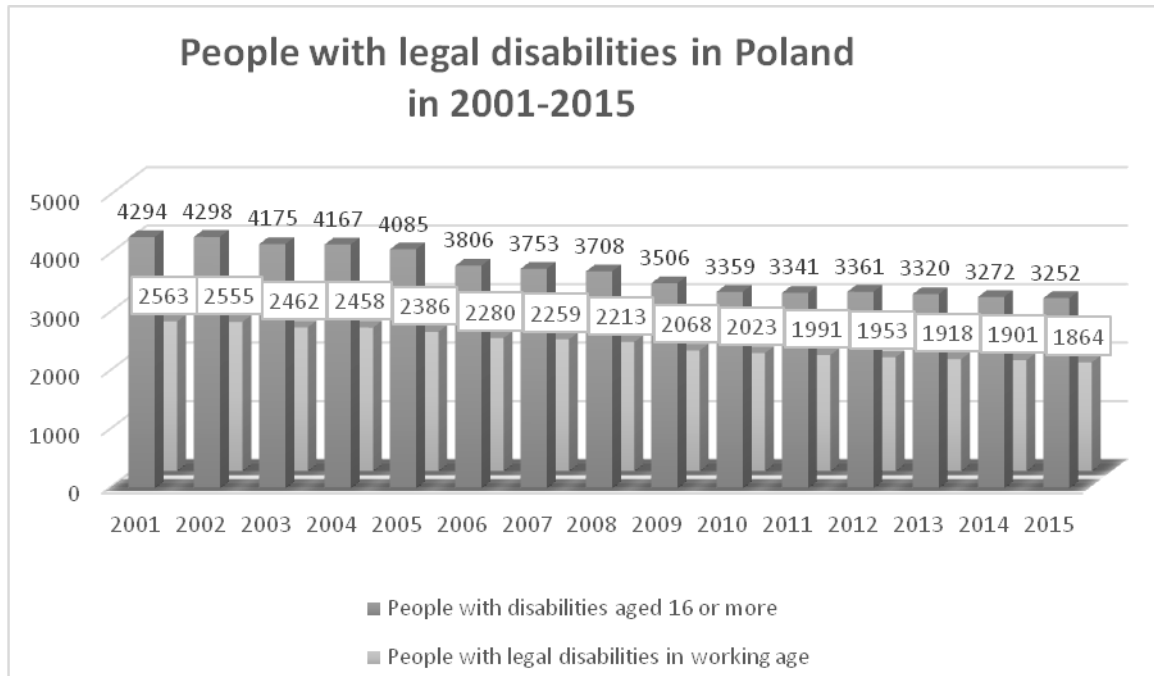


Source: Own study based on: BAEL, average annual data, analysis of the Office of the Government Plenipotentiary for Disabled People based on GUS data, data on the implementation of the Charter of Rights for 2015, p. 7.

The percentage distribution by education is similar in both cases. The highest deviations occur in the level of basic vocational education, 32% for the general population and 40.1% for the working age group. A similar scenario occurs for the lowest level of education, 31.3% and 24.8%, respectively. In descending order, the distribution of the level of education is as follows: basic vocational; junior high school; incomplete basic or without education; post-secondary and secondary vocational; higher; general secondary. Especially disturbing is the fact that the two most numerous groups constituting over 60% of the total for both analyzed cases are characterized by the lowest level of education. This has a negative impact on job opportunities. It is common knowledge that the higher the education level, the better the chances of successful integration in the labor market. It is worth noting yet another correlation, and that is that in both generic cross-sections (by age and education), these subpopulations represent the largest fraction among the entire population of people with disabilities. On this basis, it can be assumed that the oldest people have the lowest education.

At this point it is worth analyzing the development of the number of people with disabilities in the longer period of time (Figure 4).

Figure 4. People with legal disabilities in Poland in 2001-2015



Source: Own study based on: BAEL, average annual data, analysis of the Office of the Government Plenipotentiary for Disabled People based on GUS data, data on the implementation of the Charter of Rights for 2013, 2014, 2015.

It can be noticed in Figure 4 that within 15 years the number of people with disabilities decreased significantly. There were 4.229 million and 3.252 million people with disabilities aged 16 and more in 2001 and 2015, respectively. A similar scenario can be observed for the productive age - a drop from 2.563 million people (2001) down to 1.864 million people (2015). Attention should be drawn to the fact that numerous legislative changes in the field of people with disabilities took place during this period. Therefore, the fact that the number of people with disabilities decreased should not be equated with a purely positive situation, with the criteria on the basis of which the degrees of disability are granted having been verified. The main focus was on people with a mild degree of disability. The above verification prompted the decline in the number of people with legal disabilities, with a particular loss of disability status observed among the healthier individuals (Wałęga, Wałęga 2007, pp. 83-84).

Knowing the distribution of people with disabilities over a longer period of time, it is worth focusing on their occupational activity rates (Table 1).

Table 1. Economic activity rates for people with disabilities aged 15 and more

Year	Total (in thou- sands)	Economically active in thousands			Economi- cally inactive	Economic activity rate (%)	Employ- ment rate (%)	Unem- ployment rate (%)
		Total	Including:					
			working	unem- ployed				
2002	4298	775	637	139	3523	18,0	14,8	17,9
2003	4175	690	574	116	3485	16,5	13,7	16,8
2004	4167	677	544	133	3490	16,2	13,1	19,6
2005	4085	663	535	128	3422	16,2	13,1	19,3
2006	3806	571	481	90	3235	15,0	12,6	15,8

2007	3753	566	494	73	3187	15,1	13,2	12,9
2008	3708	578	508	71	3130	15,6	13,7	12,3
2009	3506	552	485	67	2954	15,7	13,8	12,1
2010 ^{*)}	3359	566	485	81	2793	16,8	14,4	14,4
2011	3341	569	486	83	2773	17,0	14,5	14,6
2012	3361	585	495	91	2776	17,4	14,7	15,5
2013	3320	574	478	96	2746	17,3	14,4	16,9
2014	3272	569	484	85	2703	17,4	14,8	14,8
2015	3252	537	472	65	2715	16,5	14,5	12,3

^{*)} Since 2010, as a result of the clarification by the GUS of the age population of people with disabilities under the Polish Labor Force Survey (BAEL), statistical data relate to persons with disabilities aged 16 and more.

Source: Own study based on: BAEL, average annual data, analysis of the Office of the Government Plenipotentiary for Disabled People based on GUS data, data on the implementation of the Charter of Rights for 2013, 2014, 2015.

In 2002-2015, a downward trend in all the generic categories presented in Table 1 can be observed. Unfortunately, this should not be perceived as something good. The decline in the number of economically inactive and disabled people as a whole, as shown above, is not equivalent to improving the situation of people with disabilities. Especially worrying is the fact that the economic activity rate decreased from 18.0% (2002) to 16.5% (2015). The unemployment rate, although falling from 17.9% (2002) to 12.3% (2015), cannot be considered a good indicator, but rather the result of a significant reduction in the number of people with disabilities as a whole. This hypothesis can be confirmed by the low employment rate at around 12.6% (2006) - 14.8% (2014). The above certifies that legislative changes have resulted in the lower profitability in employing people with disabilities for Polish employers. Table 2 shows the economic activity of people with disabilities.

Table 2. Economic activity of people with disabilities aged 16 and more by degree of disability in: 2005, 2013, 2014, 2015

Degree of disability	2005	2013	2014	2015
Economic activity rate (%)				
severe	4,2	4,8	4,4	4,7
moderate	13,3	19,1	20,2	18,5
mild	25,4	26,8	25,7	24,9
Employment rate (%)				
severe	3,6	4,1	3,8	4,1
moderate	11,0	16,2	17,5	16,5
mild	20,0	21,7	21,5	21,4
Unemployment rate (%)				
severe	–	14,4	17,1	14,0
moderate	16,4	15,1	13,2	10,6
mild	21,2	19,3	16,3	14,0

Source: Own study based on: BAEL, average annual data, analysis of the Office of the Government Plenipotentiary for Disabled People based on GUS data, data on the implementation of the Charter of Rights for 2005, 2013, 2014, 2015.

Analyzing people with disabilities by degree of disability in 2005-2015 there is a favorable change to be observed. Across all three levels of disability, the unemployment rate dropped. The biggest improvement concerned mild disability, with a 7.2% decrease. The employment rate also increased for all generic groups. In this case, the moderate employment

rate improved the most, with an increase of 5.5%. A similar scenario occurred for the economic activity rate. Similarly to the employment rate, the highest increase was recorded for moderate disability at 5.2%. For comparison, in the fourth quarter of 2015, the economic activity rate of the Polish population was 74.8%. The employment rate for the total population was 52.6% (and 69.5% for the working-age population). The unemployment rate, meanwhile, was calculated at 6.9% (*Aktywność ...* 2016, pp. 25-30).

In light of the above, it is the economic activity of people with disabilities during the period considered that should be perceived as improving.

Conclusions

The conducted analysis indicates that the analyzed period demonstrates a relatively low level of economic activity of people with disabilities and a relatively high level of economic inactivity. Compared to the population of Poland as a whole, this is an unsatisfactory result. It should be emphasized that the factors that still inhibit economic activity include legal and institutional regulations of the labor market. In addition, changes in the demographic structure of the Polish population and its aging have a significant impact on the current situation. The above analyses allow to provide the answer to the research question posed. The situation has improved in relation to previous years, but further efforts need to be made in order to encourage employers to hire people with disabilities. It is also necessary to simplify the complex administrative procedures when applying for compensation, as well as their service on the part of public entities (PCPR, MOPS, MOPR, OPS, UM). Another important issue is the strengthening of the state's activities to increase the level of education among people with disabilities (e.g. the program *Aktywny Samorząd* [Active Local Government]). The search for solutions that could alleviate persons with multi-faceted disabilities proves particularly challenging and other countries, including highly developed ones, are facing the same problem (Transforming ... 2003).

References

- Aktywność ekonomiczna ludności Polski. IV kwartał 2015* (2016), Statistical data and studies, GUS, Warsaw.
- Gąciarz B., Ostrowska B., Pańków Wł. (2008), *Integracja społeczna i aktywizacja zawodowa osób niepełnosprawnych zamieszkałych w małych miastach i na terenach wiejskich, uwarunkowania sukcesów i niepowodzeń*, IFiS PAN, Warsaw.
- <http://stat.gov.pl/metainformacje/slownik-pojec/pojecia-stosowane-w-statystyce-publicznej/241,pojecie.html>, (retrieved 01.12.2016).
- Data on the implementation of the Charter of Rights for 2005: Informacja o realizacji Karty Praw za 2005* (2006), Ministry of Economy, Labor and Social Policy, Warsaw.
- Data on the implementation of the Charter of Rights for 2013: Informacja o realizacji Karty Praw za 2013* (2014), Ministry of Economy, Labor and Social Policy, Warsaw.
- Data on the implementation of the Charter of Rights for 2014: Informacja o realizacji Karty Praw za 2014* (2015), Ministry of Economy, Labor and Social Policy, Warsaw.
- Data on the implementation of the Charter of Rights for 2015: Informacja o realizacji Karty Praw za 2015* (2016), Ministry of Economy, Labor and Social Policy, Warsaw.
- Karta praw osób niepełnosprawnych* [Charter of Persons with Disabilities] – Act of 1 August 1997 (Journal of Laws no 50, item 475).
- Kawczyńska-Butrym Z. (1998), *Niepełnosprawność – specyfika pomocy społecznej*, Śląsk, Katowice.
- Majewski T. (1995), *Rehabilitacja zawodowa osób niepełnosprawnych*, Centrum Badań i Rozwoju Rehabilitacji Osób Niepełnosprawnych, Warsaw.
- Narodowy Spis Powszechny Ludności i Mieszkań 2011* (2012), Report on results, GUS, Warsaw.

Prevalence of basic activity difficulties or disability, persons aged 15-64, 2011 and 2012 DIS2015, http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Prevalence_of_basic_activity_difficulties_or_disability,_persons_aged_15%E2%80%9364,_2011_and_2012_DIS2015.png, (retrieved 09.12.2016).

Serafin R., Łuczak A., Kurkus-Rozowska B., Konarska M., Bugajska J. (2007), *Poradnik dla wolontariusza spółdzielni socjalnej*, Central Institute for Labor Protection - National Institute for Researchers, Warsaw.

Transforming Disability into Ability. Policies to Promote Work and Income Security for Disabled People (2003), OECD, Paris.

Act of 27 August 1997 on Vocational and Social Rehabilitation and Employment of Persons with Disabilities (Journal of Laws of 1997, no 123, item 776 as amended).

Wałęga A., Wałęga G. (2007), *Aktywność ekonomiczna osób niepełnosprawnych w Polsce, Przemiany rynku pracy w kontekście procesów społecznych i gospodarczych*, in: Poteralski J. (ed.), Print Group Daniel Krzanowski, Szczecin.

Żbikowski J., Dąbrowski D., Kuźmicki M. (2012), *Determinanty aktywności zawodowej osób niepełnosprawnych zamieszkałych na obszarach wiejskich*, Report on results, Biała Podlaska.

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Rola banku centralnego w gospodarce – obraz po kryzysie

Streszczenie

Problem aktywności banku centralnego i jego wpływu na gospodarkę od dawna nurtuje teoretyków i praktyków ekonomii. Znaczenie polityki pieniężnej dla sfery realnej było przedmiotem analiz wielu nurtów myśli ekonomicznej. Konsensus wypracowany w tym zakresie zaowocował nową syntezą neoklasyczną mającą praktyczny wyraz w strategii bezpośredniego celu inflacyjnego. Kryzys finansowy, który wybuchł w 2008 roku sprawił, że banki centralne w sposób niezwykle aktywny podjęły działania wykraczające poza tradycyjne rozumienie ich roli. Skutki kryzysowej polityki pieniężnej widoczne są nie tylko w gospodarce ale także skłaniają do zastanowienia nad przeformułowaniem roli polityki pieniężnej w obrębie polityki gospodarczej.

W artykule obok przeglądu różnych poglądów dotyczących znaczenia polityki pieniężnej dla gospodarki opisane zostały działania podejmowane przez banki centralne w reakcji na kryzys wraz z ich obserwowanymi skutkami. Na tym tle zostanie podjęta próba wskazania możliwego nowego usytuowania polityki pieniężnej w strukturze polityki gospodarczej państwa.

Słowa klucze: bank centralny, polityka pieniężna, kryzys finansowy

The role of central banks in the economy - a post-crisis perspective

Abstract

The problems of the activity of the central bank and impact monetary policy on the economy are interesting for theoreticians and practitioners of economics. The significance of monetary policy for the real-life sphere was an object of analyses in many areas of economics. The developed agreement in this respect resulted in the new neoclassical synthesis having a practical expression of the strategy of direct inflation targeting. The 2008 financial crisis made central banks to take action exceeding the traditional understanding of their role and to do so in an unusually active way. The effects of the unconventional monetary policy can be observed not only in the economy but also in the changing of thinking of the role of monetary policy. This article, apart from exploring different views concerning the significance of monetary policy for the economy, investigates the measures taken by central banks in response to the crisis and their effects. Taking this into account, an attempt to explain the new place of monetary policy in the structure of economic policy was made.

Keywords: central bank, monetary policy, financial crisis

COD JEL: E58

Introduction

Monetary policy forms part of the economic policy of each state, whereas central banks are institutions authorized to manage that policy. This statement is the foundation for the functioning of modern central banking. It does not raise doubts either on the basis of theoretical considerations or in practice. However, the determination of the impact of monetary policy on economic development and its relationship with fiscal policy is a topic that has been discussed for many decades. An attempt to combine the achievements of various economic schools resulted in the creation of a new neoclassical synthesis as the theoretical basis for pursuing contemporary monetary policy. On this basis, many central banks implemented the

strategy of direct inflation targeting and by 2008 effectively pursued monetary policy aimed at maintaining prices at a stable level. For this purpose the bank used traditional monetary policy instruments influencing the level of short-term interest rates in the economy. The outbreak of the financial crisis in September 2008 (the provisional date is the collapse of financial services firm Lehman Brothers) made that central banks become actively involved in activities to reduce the negative impact of that crisis. To this end, they used instruments outside the traditional set assigned to monetary policy. The use of unconventional monetary policy instruments has triggered various effects, the relevance of which for future economic policy is often significant and can be long-term. This leads to the formulation of a question regarding the future role of the central bank and its monetary policy in the structure of economic policy.

This article is divided into three sections. The first section will review the views of various trends in economic thought on the role and location of monetary policy in the structure of the state's economic policy, based on the available literature. The second section will describe the unconventional monetary policy instruments used by central banks during the crisis, along with their potential long-term effects on the economy. The summary will include an attempt to answer the question regarding a possible change in the structure of economic policy in the context of the future role of monetary policy.

Review of the views on the role of monetary policy in the economic policy of the state

Researchers have dealt with the problems of money and its influence on the economy since antiquity. From the point of view of the development of contemporary theories, the most important is the formulation of the quantitative theory of money at the end of the 19th century (Drabowski 1989, p. 8). It consisted in a certain summary and systematization of views presented earlier by economists. The founder of the quantitative theory of money (in the transaction version) is Irving Fisher, who developed the descriptive rules of money circulation in the economy. This formula is based on the assumption that the economy is in balance under the conditions of full employment. According to Fisher, the economy strives to reach that state by itself. In the practice of economic life, central banks controlled the issuing of banknotes in relation to the accumulated bullion stocks, in line with the adopted assumptions. This prevented uncontrolled increase in prices and inflation. The economy, having the ability to recover spontaneously, did not require any deeper intervention on the part of the state. The sole role of the central bank was to control the size of the money supply.

The shift of views on the central bank's role in the economy occurred with the outset of the 20th century. The founder and leading personality of the new economic school was J.M. Keynes, who drew attention to the importance of effective demand for the economy. At the same time, he emphasized the instability of investment and consumption generated by the private sector. The main task for economic policy was to stabilize economic growth through redistribution and public investments (Kiedrowska, Marszałek 2003, p. 72). Monetary policy consisting in lowering the short-term interest rate may affect the growth of loans in the economy and stimulate investment activity, but due to the uncertainty experienced by entrepreneurs, it cannot bring about the effects equivalent to fiscal policy (Pruski 1993, p. 43). Keynes's attitude to inflation is noteworthy as he believes inflation may jeopardize the economy only in conditions of full use of production capacity, which is rather an exceptional case. According to the Keynesians, fiscal policy plays a dominant role in the structure of the economic policy of the state, with monetary policy having a secondary position.

Monetary concepts in economics arose in response to the inadequacy of Keynes's theory in explaining the effects of supply shocks and stagflation processes in the economy in the 1970s and 1980s (Ptak 2008, pp. 100-101). Monetarism, as an economic doctrine, was shaped in the mid-1950s, but gained popularity only in the time of the great inflation of the 1980s. The leading representative of the Chicago school developing theories later identified as monetaristic was Milton Friedman. According to the monetarists, the condition for ensuring stable

economic growth is to maintain a low and stable inflation level. Since the demand for money is stable, the size of the money supply is of paramount importance to the price level, depending entirely on the activities of the central bank. Hence the great role of monetary policy. According to Friedman and his successors, fiscal policy is ineffective as an instrument to support economic development, mainly for two reasons: the crowding-out effect (government investment expenditure replaces private sector spending) and delays (related to the long-term legislative path). Unlike the Keynesians, monetarists gave primacy to monetary policy over fiscal policy.

The opposition between the Keynesian and monetarist approach to the issue of the effectiveness of economic policy for many years shaped thinking about the role of fiscal and monetary policies. Turning to the assumptions of the new neoclassical synthesis, as the basis for contemporary monetary policy, the main thoughts of the other schools of mainstream economics should be outlined. The new neoclassical school, in connection with the theory of rational expectations, pointed to the ineffectiveness of both monetary and fiscal policies in stabilizing the economy. According to its representatives, only unexpected changes in the rules of pursuing monetary policy could trigger a short-term impact on the economy. In the long run, however, economic policy was neutral. Economists siding with the real business-cycle theory share a similar opinion in that regard. Although they point to the primacy of fiscal policy over monetary policy, they do not recommend using it as an instrument for stabilizing the economic situation (Kiedrowska, Marszałek 2003, p. 86).

Starting from the 1980s, the world economy saw a period of great stability. After the experience of high inflation, governments for the most part withdrew from intervening in the economy. It was a period of low inflation, accompanied by stable economic growth. The effect of the changes discussed above became, in the theory of economics, a new neoclassical synthesis. It is the expression of an eclectic approach to the former economic achievements in terms of the monetary policy theory, for which the general equilibrium model grounded on the concept of no fixedness was assumed (Grabek, Kłos, Koloch 2010, pp. 24-31). According to the views of this trend of economic, monetary policy can play an important role in supporting the economy in recovering from the effects of real-life shocks. Its importance for ensuring low and stable inflation is crucial from the point of view of the economy. However, it should be remembered that its role is only supportive in relation to the economy's ability to self-regulate (Sławiński 2016). Fiscal policy is much less significant and should focus on providing optimal conditions for the functioning of the economy.

The above views of major economic schools demonstrate that the conviction of the primacy of one of the policies, i.e. fiscal or monetary, has changed over time. With that being said, the change of views was usually associated with disturbances in the real-life sphere of the economy, which gave impetus to the revision of existing views. At the end of the 20th century, in line with the new synthesis, neoclassical monetary policy grew to be the key element of economic policy and central banks became the institutions supervising national financial order (Alińska, Pietrzak, Wasiak 2016).

Unconventional monetary policy instruments and selected effects of their use

In line with the above-mentioned assumptions of the new neoclassical synthesis, until the 2008 crisis central banks used to pursue the adopted monetary policy strategies using traditional instruments. These included short-term central bank interest rates, open market operations and deposit and credit operations, which allowed for the adjustment of the monetary base to the desired level (Ząbkowicz 2015, pp. 30-31). That instrumentation also provided for a mandatory reserve and an increasingly extensive information policy. Using these tools, the central bank, through various transmission channels of monetary impulses, affected real economy (Demchuk, Łyziak, Przystupa, Sznajderska, Wróbel 2012, p. 7).

The financial crisis broke out in September 2008. It caused liquidity problems for banks and other financial market entities, resulting from, on the one hand, a decrease in the value of assets (especially toxic assets, with a badly priced risk) and, on the other hand, a sudden of the interbank lending market. The loss of trust among market participants translated into a reduction in the number of transactions concluded on the money market. In view of those events, both central banks and governments took swift action. As per central banks, in the initial period that action consisted in lowering interest rates and modifying the principles of conducting standard open-market operations and deposit and credit operations. The measures taken proved insufficient to stop the growing disorders. In addition, the situation was further complicated by the fact that the central bank's interest rates were brought to a close-zero level quite quickly (as early as at the end of 2008 in the United States). This took away the possibility of continuing the conventional monetary policy. Central banks launched new, non-standard monetary policy instruments as a result. In the literature, these tools are referred to collectively as quantitative easing as they consist in providing additional liquidity to the financial sector. This is done by purchasing various types of market securities, which results in an increase in the balance sheet total and a change in the structure of the central bank's balance sheet. What is new in this case is not only the technical details of operations performed, but also their scale (Tomkiewicz 2015, pp. 166-167). An example is the Federal Reserve System, whose balance sheet total has increased five-fold since the 2008 financial crisis - from 900 billion to 4.5 trillion US dollars (Mester 2016). It should also be noted that, as a consequence of quantitative easing, significant amounts of Treasury debt securities accessed the portfolios of central banks³.

Achieving near-zero interest rates by short-term prompted central banks to affect long-term interest rates by purchasing long-term debt securities (Roath 2016)⁴. The creation by the central banks of a constant demand for them reduced the cost of obtaining financing by issuers of such securities. However, as the purchases made by the central bank also concern long-term Treasury securities, the government's financing conditions are also bettered in the process, having an obvious impact on the possibilities of pursuing an active, stimulating economic fiscal policy⁵.

The non-standard measures used by central banks have had various effects. The panic and disturbances in the financial market were quickly controlled, while the banking sector (also thanks to the support of governments) did not lose liquidity and the depositaries did not incur losses. The recession on the side of real economy was relatively superficial (Tomkiewicz 2015, pp. 167-168), but unfortunately it was long-term. This may be the result of the phenomenon of secular stagnation observed in developed economies. Secular stagnation consists in the simultaneous occurrence of excess savings and low demand (Sławiński 2016). It should also be noted that the accommodative monetary policy pursued for a long time influenced the dependence of financial markets on cheap, easily available money. The phenomenon of addiction applies equally to governments. Central banks influenced the conditions for the functioning of the government debt market in two ways. First, by keeping long-term interest rates at a very low level (here one can again refer to the example of the new policy goal of the Bank of Japan). Second, central banks have been generating constant demand for Treasury securities by buying them on either the primary (Bank of Japan) or secondary (European Central Bank) market.

³ It is approximately 10% of the value of assets in the case of the Federal Reserve System and the European Central Bank (Ramotowski 2016).

⁴ The Federal Reserve System carried out an operation twist involving the conversion of short-term securities into long-term ones.

⁵ This was particularly marked by the announcement by the Bank of Japan of a new target for monetary policy, in the form of maintaining a near-zero profitability of 10-year government bonds (Ramotowski 2016).

Recent discussions on monetary policy have been increasingly inclined to the idea that it has exhausted the possibilities of stimulating economic growth (Ramotowski 2016). This does not, however, imply the need to return to pre-crisis monetary policy. On the contrary, it seems that monetary policy should continue to expand and use non-standard instruments as required. However, its main task should be to provide a space for an expansive fiscal policy more broadly outlined than before (Roath 2016). Analyses regarding the effectiveness of pro-investment monetary and fiscal policy indicate that the latter carries a much lower risk (Feldstein 2016). Central banks buying market securities into their portfolios take over the associated risk. In the case of fiscal policy, which relies on a different set of tools, the risk is not transferred on to the government. It is also worth clarifying at this point that the subject of monetization of public debt through the issuing by the central bank of what is known as “helicopter money” is not discussed here for space reasons (Sławiński 2016). The introduction of “helicopter money” would certainly affect the mutual relations of monetary and fiscal policy.

Conclusions

Views on the role of monetary and fiscal policy and their primacy in gearing the economy towards stimulating growth have changed over the years. To a large extent, it was not so much a consequence of the development of theoretical research, but the phenomena occurring in real life. The consensus achieved at the end of the 1980s prioritized monetary policy as more effective in supporting economic self-regulation processes. The financial crisis of September 2008 forced banks to apply instruments that had never been used before as the standard of monetary policy ran out. By making an unprecedented scale of purchases of securities (both commercial and government) with long maturities, the banks began to effectively influence the level of long-term interest rates. At the same time, that policy has changed the conditions for the functioning of financial markets particularly in what concerns the government debt securities market. As a result, monetary policy began to strongly impact fiscal policy. On the other hand, the possibilities of influencing non-standard monetary policy to stimulate economic growth seem to be running out, which would indicate the future primacy of fiscal policy. In the author's opinion, parallel occurrence of both these trends points to the necessity of developing a completely new strategy of economic policy based on far-reaching coordination of the two policies subject to equal treatment. It seems that such a solution will be a significant *novum* in the way of thinking about the economic policy of the state.

References

- Alińska A., Pietrzak B., Wasiak K., *Ewolucja zmian i zadania dla banków centralnych w świetle doświadczeń kryzysu finansowego*, <http://kolegia.sgh.waw.pl/pl/KES/kwartalnik/Documents/AABPKW231.pdf>, (retrieved 16.10.2016).
- Demchuk O., Łyziak T., Przystupa J., Sznajderska A., Wróbel E. (2012), *Mechanizm transmisji polityki pieniężnej w Polsce. Co wiemy w 2011 roku?*, „Materiały i Studia”, no 270, National Bank of Poland, Warsaw.
- Drabowski E. (1987), *Wpływ pieniądza na gospodarkę w teoriach keynesizmu i monetaryzmu*, PWN, Warsaw.
- Feldstein M., *The Future of Fiscal Policy*, <http://www.nber.org/feldstein/IMF%20April%202015.pdf>, (retrieved 15.10.2016).
- Grabek G., Kłos B., Koloch G. (2010), *SOE^{PL 2009} – Model DSGE małej otwartej gospodarki estymowany na polskich danych. Specyfikacja, oceny parametrów, zastosowania*, „Materiały i Studia”, no 251, National Bank of Poland, Warsaw.
- Kiedrowska M., Marszałek P. (2003), *Polityka pieniężna i fiskalna w teoriach makroekonomicznych*, „Ruch Prawniczy, Ekonomiczny i Socjologiczny”, no 1, Poznań.

Łaski K. (2011), *Strukturalne przyczyny kryzysu finansów publicznych w Unii Europejskiej oraz w Unii Gospodarczej i Walutowej*, „Studia Ekonomiczne”, no 1, Warsaw.

Mester L. J., *Recent Developments in U.S. Monetary Policy: From Extraordinary Back to Ordinary*,

file:///C:/Users/U132622/Downloads/sp%2020150323%20recent%20developments%20in%20the%20us%20monetary%20policy%20pdf%20(1).pdf, (retrieved 10.08.2016).

Pruski J. (1993), *Ewolucja keynesistowskiej teorii pieniądza – tobinowska teoria popytu na pieniądz*, in: Belka M., Wojtyna A. (ed.), *Współczesny keynesizm*, PAN Instytut Nauk Ekonomicznych, „Studia i Materiały”, no 42, Warsaw.

Ptak P. (2008), *Ile państwa w gospodarce? Milton Friedman o ekonomicznej roli państwa*, C.H.Beck, Warsaw.

Ramotowski J., *Rośnie protekcyjizm a rządy patrzą krótkoterminowo*, <https://www.obserwatorfinansowy.pl/tematyka/makroekonomia/rosnie-protekcjonizm-a-rzady-patrza-krotkoterminowo/>, (retrieved 10.10.2016).

Roath S. S., *Desperacja banków centralnych*, <https://www.obserwatorfinansowy.pl/forma/rotator/desperacja-bankow-centralnych/>, (retrieved 10.10.2016).

Sławiński A., *Granice skuteczności polityki pieniężnej*, <https://www.obserwatorfinansowy.pl/forma/rotator/granice-skuteczności-polityki-pieniężnej/>, (retrieved 10.10.2016).

Tomkiewicz J. (2015), *Skutki uboczne kryzysowej polityki monetarnej*, University of Economics in Katowice, „Studia Ekonomiczne”, no 214, Katowice.

Ząbkowicz A. (2015), *Odejście od konwencjonalnej polityki pieniężnej*, Warsaw School of Economics, „Prace i Materiały Instytutu Rozwoju Gospodarczego”, no 95, Warsaw.

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Funkcjonowanie placówek edukacyjnych w kontekście niwelowania dysproporcji rozwojowych¹

Streszczenie

W Polsce powiększa się przepaść między regionami, na niekorzyść najbiedniejszych, czego wynikiem jest także narastanie nierówności dochodowych w społeczeństwie. Co więcej, istniejące nierówności dochodowe mogą również ograniczyć perspektywy dochodów przyszłych pokoleń.

W artykule omówiono style zarządzania placówką edukacyjną w kontekście możliwości rozwijania umiejętności kluczowych pożądanых na współczesnym rynku pracy i dla przyszłości, które przyczynić się mogą do niwelowania dysproporcji rozwojowych.

Hipoteza badawcza: zmiana sposobu zarządzania placówką edukacyjną może stanowić skuteczne narzędzie rozwijania umiejętności kluczowych pożądanых na współczesnym rynku pracy i dla przyszłości.

Metody: obejmują zarówno dane pierwotne, jak i wtórne, w tym: studia literaturowe dotyczące opracowań zwartych, a także czasopism i innych publikacji, analizy statystyczne, wnioskowanie, synteza dla całościowego opracowania.

Problem rozwijania u dzieci i młodzieży pożądanых przez pracodawców umiejętności jest trudnym zagadnieniem, które wymaga szerokiej gamy rozwiązań. Nie mniej w świecie rosnących nierówności dochodowych, koncentracja na kapitale własnym edukacji, może stanowić skuteczne podejście do rozwiązania tego problemu w dłuższym horyzoncie czasowym.

Słowa kluczowe: polityka edukacyjna, dysproporcje rozwojowe

Education as a tool for eliminating development disparities

Abstract

There is a growing gap among the regions in Poland to the disadvantage of the poorest, leading to the growth of earning income inequalities in the society. Furthermore, the existing income inequalities can also limit the income prospects for future generations.

In the article, the author attempts to create a model for management of an educational institution that responds to contemporary development challenges.

Research hypothesis: the change in management of an educational institution is an effective tool to minimize development disparities.

Methods: include both primary and secondary data and literature studies on compact studies, as well as journals and other publications, statistical analysis, inference, synthesis of the overall study.

The implications for education policy are clear. An education policy focused on its own capital can be a very effective tool for increasing earnings mobility between generations and reducing income inequality in time and therefore can be as an effective tool for growth. The problem of eliminating development disparities and income inequality is a complex issue that requires the application of a wide range of solutions. Nonetheless, in the world of growing

¹ Rozumiane jako dysproporcje w rozwoju społeczno-gospodarczym regionów, które decydują o poziomie życia zamieszkujących je osób.

inequalities, the concentration on own educational capital can prove an effective approach to solve this problem in the long term.

Keywords: disparities, education policy

JEL CODE: I24, I25

Introduction

The leveling development disparities and inequality is a difficult issue that requires a wide range of solutions. Nevertheless, in the world of growing inequalities, focus on the equity of education can be an effective approach to resolving this problem in the long-term horizon.

On the basis of research on the literature, as well as own research, the following hypothesis was verified in this article: changing the way of managing an educational institution can be an effective tool for developing key skills desired in the modern labor market and for the future.

The article uses research methods that cover both primary and secondary data, including: literature research on compact studies, as well as journals and other publications, statistical analysis, inference, synthesis for the overall study.

High quality of education cannot be understood only as a high indicator of knowledge transfer, but above all development of key skills for the successful participation in the contemporary labor market and for the future. Educational goals based solely on the transfer of knowledge and achieving the highest rates in this respect are insufficient in the context of economic development.

In the 21st-century economy, knowledge is the most valuable resource that determines the development of the economy as a whole (Hryniewicz 2000, Domański 2001). Therefore, in the modern economy there is a great demand for highly qualified employees, as confirmed by the EU 2020 economic strategy. Skilled workers and scientists are the most sought after on the labor market and they are also best paid.

Less developed regions normally tend to have low capabilities in taking up production at a high technological level and therefore compete mainly with price, finding themselves under a strong competitive threat posed by potentially cheaper producers and manufacturers. It is worth emphasizing that price competition can only be won by those who are happy with low salaries, i.e. the poor. As a consequence of these processes, the segmentation of territorial systems is consolidated: the high segment generates innovations that allow to obtain high wages and profits as well as maintain a stable competitive advantage; technologically outdated products are produced in the low segment, with the use of small capital resources and a low-paid, poorly qualified workforce. This segment aims at achieving a comparative advantage, consisting in offering a product cheaper than the competition².

The economies of highly developed countries are based on the growing resources of well-educated people with creative and innovative skills, which is a necessary condition for technical, economic and social progress. For this reason, foreign direct investments today are located in centers of highly skilled and well-educated workforce, and the high cost of the work performed (i.e. high wages) is not a barrier.

Managing an educational institution

The current system of the functioning of educational institutions in Poland reinforces the idea of education understood only as the transfer of knowledge, thus achieving high results in

² These differences between these two approaches to market advantage were noted by Michael Porter (see e.g. Porter 2001).

knowledge tests in specific fields. There would be nothing wrong with that, were it not for the fact that such goals lead to inefficient operation of educational institutions as a whole and shift the priorities in favor of results. For the majority of educational institutions, this system can be illustrated as follows:

- Local governments, mostly managing educational institutions, focus on maintaining jobs for teachers, maintaining facilities and achieving good financial results.
- School principals are accounted for by the local government in terms of finance and employment, and for the implementation of curricula by the regional education authority
- Teachers, who want to meet the expectations of the local government, the regional education authority, the principal, parents and children, find a simple solution that a good test result will satisfy everyone - but will it really?

A large part of the resources in this management chain is absorbed by the attempt to meet the expectations of supervisors and the priority of test results, which leads to the informal shifting of goals, where the high quality of student's education and development ceases to be the objective, in favor of the mean result of the entire institution against other institutions in the region or country.

While every business model is based on profits, the obtaining of which can be either less or more costly, long-lasting or risky, the profit in the sphere of education is equipping the student with knowledge, social skills, emotional development and consequently attitudes that will help them succeed future economically and civically in the future.

The focus of educational institutions on the results of tests proves disadvantageous to the student, and thus the community, and thus the entire economy in the broader perspective.

The starting point for planning and pursuing the objectives of an educational institution is the identification of financial possibilities for a given school year. Only the knowledge of the budget determines planning and implementation of tasks. The basic task of an educational institution is to "maintain" and "survive", so, obviously, most of the tasks are directed at meeting the expectations of superiors - achieving high scores, maintaining employment and implementing curricula. The results obtained by students become a way to achieve the goals of teachers, principals and local governments. A management model like this leads to tensions and is doomed to fail because it will not be the educational institutions that are going to propel the economy in the coming years, but their graduates. These, unfortunately are often frustrated, unmotivated to act, unable to work in teams, presenting a demanding attitude towards the world and equipped with "dry knowledge" they often do not properly comprehend (Schulte-Markwort 2015). It is worth noting that the current expectations of employers towards school graduates relate primarily to the development of social and communication competence, such as foreign language skills. "General knowledge" occupies as low as the 26th place among the 33 skills and qualifications desired by employers, with "industry knowledge" ranked 29th and "diplomas and certificates" ranked 32nd. It is clear, based on the cited study results, that the investment such as education, and what the education system focuses on, is not a value appreciated by employers, thus it often becomes useless and the time devoted to it is considered wasted (Budnikowski, Dabrowski, Gąsior, Macioł 2015).

The most expected qualifications are: effective communication, openness to learning and constant development, commitment, team work skills, ability to identify and justify priorities, responsibility, ability to organize work and effective time management, flexibility and adaptability (Budnikowski, Dabrowski, Gąsior, Macioł 2015). Employers are currently inclined to work with people in possession of the above skills. At this moment, there is no obligatory program for students in Poland which would comprehensively - and in a balanced way - develop a set of cognitive, social and emotional skills so that the students can succeed in modern life. This set of skills was also widely discussed at the OECD conference on March 15, 2015 in Paris. The "Skills for Social Progress: The Power of Social and Emotional Skills" Report

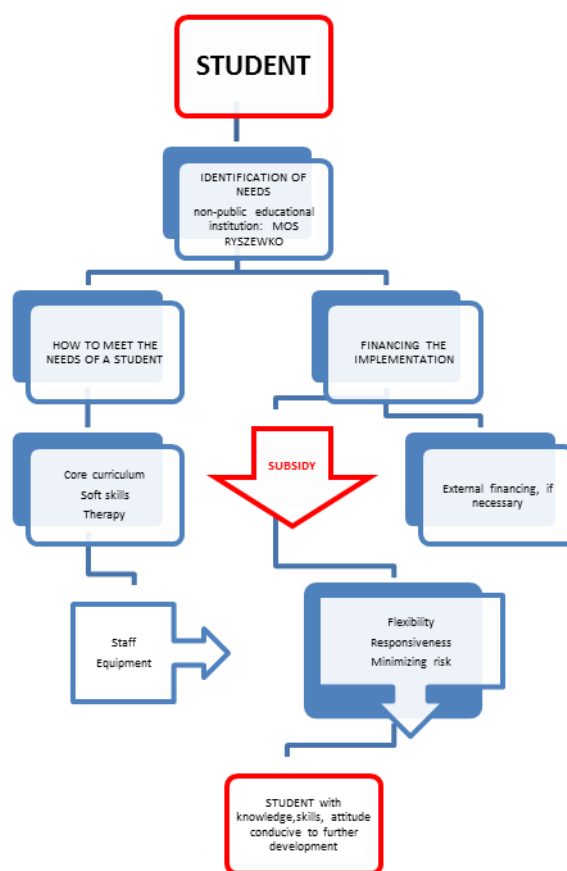
(OECD 2015) presents evidence of the impact of social and emotional skills in terms of education, labor market and social impact, describes educational practices that help support these skills and also provides a national overview of policies and programs that relate to improving social and emotional skills.

How to improve the current education system

In order for the education system to respond to the occurring changes, develop the sought-after skills and qualifications, a change at management level is required. The starting point should in that respect be a reliable identification of the student's needs in terms of multi-faceted development both in terms of knowledge and skills, and thus changes in attitude and a set of social, communication, cognitive and emotional skills. Especially important is the recognition of the student's real needs, without setting a budget limit resulting from an increase in the potential demand for staff, equipment, etc. Identifying the student's needs is the overarching and basic guideline for planning and implementing further financial and educational measures.

In the area of financing educational institutions, subsidies from the state budget are the basic contribution to the budget of each such institution, but the development of the possibility of flexible and quick expenditure management enables the implementation of educational tasks. If necessary, additional external financing opportunities are sought in the form of projects, grants, subsidies from non-public institutions and non-governmental organizations.

Figure 1. Proposed model for educational management



Source: own study.

Figure 1 shows that at the level of the identification of student needs, the institution focuses on its multi-aspect development, not only in relation to knowledge, but mostly skills - team cooperation, communication, motivation, creative search for solutions, trust, seeking infor-

mation and its effective use, conflict resolution. The student is to be prepared by the institution for success in the modern world and to be an active member of a developing society. The presented way of managing an educational institution contributes to the increased effectiveness of the potential of students, employees as well as public finances.

Conclusions and recommendations

The characteristic feature of today's strong economies is their competition driven by high quality. However, the growing economic inequalities make it difficult and restrict the ability of society to provide products and services with high added value, which ultimately determine competition in the global market. Economic problems related to unequal growth are exacerbated by social problems such as crime, drug addiction, dependence on government assistance and family breakdown. One way avoid these problems and increase the competitiveness of a knowledge-based economy is to equip today's and tomorrow's citizens with the skills and knowledge that determine economic and civic success in the economy. Unfortunately, the financing of education, and in particular the way of managing public educational institutions, lags behind and does not guarantee ever higher skills of students who, in themselves, constitute a kind of economic asset - human capital. The experience of many countries shows that increased investments in health, skills and knowledge ensure increased competitiveness of the economy through the increase in labor productivity. Education and decent wages increase employee productivity and also reduce social problems.

Improving the quality of education and learning offered above all requires changing the way the school is managed. This change should be based on the resetting of goals and focusing on student capital development. It is also necessary to reduce the size of classes, increase the flexibility of internal school finance management, enable rapid implementation of necessary activities, provide greater access to technologies for students at risk, and finally provide support for teacher education.

The determinant of a modern educational institution cannot be only the level of equipment with modern technologies, but a change in the way of transferring knowledge and development of cognitive, social and emotional skills of the students. Flexible movement along the modern changing labor marker, but also efficient functioning in a dynamically developing world, all call for educational institutions to prepare students for this changeability and dynamics. The forty-five minutes of classes should not only focus solely on passing the knowledge on a given topic, but also to inspire, motivate and support the student. Being professionals, teachers have the necessary skills and knowledge on how to do it and in many cases they could work more effectively and more efficiently, but they are often prevented by a management system that requires from them completely different attitudes and behaviors, and above emphasizes results instead of students.

Strong economies are competing with high value, not low costs. A country or region that offers a qualified workforce, modern infrastructure and a high quality of life cannot be considered an environment that is not conducive to entrepreneurship, even in spite of high taxes,. The increase in income inequality and increasing economic diversification constitute a barrier to the production of high added value products and services necessary to compete in the global market. Low wages translated not only into a low cost for the employer, but also less demand. Economic problems are exacerbated by social problems (crime, drug addiction, dependence on government assistance, family breakdown). Instead of spending public money towards productive investment, state institutions spend it on crime reduction, aid programs, etc. Prevention is almost always cheaper than treatment. If education is not invested in and managed wisely today, then it can certainly be said that the economy will incur undesirable social costs in the future as a result.

The solution to this problem in a knowledge-based economy is to equip current and future generations with the skills and attitudes of economic and civic success. There is a common

agreement that money wisely spent on education benefits not only employees, but also communities and businesses. The level of education raises income and increases productivity, while mistakes in education raise social costs.

Wise investing in education generates real, tangible results for employees, enterprises and society. For a company, not having properly educated staff means limited opportunities to compete, especially in foreign markets. If citizens do not have the necessary skills to succeed in the modern economy, they will always feel threatened by economic change.

Today, children and adolescents require a balanced set of cognitive, social and emotional skills in order to succeed in modern life. Their ability to achieve goals, collaborate effectively with others and manage emotions will be necessary to meet the challenges of the 21st century.

References

Budnikowski A., Dabrowski D., Gąsior U., Macioł S., *Pracodawcy o poszukiwanych kompetencjach i kwalifikacjach absolwentów uczelni – wyniki badania*, <http://www.e-mentor.edu.pl/artukul/index/numer/46/id/946>, (retrieved 05.06.2015).

Domański B. (2000), *Czynniki społeczne w lokalnym rozwoju gospodarczym we Polsce*, w: Hryniewicz J. T., *Endo- i egzogenne czynniki rozwoju gospodarczego gmin i regionów*, „Studia Regionalne i Lokalne”, no 2 (2).

Skills for Social Progress. The Power of Social and Emotional Skills (2015), OECD.

Schulte–Markwort M. (2015), *Burnout–Kids: Wie das Prinzip Leistung unsere Kinder überfordert*, Gebundene Ausgabe.

Monitoring Environmental Progress (MEP). A Report on Work in Progress (1995), World Bank, Washington.

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Sytuacja materialna a dobrostan osób w wieku 60+ i według ujęcia regionalnego

Streszczenie

Ze względu na zachodzące przemiany demograficzne w kierunku starzejących się społeczeństw sytuacja osób starszych nabiera szczególnego znaczenia. Gospodarcze i społeczne konsekwencje prognozowanych przeobrażeń zmuszają do refleksji nad ekonomicznymi przesłankami życia tych osób. Można bowiem postawić tezę, że większe zadowolenie z życia przekłada się na większą aktywność zawodową tej grupy. To z kolei z punktu widzenia gospodarki ma niebagatelne znaczenie. W niniejszym artykule zadowolenie z życia analizowane będzie w odniesieniu do aspektów finansowych wpływających na dobrostan Polaków. Analiza dotyczyć będzie sytuacji osób w wieku 60+ oraz będzie uwzględniała przekrój regionalny, a oparta będzie o dane pochodzące z *Diagnozy Społecznej*, GUS i ZUS.

Słowa kluczowe: osoby starsze, aktywność zawodowa, dobrostan, starzenie się, poziom życia

The financial situation and well-being of people aged 60+ and by region

Abstract

Due to the ongoing demographic changes towards aging populations, the situation of the elderly gains particular significance. The economic and social consequences of the projected transformations force the reflection on the economic rationale of life of these people. It can be assumed that increased life satisfaction translates into increased economic activity of this group. This, in turn, is of great importance from the standpoint of the economy. In this article, life satisfaction will be analyzed in relation to financial aspects affecting the well-being of people aged 60+. The analysis will focus on the aspect concerning the situation of people aged 60+ in Poland and will be based on *Diagnoza Społeczna*, GUS and ZUS data.

Keywords: the elderly (older people), economic activity, well-being, aging, quality of life

JEL CODE: I30, J14, J6

Introduction

Quality of life and living conditions are variables that directly affect life satisfaction, and they depend on one's financial situation and perceived economic security, among other things. In the face of intense social and economic changes, the issue of the standard of living is also subject to certain transformations, which nonetheless does not impact decisions regarding professional and social activity, or the so-called life choices. The evolution of life, family, education and career development models contributes to the need to redefine views on human well-being and its determinants.

The demographic changes taking place, as a result of which both the median of age and the percentage of people of post-working age are increasing, leads to the situation in which the social and economic role of older employees and people of retirement age becomes more and more important. The elderly - as employees, consumers and citizens - are becoming a social group that employers, producers (manufacturers) and the state alike are starting to appreciate, with each showing interest in the economic activity of these people. It is true that all this stems from entirely different reasons, but still, the potential and needs of people of mature age are being noticed. In this article, we put forward a hypothesis that an increase in well-

being, understood as improvement of financial living conditions, directly translates into greater economic and social activity of this social group.

Increased quality of life, and thus well-being, is an essential goal of economic and social policy, both at regional, national and EU level. Many EU documents, including the Europe 2020 strategy, focus on the need for sustainable development targeted at social inclusion, in particular of groups at risk of exclusion. Undoubtedly, people aged 60+ belong to the groups threatened by exclusion or marginalization, including in the labor market.

The well-being of people aged 60+ - conditions, components, importance

The dynamics of change is significant no matter the sphere and it triggers constant changes in the way of life, thereby transforming people's lifestyle: customs, morality, rights. Within one generation, culture undergoes rapid and often fundamental changes. This results in profound socio-organizational, cultural and moral changes caused both by new inventions, i.e. technological advancement, but also by unexpected economic crises or political factors. These phenomena, therefore, influence changes in value systems, lifestyles, life models, world views, and ultimately lead to cultural changes (Pikuła 2015, p. 14). They also influence the sense of satisfaction and happiness with life. Quality of life and standard of living, along the satisfaction resulting from it, determine the sense of well-being that undoubtedly comprises economic and non-economic factors.

The sense of well-being and life optimism are inseparable elements that accompany an individual in his or her everyday functioning. It should be agreed that these two factors differ in size depending on life situation and personality. According to J. Cieślińska (2013, p. 97), a high sense of well-being positively influences professional work, relationships with other people and overall health. People with high subjective well-being are often better evaluated (both as subordinates and superiors), achieve better results, are better equipped to handle occupational burnout and show lower absenteeism in the workplace. The sense of well-being is directly related to life optimism, which is an important individual characteristic, influencing health, good mood and life achievements in equal terms. Optimism, apart from the fact it determines individual behavior, self-esteem and attitude towards others, also determines individual effectiveness and motivates to act.

An interesting concept, albeit developed in the field of psychology, is the approach to the quality of life proposed by J. Czapiński (1992). The concept of "quality of life" equates with the category of well-being or happiness, and tends to be measured using both objective indicators based on the study of living conditions and subjective indicators dependent on personal feelings.

Well-being is directly linked to the concept of welfare. However, there is a significant difference between these two terms. While welfare focuses on material things that contribute to functioning in decent conditions and living at a satisfactory level, well-being also encompasses non-material aspects, such as health, happiness, love. Even then, welfare clearly affects well-being. When one secures their material conditions for living, they gain a sense of mental well-being, peace of mind if we will. A satisfying financial situation contributes to the reduction of conflicts, tensions and stress (Babiarz, Brudniak-Draż 2013, p. 38).

For many decades, welfare was treated in terms of affluence and material wealth, while indicators showing the pace of economic growth were an essential criterion for evaluating social progress. That approach had its obvious drawbacks, neglecting non-economic aspects

such as health, social networks or affiliation. Equally important is the fact that the increase in economic welfare does not show a linear correlation with the increase in well-being, which results e.g. from the law of diminishing marginal utility of income. Given these problems, the inclusion of economic factors only limits the perception of welfare. In the literature, attention is paid to the multidimensional character of this phenomenon, hence the precise definition is difficult and debatable. This means that the terms of welfare, well-being, living conditions and quality of life are often used interchangeably.

The concept of well-being is often associated with the term quality of life (Cieślińska 2013, p. 101). According to T. Panek (2015, p. 9), quality of life can be evaluated on the basis of objective characteristics - living conditions - and their subjective assessments. Among the various attempts to define the concept of quality of life, two views can be distinguished: Scandinavian ones focusing on objective living conditions and the American approach emphasizing the subjective well-being of individuals.

The first ways to account for financial well-being were grounded mainly in a subjective assessment of factors such as income, savings and financial security. Current research, in turn, shows when assessing their financial well-being, household members tend to refer to their current financial condition. Subjective self-reported assessment might not be the best measure of the financial condition of households as it is primarily based on a short-term perspective. Therefore, one should try and find a way for a more comprehensive assessment that would encompass all time dimensions (*Diagnoza Społeczna*, p. 75).

According to a study by J. Czapiński (2012, p. 59), the feeling of satisfaction with life and other aspects of well-being is largely determined in Poland by demographic factors (age) and social relations. As the most important factors of a successful and happy life, the respondents included: health, happy marriage, children, job, money, providence/God, integrity, friends, cheerfulness/optimism, kindness and being respected by the community, education, strong personality and freedom.

In this paper, we focus on the view that takes into account primarily material living conditions, in line with the Scandinavian approach to measuring the quality of life. Therefore, the concept of well-being is narrowed down to economic aspects and considered as financial well-being.

Financial situation as the key component of the elderly's quality of life

Financial situation is one of the most important elements reflecting the standard of living of people. For this reason studies on living conditions tend to analyze the amount of income or the possibilities of managing it. As in the case of a society classified according to different socio-demographic characteristics, also for people of mature age the issue of the ability to independently meet the needs relying on income is particularly important. Ideally, this income should be high enough so that the quality of life achieved with it would be no lower than for any other social group.

The very term quality of life is one of those concepts that proves very difficult to define and universally agree on due to the high generality applied in its interpretation. Polemics around this term concern not only various fields of social sciences, but it also raises disputes among representatives within the same field of knowledge. In the opinion of M. Wnuk and T. Marcinkowski (2012, p. 21), the reasons for this should be sought primarily in focusing on

various aspects of quality of life and in the interdisciplinary nature of this concept. Quality of life is approached in one way by economists, for whom it is a rather homogeneous term, and in another in psychology, law, medicine, pedagogy or sociology.

In economics, quality of life is perceived through the prism of indices of characteristics and indicators of quality of life, which are both measurable and comparable, taking as a reference point the so-called basket of goods and services, minimum subsistence, consumption level, scope of basic needs or social benefits (Baumann 2006, p. 165).

If one were to agree with a view that financial situation is one of the most important elements of man's life situation in general (Błędowski 2012, p. 67), this problem should definitely be taken into consideration. Especially when it concerns the elderly who often face important decisions regarding either continuation or termination of economic activity and thus reliance on allowance from the social insurance system. These decisions have an impact on the future financial situation of these people, but also on national economy as a whole, which is of considerable importance for both the economy and society given the dynamics of demographic changes.

Financial security is an important issue for every individual, but it should be presumed it becomes even more important along with the transition to an older age. It results from the smaller possibilities of improving one's situation due to the specific age-related changes in the area of health, body capacity, and sometimes slower adaptation to the changing professional environment as a result of technical progress. It is therefore necessary to have both knowledge and skills in personal finance management as well as have the opportunities and conditions to acquire them in the first place.

A healthy financial condition is a state in which a household effectively manages revenues and expenditure, is prepared for unexpected expenses, and plans its financial security in the long-term perspective. A financially healthy household should have savings for emergencies and insurance. With a view to the long-term perspective, it would be necessary to gather funds enabling personal and professional development of family members and improvement of the quality of life, constituting a form of material protection when old (*Diagnoza Społeczna* 2015, p. 75).

According to the 2015 household budget survey by GUS (Polish Central Statistical Office), the average monthly disposable income per capita in households with people aged 60+ only was PLN 1791.91 and it was 30% higher than in households composed only of people under 60 years of age. On the other hand, single-person households of people aged 60+ achieved higher incomes in comparison with both two-person households and households with at least one person aged 60+. The main source of maintaining households with people aged 60+ only was old-age or disability pensions, whereas households with people aged under 60 only were mainly supported by paid employment and self-employment (Table 1).

Tabela 1. Average monthly household income per capita by number of persons aged 60+ in 2015

	Households				
	without persons aged 60+	with at least one person aged 60+	with persons aged 60 + only		
			total	including:	
				single-person	two-person (both aged 60+)
TOTAL					
Available income in PLN	1373,53	1407,47	1791,91	1811,38	1782,10
Available income in %	100,0	100,0	100,0	100,0	100,0
including: disposable income	96,9	95,9	94,3	94,3	94,5
Income from paid employment	71,0	27,8	8,4	6,3	9,9
Income from self-employment outside the farm in privateuse	11,6	3,8	2,1	1,1	2,8
Income from farm	2,9	3,8	0,9	1,2	0,8
Income from property	0,1	0,0	0,1	0,1	0,1
Income from real estate rental	0,5	0,4	0,4	0,5	0,3
Income from social benefits	8,7	61,5	84,8	85,3	84,4
Income from social insurance benefits	5,1	59,0	83,7	83,8	83,6
including: old-age and disability pensions	3,7	54,2	77,3	70,0	82,7
Income from other social benefits	3,6	2,5	1,1	1,5	0,8
Other income	5,3	2,7	3,3	5,6	1,7

Source: GUS (2016), *Badanie budżetów gospodarstw domowych w 2015 roku* [2015 Household Budget Survey], Warsaw.

The average monthly expenses per capita in households of people aged 60+ were PLN 1449.97 and were 35% higher than in households composed of younger people only. The share of average monthly expenditure per capita in disposable income in households of people aged 60+ was 81.5%, and 79.0% in households with people aged under 60 (*Informacja o sytuacji osób starszych...* 2016, pp. 9 -10).

Households with people aged 60+ only, compared with households without the elderly, more often assessed their financial situation as bad or rather bad. At the same time, the highest percentage of people declaring bad financial situation was in the group of single-person households of people aged 60+. Considering the criterion of the place of residence, it can be noticed that the residents of villages more often assess their financial situation negatively, with the highest percentage of people rating it as bad in the group of single-person households of people aged 60+ (Table 2).

Table 2. Subjective assessment of household financial situation by number of persons aged 60+ in 2015

Item	Households				
	without persons aged 60+	with at least one person aged 60+	with persons aged 60+ only		
			Total	including:	
				single-person	two-person (both aged 60+)
in % of households					

TOTAL					
Self-reported assessment of household financial situation	100,0	100,0	100,0	100,0	100,0
Very good and rather good	32,4	23,4	23,4	17,9	30,9
Average	52,6	59,9	58,9	57,5	60,8
Rather bad and bad	15,0	16,6	17,7	24,6	8,2
CITY					
Self-reported assessment of household financial situation	100,0	100,0	100,0	100,0	100,0
Very good and rather good	35,2	25,6	26,1	20,3	34,2
Average	50,2	57,9	57,6	57,0	58,4
Rather bad and bad	14,6	16,5	16,3	22,7	7,4
COUNTRY					
Self-reported assessment of household financial situation	100,0	100,0	100,0	100,0	100,0
Very good and rather good	26,0	19,4	15,9	11,2	21,7
Average	57,9	63,6	62,4	58,9	67,6
Rather bad and bad	16,0	16,9	21,7	29,9	10,6

Source: GUS (2016), *Badanie budżetów gospodarstw domowych w 2015 roku* [2015 Household Budget Survey], Warsaw.

Financial well-being by region

Recently, measures of quality of life have also been used to determine the standard of living for residents of territorial units smaller than the country. This is the result of the observation that the living conditions and opportunities for the development of the communities of individual regions differ significantly despite concerning the same country (Polak 2016, p. 70).

The analysis of well-being at regional level indicates the diversity of individual financial conditions. The data contained in Table 3 shows that objective indicators of quality of life reflecting material living conditions were best presented in the following Polish regions: Mazowieckie, Małopolskie, Dolnośląskie, Pomorskie and Wielkopolskie. In these provinces, this indicator exceeded the value of the national index. The lowest values in this respect were observed for Warmińsko-Mazurskie. On the other hand, the economic and personal security rate was the highest in Podlaskie and the lowest in Zachodniopomorskie. Then, the indicators of subjective feeling regarding living conditions indicate that the inhabitants of Lubuskie value their financial situation the most, while the economic security is best rated by the residents of Wielkopolskie.

Table 3. Financial well-being indicators by region in 2011⁴⁰

Province	Indicators of quality of life – objective approach		Indicators of quality of life – subjective approach	
	material living condition	economic and personal security	material living condition	economic and personal security
Dolnośląskie	73,6	81,3	43,8	66,5
Kujawsko-pomorskie	70,3	83,3	44,4	69,3
Lubelskie	65,8	81,9	43,9	67,1
Lubuskie	71,6	81,7	46,8	68,9
Łódzkie	70,1	81,5	42,8	67,4

⁴⁰ The presented indicators are only a partial illustration of factors influencing quality of life and are limited to aspects related to material living conditions and economic security.

Małopolskie	73,7	84,3	44,8	68,7
Mazowieckie	76,6	84,4	44,6	67,8
Opolskie	70,7	82,2	45,2	70,1
Podkarpackie	68,4	83,5	44,4	69,4
Podlaskie	72,7	86,9	44,1	69,3
Pomorskie	73,6	81,4	45,0	69,4
Śląskie	74,5	81,6	45,1	67,4
Świętokrzyskie	68,1	82,2	43,4	67,2
Warmińsko-mazurskie	66,9	81,4	45,6	69,7
Wielkopolskie	73,3	81,2	44,2	70,8
Zachodniopomorskie	71,1	78,5	44,0	65,9
Poland	72,3	82,4	44,5	68,3

Source: Panek T. (2015), *Jakość życia gospodarstw domowych w Polsce w układzie wojewódzkim*, Zeszyty Naukowe – Instytut Statystyki i Demografii no 46, pp. 59–60.

The general indicator of quality of life in both 2013 and 2015 was the highest in Małopolskie. The biggest change observed concerns Warmińsko-Mazurskie, which moved from the 13th place in 2013 up to the 5th place in 2015. Analyzing only the material wealth of the residents of individual provinces in 2015, Warmińsko-Mazurskie and Kujawsko-Pomorskie come out on top (Table 4).

Table 4. Overall indicator of quality of life in 2013 and 2015 and material wealth indicator in 2015 by province

Province	2013 ranking	2015 ranking	Province	Material wealth
Małopolskie	1	1	Warmińsko-mazurskie	0,819
Wielkopolskie	7	2	Kujawsko-pomorskie	0,819
Pomorskie	2	3	Śląskie	0,713
Zachodniopomorskie	3	4	Lubuskie	0,696
Warmiński-mazurskie	13	5	Pomorskie	0,668
Opolskie	5	6	Dolnośląskie	0,653
Mazowieckie	6	7	Łódzkie	0,625
Śląskie	4	8	Mazowieckie	0,618
Dolnośląskie	10	9	Wielkopolskie	0,591
Podlaskie	9	10	Lubelskie	0,524
Lubuskie	8	11	Zachodniopomorskie	0,502
Kujawsko-pomorskie	11	12	Podkarpackie	0,494
Podkarpackie	15	13	Małopolskie	0,477
Świętokrzyskie	16	14	Świętokrzyskie	0,469
Lubelskie	12	15	Opolskie	0,430
Łódzkie	14	16	Podlaskie	0,297

Źródło: *Diagnoza społeczna 2015. Warunki i jakość życia Polaków*, Czapiński J., Panek T. (ed.), Rada Monitoringu Społecznego, Warsaw, pp. 126, 428.

The role of financial well-being in raising the economic activity of elderly people

Bearing in mind the demographic changes forecasted by demographers towards depopulation, population aging and the decline in the working-age population, various alternatives should be considered that could at least limit the possible negative consequences of these changes. Possible economic and social implications of these transformations necessitate analyzing the effects of activities promoting employment support programs for the soon-to-be-retired and their extending economic activity. This is certainly not a simple task to accomplish, but there seems to be no better alternative. On the other hand, striving to improve personal financial well-being and taking measures to secure income for the time of economic “deactivation” is increasingly the subject of interest for people who expect difficulties in

meeting needs based on retirement income only. This may, therefore, affect the possibilities of remaining active economically due to individual motivational factors.

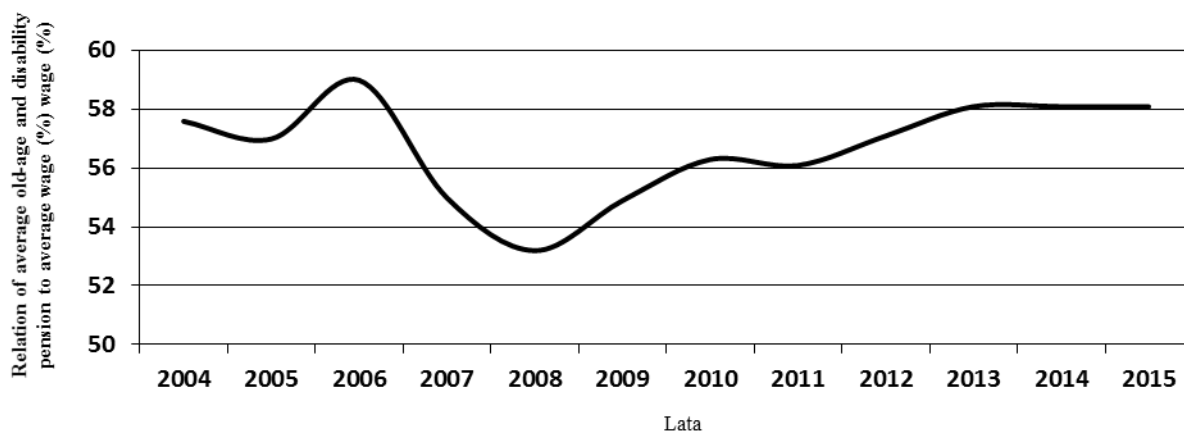
If we were to assume that the basic barrier to achieving a potential standard of well-being is poor economic conditions that make it difficult to satisfy basic life needs, economic activity will be one of the obvious possibilities to improve material living conditions. Well-being is reactive, which means it changes along with living conditions. After satisfying the needs and achieving a potential acceptable standard, well-being starts to fulfill the role of a resource conditioning further economic growth (Czapiński 2012, p. 78).

A similar view is shared by B. Fura and M. Fura, who argue that one of the main factors influencing the prolongation of economic activity is the financial situation of pensioners, shaped by the amount of social benefits and to a lesser extent by additional income. This issue is of particular importance in the case of single-person households (Fura, Fura 2011, p. 326). A longer period of economic activity directly influences the amount of the future retirement benefit, the reason for which extending the period of activity can be twice as beneficial for the employee. Single-person households, deprived of support from the family or institutions established for this purpose, may find themselves in a situation of continuing employment due to the risk of poverty.

B. Fura and M. Fura, based on the results of research carried out on a sample of 360 employees of the industrial and service sector from Podkarpackie Province, defined the socio-economic determinants of attitudes towards work in retirement. As determinants of attitudes towards taking up employment in retirement, the respondents mentioned the amount of earnings, assessment of household income and security of household income in the future. The highest value of the Cramér's V convergence coefficient was noted for the amount of earnings and the security of household income in the future (Fura, Fura 2011, pp. 326, 333).

The study mentioned above indicates that the issue of income is crucial when it comes to continuing employment in retirement. Thus, the average old-age and disability retirement pension paid by ZUS (Polish Social Insurance Institution) in relation to the average wage shows what kind of average income change potential retirees must account for. The data contained in Figure 1 shows that since 2013 this ratio is 58.1%, whereas the lowest rate was recorded in 2008 (53.2%). Pensioners must therefore function on the basis of income lower by approx. 40% from the average income from employment. Nevertheless, due to the specific family situation of people of retirement age, this group usually does not incur costs related to raising children, which significantly reduces expenses.

Figure 1. Relation of average old-age and disability pension paid by ZUS to average wage (%) in 2004-2015



Source: ZUS (2016), *Ważniejsze informacje z zakresu ubezpieczeń społecznych*, Warsaw, p. 34.

According to the data of the cross-national panel database of microdata on health, socio-economic status and social and family networks (SHARE 2014, p. 27) collected in 2010-2012, pensioners were a group for whom the probability of financial difficulties was lower than for people who were active in the labor market. This means an improvement in the self-reported assessment of the financial situation after retirement compared to the 2006-2007 surveys. In addition, as shown by the cited studies, at least in the first years of retirement, pension benefits as a substitute income provide, according to the respondents, sufficient material support, although in most cases they are lower than income from employment.

Conclusions

Financial situation undoubtedly plays an important role in shaping the well-being of people regardless of age. However, the elderly - due to the specific decline in economic activity with age and functioning based on retirement benefits as the main source of income and the growing expenses in the area of health - find themselves in a situation in which their personal financial circumstances become more important. This sometimes leads to making decisions about continuing employment even despite the right to pension benefits, which may be all the more prevalent in single-person households. Obviously, there are also other factors that influence the decision to continue economic activity, such as the desire to be active and productive or the potential fear of professional passivity.

Economic activity and employment rates in Poland in the group of people aged 55-64 are clearly on the rise. According to Eurostat, the activity rate in this age group in 2015 was nearly 47%, while the employment rate was at 44%, with an increase of around 17 percentage points in both cases over a time period of ten years. In comparison with the EU average, Poland's ratios are on average lower by 10 percentage points, although a clear improvement should be emphasized accounting for the upward trend in this respect. This direction of change also promises an opportunity to improve the financial well-being of elderly people, due to both greater economic activity and the resulting increase in potential retirement income. In addition, the economic dimension of such changes remains significant. In light of the ever-clearer shortcomings on the side of labor supply (which is obviously closely related to the demographic transformations of modern societies), prolonging economic activity becomes a necessity.

While it is true that overestimating the financial situation in general well-being can be a dangerous simplification, one cannot fail but agree with the observation made by John D. Rockefeller, who said: "The poorest man I know is the one who has nothing but money". Even then, however, better material living conditions positively influence the sense of well-being, which in relation to the elderly determines the standard of living in their autumn years.

References

- Babiarz M. Z, Brudniak-Drąg A. (2013), *Dobrostan a dobrobyt ponowoczesnej rodziny*, w: Babiarz M., Springer M. (ed.), *Zdrowie i dobrostan*. T. 4: Dobrostan i społeczeństwo, Wydawnictwo Naukowe NeuroCentrum, Lublin.
- Baumann K. (2006), *Jakość życia w okresie późnej dorosłości –dyskurs teoretyczny*, „Gerontologia Polska”, vol. 14, no 4.
- Błędowski P. (2012), *Sytuacja materialna seniorów*, in: *Raport na temat sytuacji osób starszych w Polsce*, Warsaw, http://senior.gov.pl/source/raport_osoby%20starsze.pdf
- Cieślińska J. (2013), *Poczucie dobrostanu i optymizmu życiowego kadry kierowniczej placówek oświatowych*, „Studia Edukacyjne”, no 27.
- Czapiński J. (1992), *Psychologia szczęścia: przegląd badań teorii cebulowej*, Akademos, Warsaw-Poznań.
- Czapiński J. (2012), *Ekonomia szczęścia i psychologia bogactwa*, „Nauka”, no 1.

Czapiński J., Panek T. (ed.), *Diagnoza społeczna 2015. Warunki i jakość życia Polaków*, Rada Monitoringu Społecznego, Warsaw.

Fura B., Fura M. (2011), *Aktywność zawodowa na emeryturze szansą na niwelowanie społeczno-ekonomicznych nierówności międzygeneracyjnych*, „Nierówności społeczne a wzrost gospodarczy”, no 19.

GUS (2016), *Badanie budżetów gospodarstw domowych w 2015 r.*, Warsaw.

GUS (2016), *Informacja o sytuacji osób starszych na podstawie badań Głównego Urzędu Statystycznego*, Warsaw.
http://stat.gov.pl/files/gfx/portalinformacyjny/pl/defaultaktualnosci/6002/1/1/1/informacja_o_sytuacji_osob_starszych.pdf.

Panek T. (2015), *Jakość życia gospodarstw domowych w Polsce w układzie wojewódzkim*, „Zeszyty Naukowe – Instytut Statystyki i Demografii”, no 46.

Pikuła N.G. (2015), *Poczucie sensu życia osób starszych. Inspiracje do edukacji w starości*, Impuls, Kraków.

Polak E. (2016), *Jakość życia w polskich województwach – analiza porównawcza wybranych regionów*, „Nierówności społeczne a wzrost gospodarczy”, no 48.

SHARE (2014), *Portret generacji 50+ w Polsce i w Europie. Wyniki badania zdrowia, starzenia się i przechodzenia na emeryturę w Europie*, Instytut Badań Edukacyjnych, Warsaw.

Wnuk M., Marcinkowski J.T. (2012), *Jakość życia jako pojęcie pluralistyczne o charakterze interdyscyplinarnym*, „Problemy Higieny i Epidemiologii”, no 93(1).

ZUS (2016), *Ważniejsze informacje z zakresu ubezpieczeń społecznych 2015r.*, Warsaw.

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Innowacyjne produkty turystyczne na obszarze metropolitalnym Krakowa – próba charakterystyki

Streszczenie

Celem artykułu jest zaprezentowanie wybranych innowacyjnych produktów turystycznych zlokalizowanych na obszarze metropolitalnym Krakowa. W artykule wyjaśniono istotę pojęcia innowacyjności, produktu innowacyjnego oraz scharakteryzowano krakowski obszar metropolitalny. Artykuł przygotowano wykorzystując metodę *desk research*. W opracowaniu wykorzystano wybrane pozycje literatury w zakresie: turystyki, obszarów metropolitalnych, produktów turystycznych. Wykorzystano także dokumenty strategiczne dotyczące krakowskiego obszaru metropolitalnego, dane statystyki krajowej oraz regionalnej. W części końcowej opracowania scharakteryzowano wybrane produkty turystyczne, z których skorzystać mogą mieszkańcy (turyści) obszaru metropolitalnego Krakowa.

Słowa kluczowe: turystyka wiejska, agroturystyka, innowacyjność, produkty turystyczne, obszar metropolitalny

Innovative tourism products in the metropolitan area of Krakow – an attempt of characterization

Abstract

The aim of the article is to present selected innovative tourism products located in the metropolitan area of Krakow. The article also presents the essence of the concepts of innovativeness and innovative product and it characterizes Krakow Metropolitan Area. The article is based on the desk research method and selected publications on tourism, metropolitan areas and tourism products. It makes references to strategic documents concerning the metropolitan area of Krakow and includes national and regional statistics. The final part of the article presents selected tourism products which can be used by the inhabitants (tourists) of the metropolitan area of Krakow.

Keywords: rural tourism, agritourism, innovativeness, tourism products, metropolitan area

JEL CODE: A10

Introduction

Tourism these days is not only an important source of income, but also a phenomenon of a social nature that determines the identity of a place. It influences the development and maintenance of infrastructure, but also the quality of life of residents. It is a complex phenomenon, and the effect of its development has various implications in the social, economic and environmental dimensions. Metropolitan areas offer a wide range of diverse tourism products. These products enable residents (tourists) to achieve personal, cultural, business or other goals. Panasiuk (2015) stressed that it is important to develop, create and promote innovative tourism products located within the metropolitan area as it brings social and economic benefits, in addition to having a positive effect on other industries.

This study is to present the essence of innovation in tourism, and to describe selected examples of innovative tourism products located within Krakow Metropolitan Area (KMA). The

paper used the desk research method and it relied on a traditional analysis of existing and strategic documents that served to establish, verify and present facts. The choice of methods was determined by the availability of source materials, some of which are secondary (industry reports and the literature on innovation and tourism).

Krakow Metropolitan Area

The metropolitan area of Krakow is located in the central part of Małopolska Province. It covers the urbanized area around the capital of Krakow and the satellite centers with well-developed functional economic and social links, and with a well-developed communication infrastructure.

Krakow Metropolitan Area (abbreviated as KMA) is one of the twelve metropolitan areas in Poland⁴¹. It was designated on the basis of the Spatial Development Plan of Małopolska Province, adopted under Resolution No. XV/174/03 of 22 December 2003 by the Sejmik of Małopolska Province⁴². The incorporation of communes (municipalities, Polish: *gminy*) falling within the extent of KMA was based on the agreement *Akces do obszaru metropolitalnego* [Access to the metropolitan area] signed by the representatives of these communes. The document in question constituted the expression of the will of each of the communes, i.e. it was not imposed by an administrative order.

The KMA geographic range covers the area of 51 communes⁴³, located approximately 50km from the center of Krakow (Figure 1). Regarding the territorial units of the three-level administrative division, KMA covers the city of Krakow - the city with county (Polish: *powiat*) rights - including the neighboring communes: Krakow (county commune), Wieliczka and Myślenice, almost all eastern county communes: Proszowice (save for Radziemice) and Bocheń (save for Lipnica Murowana), part of Wadowice and one commune from the following counties on the south-west: Olkuski (Trzyciąż) and Miechów (Gołcza). It should be emphasized that the entire area of the former Krakow Province is also included within KMA. The western territories of KMA's northern extreme border with the provinces Świętokrzyskie and Małopolska. In addition, six communes located on KMA's south-western edge are part of the country's frontier zone, demarcated on the basis of the definition contained in Regulation (EC) No. 1931/2006 of the European Parliament and of the Council of 20 December 2006 (assuming commune is the the smallest administrative unit).

⁴¹ *Raport o polskich metropoliach*. 2015. Based on: www.pwc.pl (retrieved 14.10.2016).

⁴² <http://bip.malopolska.pl/umwm/Article/get/id,748635.html> (retrieved 15.10.2016).

⁴³ KOM includes: - Krakow – city with county rights; Bochnia County (communes: urban - Bochnia, mixed - Nowy Wiśnicz, rural - Bochnia, Drwinia, Łapanów, Rzeszawa, Trzyciana, Żegocina), Krakow County (communes: mixed - Krzeszowice, Skąpa, Skawina, Słomniki, Świątniki Górne, rural - Czernichów, Igołomia, Wawrzeńczyce, Iwanowice, Jerzmanowice, Przegonia, Kocmyrzów, Luborzyca, Liszki, Michałowice, Mogilany, Sułoszowa, Wielka Wieś, Zabierzów, Zielonki), Miechów County (communes: rural - Gołcza), Myślenice County (communes: mixed - Dobczyce, Myślenice, Sułkowice, rural - Lubień, Pcim, Raciechowice, Siepraw, Tokarnia, Wiśniowa), Olkusz County (communes: rural - Trzyciąż), Proszowice County (communes: mixed - Proszowice, rural - Koniusza, Koszyce, Nowe Brzesko), Wadowice County (communes: mixed - Kalwaria Zebrzydowska, Wadowice, rural - Brzeźnica, Lanckorona, Stryszów), Wieliczka County (communes: mixed - Niepołomice, Wieliczka, rural - Biskupice, Gdów, Kłaj).

Figure 1. Krakow Metropolitan Area – geographic scope



Source:

https://pl.wikipedia.org/wiki/Krakowski_Obszar_Metropolitalny#/media/File:Krakowski_Obszar_Metropolitalny.png

In terms of area, KMA is one of the largest in Poland, second only to the metropolitan areas of Warsaw and Lublin (<http://krakow.stat.gov.pl> ...). Within KOM limits there are 718 settlements (17 towns and 685 villages). Taking into account the functional types of communes, as indicated by Więclaw-Michniewska (2011), it should be noted that the majority of KMA area is made up of well-urbanized and multi-functional areas. An important role in the functional structure of KMA is also performed by communes with mixed functions, which are located mainly in the eastern part of the area. In turn, communes with a dominant agricultural function are located mainly in the northern part. The area of KMA (i.e. 406,511 ha) constitutes almost 27% of the total area of Małopolska Province. KMA residents (Table 2) make up 44.5% of the population of Wielkopolska Province (*Krakowski Obszar Metropolitalny ...* 2013).

Table 1. Krakow Metropolitan Area - basic demographic data

Selected statistical data	2012	2013	2014
Population	1493042	1498499	1505607
Population per 1km²	367	369	370
Women per 100 men	109	109	109
Population of			
Pre-working age	268889	269469	270465
Working age	953317	950075	948081
Post-working age	270836	278955	287061
Live births	15305	15112	15415
Deaths	13908	13664	13452
Natural growth	1397	1448	1963

Source: Own study based on: www.gus.pl, (retrieved 08.11.2016).

In 2012-2014, the population of Krakow Metropolitan Area systematically grew, from 1,493,042 in 2012 to 1,505,607 in 2014). The average density of the KMA population ranged from 367 to 370 persons per km². Women predominate in KMA, with there being 109 women per 100 men (in 2012-2014). Based on the data contained in Table 2, the highest number of pre-working population⁴⁴ was in 2014 (270,465 people), and the lowest in 2012 (268,889 people). As regards working age, the situation is the opposite. In 2012, the number of working-age people⁴⁵ was 953,317, and 5,236 less in 2014. In terms of post-working age⁴⁶, the least numerous population of post-working age was in 2012 (270,836 people).

In the area of KMA, most live births were in 2014 (15,415), and least in 2012 (15,305). Most deaths in KMA were in 2012. In subsequent years, the trend was downward. Natural increase⁴⁷ was at 1,397 (in 2012) and went up to 1,936 (2014). The average life expectancy in 2014 was 74.6 years for men and 80.7 years for women (www.gus.pl).

According to Więclaw-Michniewska (2011), socio-economic diversification of communes falling within the scope KMA may affect both the interpretation of the concept of "metropolitan area", general acceptance of the idea of regional development, and decisions taken by individual communes, which are not necessarily sensitive to metropolitan needs.

As part of the European Observation Network for Territorial Development and Cohesion (ESPON) project investigating urban areas in the European Union, criteria for assessing metropolitan European growth areas (MEGAs) were developed⁴⁸. Of all Polish cities, eight have been included in the classification, of which only Warsaw classified as a potential MEGA, and the remaining seven - i.e. Poznań, Krakow, Łódź, Katowice, Gdańsk, Szczecin and Wrocław – were classified as weak MEGAs (Kaczmarek, Miłkowska 2010, p. 168.). In turn,

⁴⁴ Pre-working age: the age at which people have not yet reached the capacity to work, i.e. a group aged 0-17 (www.gus.pl, retrieved 20.11.2016).

⁴⁵ Working age: age of work capacity, i.e. 18-64 for men 18-59 for women (www.gus.pl, retrieved 20.11.2016).

⁴⁶ Post-working age: the age at which people usually terminate their work, i.e. 65 and over for men, 60 years and over for women (www.gus.pl, retrieved 20.11.2016)

⁴⁷ Natural increase: the difference between the number of live births and the number of deaths. A positive value means the number of live births exceeding the number of deaths, whereas a negative value - the reverse. If there is a negative value, we then speak of natural decrease. Natural increase differs from real increase by the migration balance.

⁴⁸ Among the international hierarchies of urban agglomerations and metropolitan areas in Europe, the ESPON classification (European Spatial Planning Observation Network) deserves particular attention. It distinguishes the following categories of areas in MEGAs (Metropolitan European Growth Areas): global nodes, European locomotives and strong/potential/weak MEGAs.

Koncepcja Polityki Przestrzennego Zagospodarowania Kraju [Polish National Spatial Development Policy]⁴⁹ and *Strategia Zrównoważonego Rozwoju Polska 2025* [Strategy for Sustainable Development Poland 2025] indicates that KMA, as a separate functional structure, can be considered in terms of its own economic potential

http://krakow.stat.gov.pl/vademecum/vademecum_malopolskie/portret_obszaru_metropolitalnego/krakowski_obszar_metropolitalny.pdf). The metropolitan nature of this area, higher concentration of potential customers of products and services, access to social and technical infrastructure, have all created specific conditions for the development of entrepreneurship in the metropolitan area of Krakow. KMA may, therefore, be considered in terms of its own economic potential. A special role in the economy of this area is, among others, trade and the science park sector.

When analyzing the number of newly established entities within KMA, over 205,000 were registered in 2014, which was more than half (55.2%) of all entities registered in Małopolska Province. Within KMA, the number of business entities in 2011 -2015 was systematically growing. The increase in the total number of entities in KMA was mainly owed to the private sector, which increased by almost 11% between 2011 and 2015.

In spatial terms, the largest increase in the number of entities in 2011-2015 was recorded in the following communes: Zielonki, Michałowice and Kocmyrzów, Luborzyca (<http://krakow.stat.gov.pl/files/gfx/krakow/pl/>). Apart from Krakow, with 63.2% of all entities, the largest number of entities was registered in the following communes: Skawina, Wieliczka and Myślenice. The smallest number of registered entities was recorded in the following communes: Nowe Brzesko, Sułoszowa, Trzciana, Żegocina, Koszyce, Raciechowice, Gołcza, Drwinia and Trzyciąż. Almost 65% of business entities registered within KMA operated in urban communes and approximately 16% in rural communes.

The private sector made up as many as 98.5% of all entities operating within KMA. In spatial terms, the largest share of the private sector was observed in the following communes: Mogilany, Krakow, Zielonki, Wieliczka and Zabierzów. In turn, the smallest share was recorded in: Żegocina, Drwinia, Łapanów. Individuals conducting business activity accounted for almost 70% of all entities registered in KMA

When analyzing the entrepreneurship of the metropolitan area of Krakow (i.e. the number of business entities registered per 10,000 people), it turned out there were 1,365 such entities in KMA. The eastern areas of KMA ranked poor in terms of entrepreneurship, with best results in this respect achieved by communes located in the vicinity of the city of Krakow. The highest number of registered entities per 10,000 people was in Krakow, Zielonki, Kalwaria Zebrzydowska and Mogilany; the lowest in the communes of Koniusza, Drwinia and Sułoszowa. "The influence of the metropolis on changes and economic growth in the space of the surrounding region is manifested, among others, by the increased importance of services and the development of units offering specialized services. A strongly developed service sector, ensuring efficient business service, among other things, is one of the main characteristics of metropolitan areas" Więclaw-Michniewska (2011, p. 34). 161,800 business entities were registered in the KMA service sector in 2015, i.e. almost 79% of the total, in which entities from the following subsectors prevailed: trade (approx. 31%), professional, scientific and technical activity (approx. 15%), and transportation and storage (approx. 8%). Apart from Krakow, the highest share of entities registered in the service sector was observed in the commune of Zielonki and the lowest in Trzciana.

Much attention is paid to special economic zones (SEZs), administratively separated areas where potential investors can conduct business on preferential terms. This instrument is mainly to speed up the development of a given region by attracting new investments and promot-

⁴⁹ *Koncepcja Zagospodarowania Przestrzennego Kraju* (2005), Wydawnictwo KZKP, Warsaw.

ing job creation⁵⁰. Within KMA, there are two out of 14 SEZs operating in Poland: *Krakowski Park Technologiczny- Krakowska Specjalna Strefa Ekonomiczna* [Krakow Science Park - Krakow Special Economic Zone] (town and commune of Bochnia, Krakow, Dobczyce, Gdów, Niepołomice, Skawina, Słomniki, and Zabierzów) and *Katowicka Specjalna Strefa Ekonomiczna* [Katowice Special Economic Zone] (Myślenice).

Analyzing the tourism sector, it turns out that a total of 60% of tourists, i.e. almost 2.5 million, used accommodation services in KMA in 2015, with 353 tourist accommodation establishments (i.e. 24.4% of all such facilities in Małopolska Province) conducting tourism activities in the same area the same year. In the structure of tourism accommodation facilities located within KMA, hotels predominate (almost 53%), against 34,600 collective accommodation facilities located in the territory of KMA in 2015. Analyzing the tourism sector, the following indicators are important: density of accommodation base expressed in the number of beds per 1km² and the number of beds per 1 tourism accommodation facility. For KMA, the accommodation base density rate was 8.5 in 2015 (higher than for Małopolska in general, where it was 6.0). On the other hand, the accommodation indicator per 1 tourism accommodation facility was 98.2 for KMA and it was higher than for Małopolska in general.

Analyzing protected areas located within the metropolitan area of Krakow, their total area was 101.100ha, which accounts for 12.6% of all protected areas in Małopolska. The largest percentage of protected areas in 2015 was observed in the following communes: Nowy Wiśnicz, Krzeszowice, Łapanów and Lubień. In addition, there were 1,062 natural monuments in KMA in 2015, which accounted for 50.1% of the total number of monuments in Małopolska. In turn, the area of national parks included in the metropolitan area of Krakow was 2,100ha in 2015, with landscape parks occupying 49,100ha the same year. Four communes - Wielka Wieś, Sułoszowa, Skała and Jerzmanowice-Przeginia - share the Ojcowski National Park, famous for the Castle in Pieskowa Skała and the Prądnik Valley, among other things. It is also worth noting that KMA contains a wealth of places and objects of cultural and historical significance, such as historical monuments, salt mines in Wieliczka and Bochnia, the Wawel Royal Castle, Krakow's Old Town and Kazimierz, as well as the architectural and landscape complex in Kalwaria Zebrzydowska. In addition, there are monuments entered into the registers of the Polish National Heritage Institute, including the Wawel Hill, Krakow's Old Town and a number of churches. Various cultural thematic trails run through Krakow Metropolitan Area, e.g. the salt trail with historic mines and facilities in Bochnia, Wieliczka and Niepołomice, the Trail of the Eagles' Nests, wooden architecture trail, the Małopolska Trail of Fortresses and Castles, etc.

Innovativeness and innovative tourism products

Innovative activities concern the economy as a whole, but they can also be analyzed in relation to the tourism sector alone. Focusing on tourism entities, it should be noted that they are innovative when the owner can effectively create or develop new products and effectively promote them (Krzyżanowska 2013, pp. 9-19). As pointed out by Krzyżanowska (2013), a rational owner should have the ability to continuously raise funds (e.g. EU subsidies) in order to develop and introduce new technologies and organizational methods necessary to implement ever-changing development goals.

The very term "innovation" (from the Latin *innovatis*) was originally introduced by Schumpeter, who referred it to five aspects: a) introduce a new product to the market, or give the existing product new innovative features to; b) introduce a new method (technology and technique) of production that has yet to be tried in a given sector of industry; c) establish a new market, i.e. one in which a given product has been previously absent, regardless of

⁵⁰ Act of 20 October 1994 on Special Economic Zones (Journal of Laws of 2007 No. 42, item 274 and of 2008 No. 118, item 746, as amended).

whether the market itself has been there before or not; d) acquire a new source of raw materials or semi-finished products; e) introduce a new structure of work organization (5) (Prahalad and Krishnan 2010). Schumpeter treated innovation as a technological, organizational and behavioral change. Drucker and Rogers, meanwhile, were in favor of a broad understanding of innovation, both as a process and as an effect. According to them, innovations permeate all spheres of activity, constituting a sort of idea, practice, mode of operation, way of running a business or a firm. These can be changes in the product design, marketing and promotion policy, price, customer service, or changes in organization and management methods (Krzyżanowska 2013). Innovations imply creating or developing something new, giving something new value, introducing a reform by the organization (Rogoziński 2004, Mizgajski 2002, Winnicka-Popczyk 2015) or applying new knowledge in technological and production processes (Quintane et al. 2011). Innovations are therefore an important impetus in the process of business development and may concern elements such as: company vision and mission, goals and strategy, physical features, product manufacturing or production method, marketing. Innovations arise from human knowledge and creativity, and their use depends on other people or use (Krzyżanowska and Sikorska-Wolak 2010, Tabor 2010). Innovation implies a certain change, although not every change deserves to be called innovation (Kopaliński 2006, p. 547). The literature distinguishes four types of innovation: product, process, marketing and organizational. According to the Oslo Manual (2015, pp. 52-56), product innovation is the introduction of a product or service that is new or improved in terms of its features or applications. This type of innovation includes significant improvements in terms of technical specifications, materials and components, embedded software, ease of use or other functional features. Process innovation, meanwhile, is an innovation within a given process and concerns mainly implementing a new or significantly improved production or delivery method. This category includes significant changes in technology, devices and/or software. The purpose of these innovations is to reduce the unit costs of production or delivery, improve the quality, manufacture (produce) or supply new or significantly improved products. The third type of innovation is marketing innovation, aimed at implementing a new marketing method that involves significant changes in the design/structure of the product or in the packaging, distribution, promotion or pricing strategy. Establishing new markets, better meeting the needs of customers or new positioning of the company's product on the market with a view to increasing sales are the main goals to be achieved by these innovations. Organizational innovation is another type of innovation pursued by economic operators. It involves the implementation of a new organizational method in the rules of operation adopted by the company in the organization of the workplace or in relations with the environment. These innovations are introduced to achieve better results by reducing administrative costs or transaction costs and increasing job satisfaction (and thus productivity).

According to Krzyżanowska (2013), the concept of innovation is very capacious. Innovation can be defined in both broad and narrow terms. An example of an innovation in broad terms is a new technological process or the creation of a new product or service. In the broad sense (Krzyżanowska 2013, p. 16), "an innovation is not only a new product or a technological process, but also e.g. the establishment of a new market". From the standpoint of the classification of innovations and the policy of their support, the definition of innovation presented by the OECD is of particular significance. The term "innovation" means the introduction to production and market of new production methods or significantly improved products (product innovations), the use of new production methods (process innovations), the implementation of innovative organizational solutions and the implementation of innovative marketing

activities, where these products and processes must be new, at least for the company that is introducing them [...]"⁵¹.

As mentioned earlier, the main division of innovation distinguishes product and process innovations, among the other two. Product innovations in tourism mainly relate to tourism products (Hjalager 2002). With respect to the tourism industry, Hjalager (2010) lists the following five types of innovation in tourism: product, classical process, information, management and institutional innovations.

The first type is product innovation, the task of which is to provide potential tourists with new or completely changed services/products, e.g. related to food, accommodation, transportation, etc. Process innovation is the implementation of activities, a new or improved technology, so as to improve the functioning of the entity that introduces it, e.g. a modern technology that saves electricity. Thanks to these innovations, process innovations in the area of information arise. They are used in the promotional activity of a tourism enterprise to improve the image, e.g. to build tourist packages, run a modern IT portal, etc. Czernek (2014) pointed out that management innovations focus on aspects of business or tourism management (including the city) related to communication with people. Roman (2013), Krzyżanowska (2013) emphasized the fact that product innovation cannot be considered only as an improvement of the product.

In their view, product innovation in tourism may consist in extending the product structure by a new tourism product, whose technical, technological or functional features differ significantly from the previous ones. Importantly, product innovation in tourism can be implemented when it was introduced to the market of tourism services offered to potential customers. In turn, process innovations relate to changes applied by a tourist entity in production methods and in the methods of reaching out to potential tourists, partners and recipients with a tourism product. Damanpour (1991) pointed out that product and process innovations can be divided into radical and incremental. The essence of the former lies in the fundamental changes in knowledge and existing practices, e.g. in a given area (including tourism). The latter, on the other hand, concerns changes accompanying specific actions that are undertaken (Camisón and Monfort-Mir 2012). According to Peters and Pikkemaat (2005), studies on innovation in tourism indicate that innovations tend to be incremental.

In creating or developing a tourism product⁵², according to Krzyżanowska (2013, pp. 13-14), the innovativeness of individual entities most often relies on: "knowledge, skills and material resources, professional occupation, business activity (e.g. agritourism farms that buy herbs and organize harvest and plant-identification trips), local traditions and customs (e.g. regional inns), real estate (e.g. fishing centers), ready-made designs of products inspired from other areas [...]" . Oleśnik i Pasek (2014) note that several resources are most commonly used in creating an innovative tourism product. According to them, "the characteristic feature of the whole tourism service sector is the interpenetration of different types of innovations. This means that it is not always possible to assign a specific innovation to just one type [...]" .

In Poland, an increasing number of tourism entities offers innovative products in cities, villages and rural areas that are part of metropolitan areas. There are many examples of this type of products. According to Kani and Bogusz (2016), innovative products are inns in which sausage or ham are smoked, or where *sauerkraut* is fermented. Krzyżanowska (2013)

⁵¹ Oslo Manual: *Pomiar działalności naukowej i technicznej. Zasady gromadzenia i interpretacji danych dotyczących innowacji*, Ministry of Science and Higher Education, Department of Strategy and Development of Science, Warsaw 2008, pp. 47-56.

⁵² A tourism product is "all that tourists buy separately (e.g. transportation, accommodation) or in the form of a set (package) of services, as well as the composition of what tourists do, and the qualities of equipment and services that tourists use" (Oleśnik 2007, p. 122).

notes that thanks to innovations, the subsectors like pottery, wickerwork, herbalism, wood carving, etc. have begun to develop.

Bogusz (2015) argues that tourism needs innovation like any other sector. According to Roman (2014), tourism is unfortunately plagued by problems related to the innovativeness of entities involved. This is due, among other factors, to low level of staff education, high employment fluctuation (resulting from the employment of seasonal workers), lack of professional development opportunities, extensive bureaucracy related to obtaining EU funds. According to Roman (2014), there is no simultaneous and binding innovation theory in tourism. This results in the fact that the concept of innovation in tourism activities is approached broadly by various authors. Roman (2013) stressed that there are not many discoveries in the field of innovation in tourism since innovation is the result of costly and systematic research that requires the cooperation of entire teams representing specialists from the tourism industry. Tourism innovation is often based on the principle of imitation, that is repetition of other people's actions (Roman 2014). Pałka (2010), as well as Sikorska-Wolak and Zawadka (2016), pointed out that despite these problems, the tourism service sector is constantly developing and opening up to new opportunities. The result of this is, among others: increasing the number of tourism jobs, introducing new unique tourism products, building a network of innovative solutions, etc. In the literature, many authors stress that innovation in tourism is the creation or development of a unique tourism product from scratch as well as a professional marketing environment for natural and cultural values existing in a given area. As noted by Roman (2013), to create an innovative product in tourism it is also necessary to involve many private and local-government entities.

Selected innovative tourism products located in Krakow Metropolitan Area

Metropolitan areas are not just large city centers, business and industrial areas, great communication arteries, cultural and commercial centers, but also rural areas, forests, areas with significant agricultural production or agri-food processing. Undoubtedly, metropolitan areas are places with a rich base of tourism products for residents to take advantage of. Tourism entities located within metropolitan areas present and offer unique and interesting tourism products to their residents. Gołembski (2009), Gaworecki (2007), Alejziak (1999) note that the changing needs of modern people in terms of participation in tourism and the use of products trigger a response from the market in the form of innovative solutions. As indicated by Bogusz (2015), Wojcieszak (2016), Zawadka (2015), Sieczko (2012), an innovation may be a tourism product such as a site (trail, area, object), an event (e.g. Christmas market, festival, culinary events), a service or a set of services (e.g. organized bike tour, questing).

A tourism product offered within the metropolitan area is an important element of the development of such area. It should therefore have several features, i.e. be unique, purposeful, diversified and of quality. There are many examples of innovative products on the KMA tourism market. This paper concerns only three selected tourism products. The common denominator of the presented products is their innovative nature. An initiative to create in Poland a Nationwide Network of Educational Homesteads (Polish: *Ogólnopolska Sieć Zagród Edukacyjnych*) can be considered an innovative product located in the metropolitan area of Krakow. It involves product networking and in doing so it helps build a nationwide partnership in the rural tourism sector. As indicated by Bogusz and Kmita-Dziasek (2015, pp. 157-164), the idea of creating a Nationwide Network of Educational Homesteads guarantees professional promotion of agritourism farm offers, but also raising the qualifications and knowledge of service providers. The Nationwide Network of Educational Homesteads is a tourism product developed by diverse farms. In these educational farms, crop and animal production prevail among the directions of agricultural activity. Bogusz (2015) indicated that most educational homesteads are agritourism ones. She also emphasized that activities in the field of herbal medicine and horticulture are taken up by a total of approximately 25% of edu-

cational homesteads located within the area of KMA (Table 1). The combination of educational service with the values of agriculture and rural life implemented as part of educational homesteads provides residents of the metropolitan area with the opportunity to learn about the life in the countryside.

Table 1. Innovative products located in Educational Homesteads within Krakow Metropolitan Area

Educational homestead	Education in the area of:				
	crop production	animal production	processing of agricultural products	ecological and consumer awareness	the heritage of rural material culture, traditional occupations, crafts and folk art
Stadnina Koni Huculskich Gospodarstwo Agroturystyczne	YES	YES	YES	YES	YES
	Educational programs implemented:				
	1. Chleba naszego, powszedniego racz nam dać Panie. 2. Nie od razu Kraków zbudowano. 3. Najbliższa ciążu koszula. 4. Dla Hucuła nie ma życia, jak na Połoninie. 5. Dary pól, lasów i łąk na ludowym stole. 6. Bądź kowalem swego losu.				
Zaczarowane Wzgórze	YES	YES	YES	YES	YES
	Educational programs implemented:				
	1. Opowieści polnej myszy, czyli dzień na zielonej łące. 2. Dzyń, dzyń, dzyń idą święta. 3. Rodzinna niedziela.				
Zwierzyniec Kopytkowo	YES	YES	NO	NO	YES
	Educational programs implemented:				
	1. Ośladzaj sobie życie miodem. 2. Z życia zwierząt.				
Szczęśliwa Trzynastka	NO	NO	YES	NO	YES
	Educational programs implemented:				
	1. Dawne czasy.				
We Młynie	TAK	TAK	TAK	NIE	NIE
	Educational programs implemented:				
	1. Miodowy dzień. 2. Rok w winnicy.				
Ekocentrum ICPPC	YES	YES	YES	YES	YES
	Educational programs implemented:				
	1. Zwiedzanie EKOCENTRUM ICPPC 2. Energia ze słońca –co to jest i jak ją wykorzystywać? 3. W krainie warzyw i owoców: wykłady i warsztaty. 4. Budowanie z gliny i słomy: wykłady i warsztaty. 5. O ziołach dla zdrowia i urody. 6. Warsztaty o ptakach; Malowanie drewnianych ptaszków. 7. Warsztaty o pszczołach; Świecek z pszczelego wosku. 8. Sieję-Się-Je: Nasiona w naturze i jedzeniu. 9. Po nitce do kłębka: warsztaty o owcach i alpakach. 10. Chodzący po skarbach: co żyje w glebie? 11. Tradycyjne przetwory na każdą porę roku –wykłady i warsztaty. 12. Ozdoby z masy ceramicznej, nasion i ziół.				
Ranczo Artemidy	YES	YES	YES	YES	YES
	Educational programs implemented:				
	1. Jura –mała ojczyzna. 2. Tajemnice lasu. 3. Na granicy trzech zaborów. Szlakiem powstań i ważnych wydarzeń historycznych. 4. W poszukiwaniu zaginionego skarbu –gra terenowa.				

Source: Own study based on: <http://www.zagroda-edukacyjna.pl/>, (retrieved 12.12.2016).

Another tourism product concerns thematic villages and tourism packages for existing natural or cultural values (e.g. organization of tourism services and infrastructure around cultural facilities). One of the ways to introduce the idea of bringing the countryside closer to the residents of a metropolis is through thematic villages, a proposal particularly well-received in Białystok Metropolitan Area. Czapiewska (2012) pointed out that the concept of thematic villages is an innovative idea because its premise is to come up with something that provides an interesting experience and an education at the same time. Thematic villages can be targeted to families with small children and young people, given that a visit can often last up to several hours. In KMA, work is currently underway to launch projects such as local action groups. However, it is worth noting that such villages already function in Małopolska Province, as exemplified by the local action group "*Nad Białą Przemszą*" pursuing a project entitled "Pustynia Błędowska" [Błędów Desert]. Questing trails are another interesting innovative product located within KMA. Pietrzak-Zawadka and Zawadka (2015) note that questing is a new, innovative product whose assumptions are based on local cultural heritage. They noticed that tourists (including residents of metropolitan areas themselves) are increasingly seeking more unconventional and more active forms of tourism. According to them, "the questing method consists in creating unmarked trails that can be wandered, guided by the information contained in clues in verse form. The subsequent trail stages are discovered by finding answers to questions or puzzles and finding the corresponding place in the field. The final episode of the quest usually includes a box with a reward - most often a stamp that confirms the completion of the whole trail". Within KMA, the following questing trails can be distinguished: *Szlakiem Radwanitów* (Brzeźnica), *W Anielskim Miasteczku* (Lanckorona), *Spacer po Krakowie śladami spółdzielczości*, *Krakowskie getto we wspomnieniach Aleksandra Bibersteina*, *Krakowskie getto we wspomnieniach Tadeusza Pankiewicza*. Questing is an innovative product that is becoming increasingly popular in Poland. It is addressed to families with children, active tourists, but also to the very residents of the area. Questing trails are also used by tourists who want to better explore the most interesting monuments or legends of a given region. It is a product that is bound to prove an interesting form of active leisure for the residents of the metropolitan area of Krakow.

Conclusions

This article presents different approaches to the definition of innovation and an innovative tourism product. The metropolitan area of Krakow (KMA) was characterized in the process. Based on the literature review, it can be concluded that an innovative tourism product is often a complex phenomenon and a process that requires further interdisciplinary research. In addition, it should be noted that innovation in tourism does not come down solely to introducing changes to the already available tourism products, but it is also about creating new products and improving the existing solutions. Innovative tourism products can become an important tool in the promotion of a metropolitan area. The examples of tourism products indicated in this paper (i.e. questing trails and network of educational homesteads) prove that there are many interesting products within the metropolitan area of Krakow that can be considered innovative.

References

- Act of 20 October 1994: Ustawa z dnia 20 października 1994 r. o specjalnych strefach ekonomicznych*, (Dz. U. z 2007 r. Nr 42, poz. 274 i z 2008 r. nr 118, poz. 746 ze zm.).
- Alejziak W. (1999), *Turystyka w obliczu wyzwań XXI wieku*, Wydawnictwo ALBIS, Krakow.
- Camisón C., Monfort-Mir V. M. (2012), *Measuring Innovation in Tourism from the Schumpeterian and the Dynamic-capabilities Perspectives*, „Tourism Management”, vol. 33, no. 4.

- Czeranek K. (2014), *Innowacje w turystyce miejskiej oraz determinanty ich rozwoju*, „Studia Oeconomica Posnaniensia”, vol. 2, no. 3 (264), Poznań.
- Damanpour F. (1991), *Organizational Innovation: A Meta Analysis of Effects of Determinants and Moderators*, „Academy of Management Journal”, vol. 34, no. 3.
- Drucker P. F. (1993), *Innowacja i przedsiębiorczość*, Wydawnictwo PWE, Warsaw.
- Gaworecki W. (2007), *Turystyka*, Polskie Wydawnictwo Ekonomiczne, Warsaw.
- Gołembski G. (2009), *Kompendium wiedzy o turystyce*, Wydawnictwo Naukowe PWN, Warsaw.
- Hjalager A. M. (2002), *Repairing innovation defectiveness in tourism*, „Tourism Management”, no. 23.
- Hjalager A. M. (2010), *A review of innovation research in tourism*, „Tourism Management”, no. 31.
- <http://bip.malopolska.pl/umwm/Article/get/id,748635.html> (retrieved 15.10.2016).
- http://krakow.stat.gov.pl/files/gfx/krakow/pl/defaultstronaopisowa/1824/1/1/2013_krak_obszar_metrop_2004_2011_4.pdf, (retrieved 11.09.2016).
- http://krakow.stat.gov.pl/vademecum/vademecum_malopolskie/portret_obszaru_metropolitalnego/krakowski_obszar_metropolitalny.pdf (data dostępu 11.11.2016).
- <http://www.gus.pl>, (retrieved 08.11.2016).
- <http://www.gus.pl>, (retrieved 13.11.2016).
- <http://www.gus.pl>, (retrieved 20.11.2016).
- <http://www.gus.pl>, (retrieved 20.11.2016).
- Kaczmarek T., Mikuła Ł. (2010), *Poznańska ścieżka integracji metropolitalnej*, w: Lutrzykowski A., Gawłowski R., *Metropolie. Wyzwania polskiej polityki miejskiej*, Wydawnictwo Adam Marszałek, Toruń.
- Kania J., Bogusz M. (2016), *Zagrody edukacyjne jako przykład innowacyjnej przedsiębiorczości*, Wydawnictwo Wieś Jutra, Poznań.
- Kmita-Dziasek E., Bogusz M. (2015), *Zagrody edukacyjne jako przykład innowacyjnej przedsiębiorczości na obszarach wiejskich*, Wydawnictwo PAN Komitet Zagospodarowania Kraju, CDR Oddział w Krakowie, Krakow-Warsaw.
- Koncepcja Zagospodarowania Przestrzennego Kraju* (2005), Wydawnictwo KZKP, Warsaw.
- Kopaliński W. (2006), *Podręczny słownik języków obcych*, Oficyna Wydawnicza Rytm, Warsaw.
- Krakowski Obszar Metropolitalny w latach 2004–2011* (2013), Główny Urząd Statystyczny w Krakowie, Krakow.
- Krzyżanowska K. (2013), *Innowacyjność w turystyce wiejskiej – teoria i praktyka*, w: Nuskiewicz K., Roman M., *Innowacje w rozwoju turystyki*, Wydawnictwo Zespołu Szkół Centrum Kształcenia Rolniczego im. Jadwigi Dziubińskiej w Gołdkowie, Gołdkowo.
- Krzyżanowska K., Sikorska-Wolak I. (2010), *Przedsiębiorczość w ujęciu teoretycznym i w praktyce*, in: Krzyżanowska K., *Przedsiębiorczość na obszarach wiejskich – Stan i perspektywy rozwoju*, Wydawnictwo SGGW, Warsaw.
- Mizgajska H. (2002), *Aktywność innowacyjna polskich małych i średnich przedsiębiorstw w procesie integracji z Unią Europejską*, Prace Habilitacyjne, Wydawnictwo Akademia Ekonomiczna w Poznaniu, Poznań.
- Olearnik J., Pasek K. (2014), *Innowacyjność w turystyce i jej oddziaływanie promocyjne*, Wydawnictwo Akademia Wychowania Fizycznego we Wrocławiu, Wrocław.
- Oslo E. (2008), *Zasady gromadzenia i interpretacji danych dotyczących innowacji OECD/Eurostat*, Polska wersja elektroniczna, MNiSW, Warsaw.
- Pałka E. (2010), *Produkt turystyczny szansą rozwoju turystyki na przykładzie województwa świętokrzyskiego*, „Zeszyty Naukowe Uniwersytetu Szczecińskiego”, no 591, „Ekono-

miczne Problemy Usług”, no 53, *Potencjał turystyczny – zagrożenia ekonomiczne*, Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, Szczecin.

Panasiuk A. (2015), *Pomoc w rozwoju innowacyjnej gospodarki. Partnerstwo innowacyjne. Państwo i społeczeństwa*, Wydawnictwo Oficyna Wydawnicza AFM, Warsaw.

Peters, M., Pikkemaat, B. (2005), *Innovation in Tourism*, „Journal of Quality Assurance in Hosp & Tourism”, vol. 6. no. 34.

Pietrzak-Zawadka J., Zawadka J. (2015), *Wykorzystanie questingu w edukacji przyrodniczej na obszarach przyrodniczo cennych na przykładzie województwa podlaskiego*, „Studia i Materiały Centrum Edukacji Przyrodniczo-Leśnej”, R.17, zeszyt 43(2), Rowów.

Prahalad C. K., Krishnan M. S. (2010), *Nowa era innowacji*, Wydawnictwo PWN, Warsaw.

Quintane E., Casselman R. M., Reiche B. S., Nylund P. A. (2010), *Innovation as a knowledge-based outcome*, „Journal of Knowledge Management”, vol. 6.

Raport o polskich metropoliach (2015), <http://www.pwc.pl> (retrieved 14.10.2016).

Regulation (EC) No 1931/2006 of the European Parliament and of the Council of 20 December 2006 (Journal of Laws EU L405/1).

Rogers E. M. (1995), *Diffusion of innovations*, FREE PRESS, New York.

Rogoziński K. (2004), *Innowacyjność i nowa taksonomia usług*, „Wiadomości statystyczne”, t. 3, Główny Urząd Statystyczny, Polskie Towarzystwo Statystyczne, Warsaw.

Roman M. (2013), *Teoria innowacji i jej zastosowanie w turystyce*, in: Nuskiewicz K., Roman M., *Innowacje w rozwoju turystyki*, Wydawnictwo Zespołu Szkół Centrum Kształcenia Rolniczego im. Jadwigi Dziubińskiej w Gołdkowie, Gołdkow.

Roman M. (2014), *Znaczenie innowacji w funkcjonowaniu sektora turystycznego – podejście teoretyczne i praktyczne*, „Zeszyty Naukowe Uniwersytetu Szczecińskiego. Ekonomiczne Problemy Turystyki”, no 805, 1(25).

Schumpeter J. (1960), *Teoria rozwoju gospodarczego*, Wydawnictwo PWN, Warsaw.

Sieczko A. (2012), *Turystyka wiejska i agroturystyka w świetle perspektyw rozwoju obszarów wiejskich*, „Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu”, t. 14, z. 3, Warsaw

Sikorska-Wolak I., Zawadka J. (2016), *Innowacyjne rozwiązania w turystyce wiejskiej*, „Roczniki Naukowe Stowarzyszenie Ekonomistów Rolnictwa i Agrobiznes”, vol. XVIII, zeszyt 4.

Tabor K. (2010), *Przestań doradztwa i przedsiębiorczości na obszarach wiejskich*, w: Krzyżanowska K., *Przedsiębiorczość na obszarach wiejskich – Stan i perspektywy rozwoju*, Wydawnictwo SGGW, Warsaw.

Więclaw-Michniewska J. (2011), *Zróżnicowanie społeczno-gospodarcze gmin krakowskiego obszaru metropolitalnego*, Wydawnictwo Uniwersytetu Opolskiego, „Studia Miejskie”, no 4.

Winnicka-Popczyk A. (2015), *Inwestycje firm rodzinnych w innowacyjność (przegląd zagadnienia w literaturze zagranicznej)*, „Przedsiębiorczość i Zarządzanie”, vol. 16, no 7.

Wojcieszak M. (2016), *Produkty turystyczne na obszarach metropolitalnych. Wyzwania w rozwoju turystyki*, Wydawnictwo SGGW, Warsaw.

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Nowy Jedwabny Szlak jako instrument chińskiej ekspansji we współczesnej gospodarce światowej

Streszczenie

Budowa Nowego Szlaku Jedwabnego przez Chiny, nawiązującego do antycznego szlaku handlowego staje się jednym z najciekawszych zjawisk zachodzących we współczesnym świecie i może stanowić jedno z największych wydarzeń w XXI wieku, trwale zmieniając światową gospodarkę i politykę. Celem artykułu jest analiza koncepcji Nowego Szlaku Jedwabnego pod względem jego znaczenia dla międzynarodowych stosunków ekonomicznych i politycznych oraz potencjalnych zmian, które może spowodować w gospodarce światowej. W celu realizacji tematu zakłada się przeprowadzenie analizy literaturowej oraz zbadanie wpływu budowy Nowego Szlaku Jedwabnego na podstawie dostępnych oraz prognoz. Artykuł składa się z trzech części, które kolejno będą poświęcone analizie roli Chin we współczesnym świecie, koncepcji Nowego Szlaku Jedwabnego oraz jego wpływowi na funkcjonowanie gospodarki światowej.

Słowa kluczowe: Nowy Jedwabny Szlak, Chiny, ekonomia międzynarodowa, geopolityka, geoeconomia

The New Silk Road. Economic importance of China expansion in the modern global economy

Abstract

Building the New Silk Road by China is becoming one of the most interesting phenomena in the contemporary world. Its construction, referring to the ancient trade route, may be one of the most important events of the 21st century that will forever change the world economy and politics. This article aims to analyze the concept of the New Silk Road in terms of its importance for international economic and political relations and the potential changes that could result in the world economy. To understand the subject, the author is to review the literature and examine the impact of building the New Silk Road based on available forecasts. The article is divided into three sections, which concern, respectively, the analysis of China's role in the modern world, the concept of the New Silk Road, and its impact on the functioning of the global economy.

Keywords: New Silk Road, China, international economics, geopolitics, geoeconomics

JEL CODE: F02, F53, F55

Introduction

Since it was first announced, the construction of the New Silk Road has become one of the most researched and discussed topics in both scientific and popular discourse. China, for years working towards the position of a superpower, systematically seeks opportunities of further expansion, the New Silk Road being one of the instruments in that strategy. The implementation of this project, due to its scale and ambition, is a unique phenomenon that rightly arouses contrasting opinions.

The purpose of this article is to analyze the concept of the New Silk Road in terms of its importance for international economic and political relations and potential changes in the global economy. To address this issue, a literature review is to be conducted and the impact of building the New Silk Road based on available and forecasts examined.

This paper is divided into three sections, which concern, respectively, the analysis of China's role in the modern world, the concept of the New Silk Road, and its impact on the functioning of the global economy.

China's economic and political transformation

China has undoubtedly become one of the key players in the modern economy and politics. The rapid transformation and development of this country for years has been one of the most interesting phenomena of the modern world, astounding researchers, analysts and decision makers alike.

- Economic transformation in China is linked with the plan of ambitious economic reforms initiated by Deng Xiaoping in 1978, when the Chinese government adopted a gradual marketization of the economic system;
- the actual departure from Maoism in the economic, political, social and cultural spheres;
- opening the national economy to the world;
- building a new legal order in the country;
- restoring respect for the old Chinese culture and tradition, and cultivating ancient rituals.

In what was then a reformatory and innovative program of the "four modernizations" - agriculture, industry, national defense, and science and technology (Kowalik 2005, p. 222), economic reforms focused primarily on (Gawlikowski 2004, p. 118):

In light of no of previous experience in the transformation of the socio-economic system, these reforms were introduced gradually, initially in selected enterprises and institutions, which enabled the correction of solutions before their implementation throughout the country (Szymański 2007, pp. 184-185).

Agriculture was the first area to have been reformed. Villages underwent a process of decentralization of property rights and departure from the agricultural communal system. The overarching objective of this reform was to increase agricultural production and ensure the state's self-sufficiency in feeding the population. At the same time, special experimental economic zones were set up at that time, in which free movement of capital was allowed, which resulted, among other things, in the transfer of modern technologies and management methods to be later used across China. The first special economic zone was Hong Kong.

The industry was modernized come 1984, with the main focus on increasing efficiency and effectiveness while reducing bureaucracy and modernizing management methods. The Chinese enterprises were given a relatively broad autonomy, and the allocation of resources through the market system was enabled.

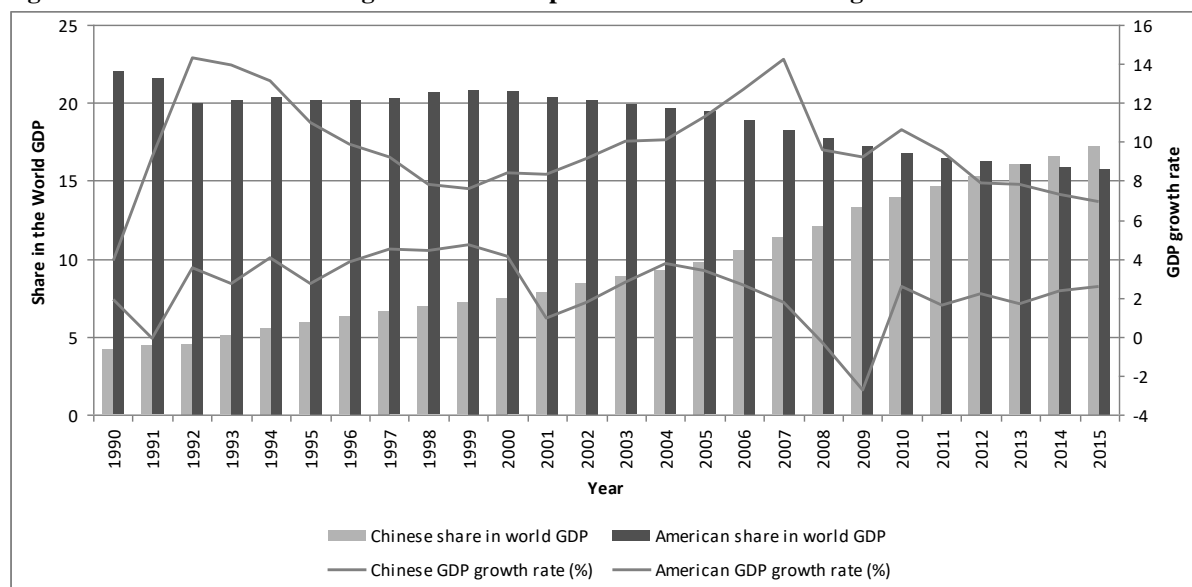
Finally, in 1991, the Chinese government decided to abandon the centrally planned economy in favor of the market system. The full market economy was to be achieved by 2000.

Such rapid changes in the global economic system had both positive and negative implications for the world. On the one hand, China has become an attractive market for rapidly growing Western countries, and on the other – a source of cheap imports and a place of production for corporations, which allowed to maintain low inflation, limit wage growth and allow domestic demand to increase. At the same time, however, negative aspects must not be overlooked: the role of China as the largest buyer of debt securities enabling the financing of budget deficits, growing trade deficits; indirectly, the increase in the prices of natural resources affecting other countries, as a consequence of the sharp increase in production and industrialization in China.

It should be noted that, to this day, it is quite problematic to try and analyze this giant - on the one hand, a huge Chinese population determines a high level of production, and thus the level of GDP. Therefore, achieving a certain GDP and increasing the share in global GDP *de facto* means reaching only the nominal leader position. Standard of living, innovation, quality of human capital and institutions in the Western world still remain several times higher than

in China. So, while this process illustrates the growth of an economic power, China still has a long way to go in paring with top-tier economies (Figure 1).

Figure 1. China and USA GDP growth rate comparison and their share in global GDP



Source: own study based on: *World Bank Economic Outlook*,
<http://www.imf.org/external/pubs/ft/weo/2016/01/weodata/index.aspx>

With that being said, it is clear that the growing interdependence and China's rising position come with as many threats as benefits. Foreign debt entrusted in China's hands can serve as a potential source of pressure and destabilization, whereas the growing dependence on Chinese goods and the increasing foreign exchange reserves in China can easily trigger a crisis and economic collapse in the entire Western world. China's production of increasingly sophisticated goods and the tendency for Chinese corporations to acquire well-known brands and cooperate more closely with modern technology manufacturers may be perceived as alarming.

Another problem is the strengthening of China's position in Europe, both through ever-bolder investments as well as the purchase of debt securities of European countries, including those of PIGS (Portugal, Italy, Greece, Spain), which may consequently make them politically dependent on Beijing. Also interesting is the progressive construction of the New Silk Road.

The New Silk Road as conceived by China

The construction of the New Silk Road is an obvious reference to the ancient route, which synthetically defines the entirety of trade routes that most probably linked Europe and the Far East as early as the first millennium before Christ (Uhlig 2007, p. 6). This most famous and the most important trade route in history began to gain importance along with the progressive centralization of the then powers: the Empire of the Chinese Qin and Han dynasties and the Roman Empire controlling the Mediterranean basin, enabling the intensification of trade between East and West. Originally, the Trail ran from the then capital of the Chinese Empire - Chang'an, through the outskirts of the Takla Makan Desert, reaching Central Asia. Then, through Persia, the goods would arrive in Antioch, from where they could be distributed to other Western centers.

For centuries, the ancient Silk Road enabled not only commercial but also cultural exchange between East and West, playing an important role up until the Great Geographical Discoveries that completely reshaped the global system. The idea of the Silk Road consisted not only in prompting mutual interactions between nations, but above all in cooperation in

creating and shaping culture and civilization. For this reason, researchers believe the trail was a *de facto* comprehensive political, economic and cultural system for Eurasia, whose axis was mutual contacts (cf. Beckwith 2009).

For China today, the New Silk Road is mostly an element of geopolitical and geo-economic strategy of further expansion, and of a new world order in the future. This is closely linked with the idea of the "great renaissance of the Chinese nation" which regains significance and importance due to civilizational and cultural achievements as well as China's potential and position in contemporary international economic and political relations. China, which is not only a state or culture, but above all a great ancient civilization, feels strong enough not to imitate others, but rather follow its own path and stimulate global tendencies (see Hübner 2014, pp. 5-31). It is important to note that the New Silk Road can be as beneficial and contributive to overall development as it can be detrimental in many respects. While its very creation and construction may give rise wars and conflicts, should it become a fact, it will be a huge political and economic success – especially for China, which in doing so will get closer to the role of the actual global superpower. It is also an excellent instrument for the implementation of soft-power diplomacy, whose main objective is to build a positive image of the state as a gentle and generous power.

The initiative in question is to foster win-win cooperation as a basis for further and harmonious socioeconomic development of individual countries and global economy as a whole. To implement the assumptions outlined, individual states should concentrate on extending cooperation in the following areas (*Jedwabne szlaki ...* 2015, pp. 11-24):

- political coordination, which is the foundation for the implementation of the initiative and is implemented through intergovernmental cooperation, multi-level intergovernmental exchange.
- in a long-term perspective, the countries of the Road can coordinate their mutual strategy and policy in the field of economic development, work out plans and measures to develop regional cooperation and provide political support;
- connections between entities, which are a priority area in the concept of the New Silk Road. Countries along the Route should improve the links of their infrastructure construction plans and technical standards systems, jointly develop the construction of major international crossings, and create an infrastructure network encompassing all subregions in Asia, as well as linking Asia, Europe and Africa;
- unhindered trade - cooperation in the field of investment and trade is the most important task in building the Road, which necessitates further facilitations in terms of investment and trade and removal of any additional barriers to ensure a healthy business environment. A question that remains to be seen is the establishment of possible free trade areas with a view to unleashing the potential for mutual cooperation;
- financial integration, constituting the base of the construction of the Road, aimed at strengthening financial cooperation and intensifying efforts to create a monetary stability system, an investment and financing system and a credit information system;
- building and strengthening social bonds as a prerequisite for providing support for the implementation of the idea of the Road by the societies of the countries involved.

The New Silk Road is a unilateral Chinese initiative financed from China's national funds under the Silk Road Fund established with this purpose in mind, with a capital of about USD 40 billion and using recently founded international institutions, mainly the Asian Infrastructure Investment Bank (AIIB). In January 2015, a private energy development fund was also announced, with a plan to attract USD 20 billion in investments to the concept of the Road. Additionally, China wants to set up free trade zones with Asian and European countries, promote financial integration and create new trade belts (Kaczmarek 2015). The New Silk Road is to be divided into a land route connecting the Far East, Central Asia and Europe, and the

Silk Road on the Sea (or Maritime Silk Road), intended to approach China to other Asian countries, India and Africa.

The idea, becoming one of the key developmental concepts of the Middle Kingdom, is obviously international and supra-regional in nature, including Central Asia as the basis of the Economic Belt and Southeast Asia as the basis of the Silk Road on the Sea. It also includes Pakistan in the form of the China-Pakistan Economic Corridor (cf. Głogowski 2016, pp. 15-25). The land-based Silk Road Economic Belt connects China, Central Asia, Russia and Europe, plus the region of the Persian Gulf and the Mediterranean, running through both Central and West Asia. In addition, it links China with Southeast Asia, South Asia and India. In turn, the Silk Road on the Sea connects the Chinese coast with Europe via the South China Sea and the Indian Ocean as one route and from the Chinese coast through the South China Sea to the South Pacific as the other. The above directions constitute the area of the greatest political and economic interest of China. Nevertheless, the trail itself is not limited to Asia only, but rather connects East and West the way its ancient predecessor did. An important element of China's strategy concerns the following, broadly defined regions and transit countries: Central and Eastern Europe, the Balkans, the Southern Caucasus, Turkey and the Middle East. Beijing also plans to build a new Eurasian Land Bridge and develop economic connections of the following configurations: China – Mongolia - Russia, China – Central and West Asia, and China – Southeast Asia, based on the major cities along the Road. At sea, the initiative focuses on jointly building efficient, safe and effective transportation routes connecting major sea ports. Closely related to the construction of the Road is the establishment of the economic belt China-Pakistan and Bangladesh-China-India-Myanmar (*Jedwabne szlaki ...* 2015, pp. 11-13).

Despite these promising and astounding in ambition perspectives, one should still bear in mind the problems that China may face in the coming years that will affect the construction and functioning of the Road. The most important issue seems to be the need to change the orientation of the economy from pro-export (but also focused on accepting foreign investments) to the internal market. The persistent disproportion between investments, at 50% of GDP (and in fact driving China's economy today), and household consumption, at around 1/3 of national income (*Peddalling Prosperity ...* 2012), is problematic. Corruption and possible social conflicts that may arise in the growing income stratification of the population or in political matters are a serious problem, too - it is enough to mention the independence tendencies in Tibet and the revolts of the Uyghur people in the Xinjiang Autonomous Region. The question of possible conflicts related to civil liberties and human rights also remains to be seen. Another serious problem is the aging of the population and the imbalance in gender proportion, related both to the long-term one-child policy as well as to the historically conditioned preference of male children. Last but not least, the issues of environmental protection and the fight against pollution are of utmost importance, too (see Liberska 2010, pp. 340-346, Kamiński 2007, pp. 37-39).

In spite of all these doubts, the very concept of the New Silk Road is nevertheless extremely interesting and potentially beneficial through the intensification of trade and cultural exchange for the entire region of Central and East Asia, as well as the countries that will actively participate in this initiative. For China, the most important aspect seems to be that of expansion, strengthened hegemony and political influence in global terms.

Economic importance of the New Silk Road in the global economy

The One Belt One Road Initiative, or the New Silk Road of the 21st Century, was announced by President Xi Jinping in Astana, in September 2013. Since then, the project has been carried out with great impetus by Beijing, and if it succeeds, it will have the potential to determine the architecture of international global order, including the commodity exchange system, and thus - all the institutions that form the backbone of that system.

This initiative is an emanation of actions aimed at creating a multi-polar and more balanced world, appreciating cultural diversity, based on economic and cultural exchange, as well as global and regional cooperation, taking greater account of the voice and interests of less developed countries. The construction of new trade routes in the future may have fundamental economic and political implications for project participants. It can lead to the coordination and integration of development strategies of the countries of the Road and increase the market potential of the region, while stimulating investment, consumption and global demand, thereby influencing the labor market. The intensification of social and cultural relations between individual countries is also important, with the participation in the Road, as declared, open to all entities, both countries and international institutions (*Jedwabne szlaki ...* 2015, pp. 7-8).

The emergence of the New Silk Road may transform the economic system and the global order in terms of the division of labor and its fruits. Great geographical discoveries and colonialism created and consolidated the system of division of labor, redistributing the surplus value of work and its fruits from the periphery and semi-periphery countries to the core countries. These core countries dominate by owning and controlling the most important means of production and performing tasks with a higher level of knowledge (domination in high technology products, innovation, productivity, finance and trade). China is a country that has shifted from periphery to semi-periphery (which is already a remarkable achievement given its huge population and vast territory) and is now on the way to profoundly influencing the entire global system and become a core country under an entirely new regime, unheard of in the last 500 years of dominance of the sea powers.

In the geopolitical dimension, China and its New Silk Road can reverse the effects of great geographic expeditions that brought about a world trading system that favors sea states - historically speaking, the coastal states of Western Europe and then United States. If successful, the Road can alter the relationship in favor of the land communication system linking the distant parts of Eurasia, with all implications this process may entail. In doing so, China gains access to the broadly defined West: Asia Central Europe. This is dictated by both the objective requirements of geopolitics, as well as the large financial and power reserves of the Chinese economy after the period of intense development, when China's GDP would increase by an average of 10 percent annually. The transport network connection with Europe and the European Union countries would merge the two most productive areas of Eurasia with the resource base in Africa.

As regards Russia and the countries of Central Asia, the concept of the New Silk Road is a Chinese response to the Eurasian Economic Union (EAEU) promoted by Moscow. The Chinese concept - different in principles from Russia's vision - helps defend Beijing's economic position in Central Asia without the need for open competition with Russia. On the other hand, treating Russia as an important element of the Road will certainly ease the latter's aversion towards the project. It will also give the impression of a positive-sum game that can convince Russia not to oppose Chinese projects in Central Asia. Although Russia is conceived as part of the Road, this initiative may undermine its independent plans to revitalize the infrastructure of the Trans-Siberian railway, especially in its eastern section. On the other hand, potential political, demographic and eventually economic conflicts with Russia may emerge in the future.

With regard to the ASEAN countries, the concept of the New Silk Road and its implementation will serve, on the one hand, to alleviate (even if seemingly) Chinese hegemony, and on the other to allow more effective defense of Chinese interests in territorial disputes. Investments in individual countries (e.g. a planned railway in Thailand, a container port in Malaysia) will create a lasting platform for cooperation. At the same time, the concept of the Silk Road on the Sea is a legitimation for increasing the presence of the Chinese Navy in disputed

waters and protecting sea routes, which is to be achieved using ports in Pakistan, Myanmar and Sri Lanka.

The implementation of this concept will also strengthen China's position in relation to India, regardless of whether India decides to join the project or not. By promoting the concept of the Road, China has intensified its relations with countries considered close partners of New Delhi: Nepal, Bangladesh and Sri Lanka. Nepal and Bangladesh are important for China to gain access to the Indian Ocean, bypassing the Malacca Strait. Sri Lanka or Maldives, meanwhile, can become a focal point for the Chinese Navy, allowing it to maintain a permanent presence in the Indian Ocean. By pulling India into the project, China can neutralize the latter's resistance in that respect. On the other hand, India wants to invest in port infrastructure, which may lead it to cooperate with China. If, in turn, New Delhi refuses to cooperate, then India is prone to losing its influence in the above-mentioned countries, which are willing to take advantage of potential Chinese financing.

Both the concept of the Road and its implementation pave the way for increasing China's influence in the Middle East. The idea of the New Silk Road is also a means to strengthen cooperation between China and Turkey. The New Road may become an instrument that will bring China closer together with Iran by building a belt running through Central Asia.

Europe is the most important economic partner for China. Implementation of the narrow-range Road concept - construction of infrastructure belts - will allow to increase trade turnover and boost exchange. Even partial implementation of the project will increase China's access to the European market and facilitate closer cooperation with the EU. Central and Eastern Europe can play an important role as a transit zone and a port of entry to the Western European market. This part of the continent can serve as a gateway to Western Europe, countries with sea and land ports.

The concept of the Road and its importance for Central and Eastern Europe should be included in the broader context of China's relations with the region. From China's perspective, the main advantage of the region is its geographical location. China expects that the countries of the region with open markets will be in favor of an agreement on investments and free trade areas. In addition, they could help improve and market Chinese products before their proper entry into the European market. Good relations with China and the lack of historical disputes further reduce the strategic resistance to Chinese initiatives. However, the New Silk Road may lead to competition between individual countries for investments that will be an indispensable element of the route.

To sum up, the construction of the New Silk Road may completely change the face of the modern world, directly affecting Eurasia and Africa, and indirectly both Americas and other regions. These changes can also fundamentally impact global politics and economics. Despite the threats for individual countries related to the transformation of production and exchange structures, the project in question may ultimately prove beneficial to all the parties involved.

Conclusions

The construction of the New Silk Road is the largest geopolitical and geo-economic project in years. Its main objective is, simply put, to reshape the global order. For China, it is a way to expand and strengthen its influence, develop and escape from the middle income trap, building instead a society of at least "moderate well-being".

The New Silk Road presents an interesting initiative for countries that decide to participate in this project. The direct benefits arise from the intensification of trade and cultural exchange and broader integration between the participants. In the long-term perspective, changes may be observed with relation to the possible rebuilding of world order and geopolitical polarity. It should be noted that the potential benefits must be analyzed together with the potential threats associated with the reshaping and structural changes in the economies of the participating countries and possible new conflicts that may emerge in the process.

In conclusion, China's initiative is certainly one of the most important projects of recent years, and if successful, it will trigger profound changes in the functioning of the global economy and its entities.

References

Beckwith Ch.I. (2009), *Empires of the Silk Road: A History of Central Eurasia from the Bronze Age to the Present*, Princeton University Press, Princeton and Oxford.

Gawlikowski K. (2004), *Procesy transformacji w Chińskiej Republice Ludowej*, w: Gawlikowski K. (red.), *Azja Wschodnia na przełomie XX i XXI wieku. Przemiany polityczne i społeczne*, Wydawnictwo TRIO, Warsaw.

Głogowski A. (2016), *Nowy jedwabny szlak – geopolityczne znaczenie współpracy Islamabadem*, „Przegląd Geopolityczny” no 16.

Hübner W. (2014), *Współczesny Szlak Jedwabny a tradycja: Chiny i Azja Centralna*, „Zeszyty Naukowe Uczelni Vistula” no 34.

International Monetary Fund (2016), *World Economic Outlook*, <http://www.imf.org/external/pubs/ft/weo/2016/01/weodata/index.aspx>.

Jedwabne szlaki XXI wieku. Wizja i działania w sprawie wspólnego budowania Pasa Gospodarczego wzdłuż Jedwabnego Szlaku i Morskiego Jedwabnego Szlaku XXI wieku (2015), pl.china-embassy.org/pol/xwdt/P020150425734274256571.pdf.

Kaczmarowski M. (2015), *Nowy Jedwabny Szlak: uniwersalne narzędzie chińskiej polityki*. Komentarze OSW, <https://www.osw.waw.pl/pl/publikacje/komentarze-osw/2015-02-10/nowy-jedwabny-szlak-uniwersalne-narzedzie-chinskiej-polityki>.

Kamiński T. (2007), *Problemy gospodarcze w relacjach Unii Europejskiej z Chinami*, w: Marszałek-Kawa J. (red.), *Powrót smoka. Marsz Chin ku pozycji globalnego mocarstwa*, Wydawnictwo Adam Marszałek, Toruń.

Kowalik T. (2005), *Systemy gospodarcze. Efekty i defekty reform i zmian ustrojowych*, Fundacja Innowacja, Warsaw.

Liberska B. (2010), *Perspektywy rozwojowe chińskiej gospodarki do 2050 roku*, „Studia Ekonomiczne – Economic Studies” nr 4 (LXVII).

Special Report: China's Economy – Pedalling Prosperity (2012), „The Economist”, 26th May

Szymański W. (2007), *Czy globalizacja musi być irracjonalna?*, Wydawnictwo SGH, Warsaw.

Uhlig H. (2007), *Jedwabny Szlak. Kultury antyku między Chinami a Rzymem*, Książnica, Warsaw.