

UNIVERSITY OF KELANIYA
DEPARTMENT OF MARKETING MANAGEMENT

INEQUALITIES IN MANAGEMENT
AND ECONOMICS

Winnet Centre of Excellence® Series No. 1



Kelaniya 2016

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Kelaniya 2016

ISBN 978-955-704-019-6

Publishing

Department of Marketing Management

University of Kelaniya, Sri Lanka

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INTRODUCTION

The Winnet Centre of Excellence® Series, issued in English, is an edited once a year continuous publication. Into the hands of readers we are placing first edition which is a collection of works devoted to the concept of inequalities in economics and management.

This monograph consist of seven chapters. The first chapter explores the problems of the inequalities of access to bank crediting and financing of micro and small enterprises. In chapter two the author aims to indicate that diversity management is a tool of corporate social responsibility. In chapter three there is investigated concept of diversity management as counteracting discrimination of employees. Chapter four contains the analyses of the new EU strategy for equality of women as an indicator of anti-discrimination on the labour market in Poland. The fifth chapter raises the problem of differences in the scope of application of marketing in cultural institutions in the light of results of empirical research and typology of cultural institutions. In chapter six the author describes household spending on medications and medical treatment in Poland in the years 2005-2014. The last chapter – seventh presents the application of quantile regression to study variation in most urgent spending of households when comparing towns and rural areas.

We are honoured to express words of gratitude to all co-authors and the reviewers for their efforts and contribution towards this joint international publication.

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CHAPTER 1

INEQUALITIES OF ACCESS TO BANK CREDITING AND FINANCING OF MICRO AND SMALL ENTERPRISES

1.1. Introduction

Possibilities and methods of financing micro, small and medium-sized enterprises are common subjects of study and publications by authors worldwide. They analyse methods and sources of the financing, advance models of and identify barriers to development of these enterprises, principally because the latter are the foundations of many developed economies globally. Those authors prove financial decisions and conduct of entrepreneurs have direct impact on growth and development of the organisations they run. It is frequently demonstrated financial behaviour of SMEs is a result of their specific characteristics, such as: age, size, type of ownership and legal status, geographical location, industrial sector, structure of resources in place.

Contradictory conclusions are postulated on the basis of empirical research, as proved by the theories of SME financing presented below.

Despite large numbers of publications on the topic, a number of areas remain unexplored and questions unanswered. One of the latter is, whether the limited access of micro enterprises to sources of financing arises from their unique nature and lifecycle of such organisations, relates to assumptions of the theory of a sequential

choice of financing sources, or stems from discrimination of micro-enterprises by banks.

These questions have led to the following hypothesis:

H: Banks discriminate against micro-enterprises in the process of credit awarding.

For the purposes of its verification, the most popular theories of enterprise financing were analysed, such as: the pecking order theory formulated by S. C. Meyers (1984, pp.574-592), A. N. Berger's and G.F. Udell's financial growth cycle (1998, pp.613-673), and the theory of information asymmetry of J.E. Stiglitz and A. Weiss (1981, pp.393-410). They are the starting points for an analysis of holistic empirical data about the Polish SME sector published by the Polish Confederation Lewiatan and Ministry of Economy, Department of Market Forecasting and Analysis. The author refers those data to results of her empirical research into micro and small enterprises in Lesser Poland.

The second part of this paper introduces assumptions and a discussion of the pecking order theory, the financial growth cycle, and the theory of information asymmetry.

Methods are presented in chapter three.

The two subsequent sections are empirical: the fourth presents and analyses results of the secondary research and part fifth of the author's own research. Conclusions are contained in chapter six.

1.2. Financing of micro, small and medium-sized enterprises in the light of: the pecking order theory, the financial growth cycle theory, and the theory of information asymmetry

Availability of sources of financing is considered a major factor of development and growth of micro, small and medium-sized enterprises (SME). The methods of financing presented in the

literature are greatly varied, starting from such internal sources as owners' or managers' savings and retained profits to informal external sources including financial support of family and friends, merchant crediting, venture capital and business angels, ending finally with external, formal sources offered by financial institutions like banks, other institutions and stock exchanges (Chittenden, Hall, Hutchison, 1996, pp. 59-67).

In line with the financial growth cycle postulated by A. N. Berger and G. F. Udell (1998, pp. 613-673), financial requirements and financing options available to a small and medium-sized enterprise change across stages of a firm's lifecycle. In other words, different financing strategies are needed in the different phases of a firm's growth. Due to the characteristics of SMEs at their initial stages, such as non-transparent information (Berger, Udell, 1998, pp. 613-673), lack of crediting history (Cassar, 2004, s. 261-283), and a high risk of failure (Huygebaert, Van de Gucht, 2007, pp.101-133), micro, small and medium-sized enterprises are primarily dependent on internal sources of financing. In time, as small and medium-sized enterprises evolve in their lifecycle, they gradually adapt their capital structures (La Rocca, La Rocca, Cariola, 2011, pp.107-130), mature, develop crediting histories and are capable of providing additional credit security, their credit worthiness improves, they become more attractive and noteworthy to investors. As a result, firms begin switching from internal to external sources including venture capital, merchant credit, and bank loans. As small and medium-sized enterprises commence offering transparent information, they may gain access to the so-called securitised debt and public equity capital markets.

A number of scientists, including A. Kimhi (1997, pp. 309-318), S. L. Barton and P.J. Gordon (1987, p. 67), use the business lifecycle model as an approach to understanding financial behaviour of small

and medium-sized enterprises. At the same time, M. La Rocca et al. (2011, pp.107-130) show the financial behaviour of small and medium-sized enterprises are to a large extent attributable to their development cycles. In their research into financing of small firms, conducted on a sample of sixty businesses in three Chinese cities, J. Wu et al. (2008, pp.959-975) have found evidence in support of the financial growth cycle theory.

However, other researchers criticise this model of financing, claiming it fails to offer a complete view of modelling of financial decisions and behaviour of small and medium-sized enterprises. For instance, A. N. Berger, G. F. Udell (1998, pp.613-673) agree the lifecycle paradigm will not be of use to all small and medium-sized enterprises in various industries, assuming age and size of a firm and availability of information, pillars of this particular paradigm, are not always perfectly linked to one another. B. T. Gregory, M. W. Rutherford, S. Oswald and L. Gardine (2005, pp.382-392) are in partial support of the model, saying financing of small and medium-sized enterprises cannot be standardised. In addition, their results, contrary to the model of organisation lifecycle, which would suggest financial requirements of a small and medium-sized enterprise are positioned on a certain scale of time, age and information, size of a firm proves the sole significant factor conditioning decisions regarding capital structure of a small and medium-sized enterprise in some, though not all the cases.

The model of financing small and medium-sized enterprises explicated by A. N. Berer, G.F. Udell (1998, pp. 613-673) diverges from the hypotheses advanced by the pecking order theory. The theory of a sequence of choices of financing sources (the pecking order theory), developed by S. C. Meyers (1984, pp.574-592), implies decisions

affecting capital structure of a business are functions of its age. In line with the theory, internal sources of financing have a priority status, whereas use of external sources is delayed until the internal ones have been exhausted. He posits the following sequence of preferred sources of financing for a business: internal own capital, internal equity, then generation of debt and external venture capital, business angels.

In accordance with the pecking order theory, and contrary to the financial growth cycle, B. T. Gregory et al. (2005, pp.382-392) argue older companies should be less dependent on external sources of financing than younger businesses are. They state older firms have more opportunities for accumulating retained profits and thus have more internal funds available to finance their own operations. J. Sancez-Vidal and J.F. Martin-Ugedo (2005, pp.342-355) on Spanish small and medium-sized enterprises also support the pecking order theory. The theory has also been tested by J. Helwege and N. Liang (1996, pp.429-458), who examined financial decisions of small, young enterprises in 1984-1992. Results of these authors' empirical research indicate sources of financing employed by businesses in their sample undermined the pattern suggested by the pecking order theory. They failed to find evidence of a significant connection between growth of external financing and deficits of internal funds, as suggested by that theory, either.

In spite of efforts towards creating theories of financial behaviour of small and medium-sized enterprises, which have produced a variety of financing patterns small and medium-sized enterprises are expected to follow, it appears different theories suggest various approaches.

There is a general agreement, though, concerning impact of characteristics of small and medium-sized enterprises and of

entrepreneurs on choices of sources and methods of financing resorted to by small and medium-sized enterprises.

Another theory is advocated by J. E. Stiglitz and A. Weiss (1981, pp. 393-410). They argue lack of information transparency is a fundamental factor influencing selection of financing sources. They claim the asymmetry of information is the cause of credit rationing, that is, lending to some applicants only. This stems from banks not raising interest rates, which could adversely affect their profitability due to a negative customer selection and a temptation to accept more risky investment projects from some clients. The failure to apply the classic market mechanism of raising prices given growing demand will restrict access to crediting (Stiglitz, Weiss, 1981, pp. 393-410).

Foundations for analysis of the information asymmetry were laid by G. Akerlof, M. Spence and J. E. Stiglitz, Nobel Prize winners for these achievements in economics in 2001. These scientists have built the foundations for the general theory of markets exhibiting the asymmetry of information. They concluded even slight deviations from rationality at the level of micro-behaviour trigger major macroeconomic deviations, which means, for instance, unavailability of bank crediting to micro-enterprises has consequences for an entire economy.

1.3. Methods

Verification of the hypothesis formulated in the article is based on the outcome of the secondary research carried out on the Polish micro, small and medium-sized enterprises (MSME) and the results of author's own empirical research carried out in Lesser Poland region.

Results of empirical research into the Polish sector of MSME are derived from secondary sources. These are chiefly data collected in

reports published by the Ministry of Economy, Department of Market Forecasting and Analysis, and the Polish Confederation Lewiatan.

Ministry of Economy, Department of Market Forecasting and Analysis, has undertaken regular studies since 1998. These are carried out twice a year, the most recent in March and April 2016. 6000 MSMEs were selected out of the set of REGON numbers. 15% of correctly filled survey questionnaires were returned. Micro-enterprises prevail in the sample, accounting for 87.3% of all the entities examined. Small firms constituted 8.5% and medium-sized 4.2%. Self-employed individuals who do not hire any personnel were the bulk of the sample (56%). The sample is representative as it has been randomly selected from the entire SME population; it additionally represents the real structure of the population.

The Polish Confederation of Private Employers Lewiatan regularly distributes survey questionnaires among Polish SMEs as well.

The research sample consists of 1650 enterprises every year. The enterprises are selected in line with prevailing statistical rules, thus, the results are reliable and can provide grounds for drawing conclusions concerning the SME sector in Poland.

The author conducted her own research in Lesser Poland with reference to 2012-2015. The research sample has been randomly selected and consists of 350 micro and small enterprises from eight the most popular sections in Polish MMSEs such as: culture and entertainment, construction, transport, production, IT, trade, gastronomy and accommodation, and other services. A survey questionnaire and structured interview served as the research methods. The author met individual entrepreneurs, which helped to eliminate potential errors due to any ambiguities.

The Polish SMEs were classified in line with the Freedom of Business Operations Act of 02.07.2004 (672 of 2013). The criteria of enterprise classification:

- Micro-enterprises: employing fewer than 10 on average annually, net sales revenue and total assets below € 2m,
- Small enterprises: employing fewer than 50 on average annually, net sales revenue and total assets below € 10m,
- Medium-sized enterprises: employing fewer than 250 on average annually, net sales revenue below €50m, and total assets below € 43m.

The question of whether an enterprise is independent or affiliated with others (partner or affiliated enterprises) has been taken into consideration for the purposes of computing average employment and the financials).

Furthermore, to verify the hypothesis Pearson's Chi-squared test (χ^2) of independence was used, where H_0 indicates that the variables are independent and H_1 indicates that variables are dependent.

1.4. Financing of Polish SMEs in practice

In spite of the Freedom of Business Operations Act of 02.07.2004 (173.1807 of 2004) prevailing in Poland, which clearly defines criteria for inclusion in the SME sector, each bank applies rules of its own. Criteria for categorising enterprises as micro, small and medium-sized are set out in Table 1.1 below. Names of banks are not disclosed due to the bank secrecy.

Table 1.1 Criteria for inclusion of enterprises in the SME sector by selected banks in Poland

Bank	Criteria
1	Firms employing fewer than 50 in a business year on average and whose annual turnover was as follows: <ul style="list-style-type: none"> – Self-employed, private companies – up to PLN 20m, – Capital companies and other legal forms – up to PLN 10m, – Professions – unlimited.
2	Businesses keeping integrated books of accounts with annual sales revenue below an equivalent of € 7m
3	<ul style="list-style-type: none"> – Small businesses keeping the so-called abbreviated books of accounts whose annual sales revenue is below an equivalent of € 800K. – Medium-sized businesses keeping integrated books of accounts with annual sales revenue below an equivalent of € 800K.
4	Enterprises as defined by the Business Operations Law, individual professionals, private farmers, and non-profit entities working for households with annual net sales revenue or annual budgets below PLN 5m in the last calendar year.

Source: The author's own compilation.

The data in Table 1.1 implies that banks commonly prefer businesses keeping integrated books of accounts, which, in the circumstances of Poland, means they do not support a bulk of micro-enterprises since, as Doing Business (2013) report states, more than 90% micro-enterprises are self-employed individuals who apply such abbreviated book-keeping as lump-sum income tax and revenue and expense ledgers.

The data published by the Polish Confederation of Private Employers (PKPP) Lewiatan indicate a majority of Polish SMEs do not take advantage of bank crediting (ca. 70%) as it is difficult to obtain.

Banks regard the sector as highly risky and rarely decide to finance micro-enterprises (Table 1.2). The data below suggest medium-sized enterprises, as the least risky among SMEs from the viewpoint of bank servicing, secure bank credits far more frequently than small or micro-enterprises do. It can be reaffirmed, therefore, that access to bank crediting in direct proportion to size of a business.

Table. 1.2 Percentage of enterprises using bank credits by the size of the enterprises in 2011-2015

Year	Total SMEs using credits [%]	Type of enterprise	Percentage of enterprises [%]
2011	12.0	Micro	34
		Small	80
		Medium	69
2012	18.7	Micro	28
		Small	64
		Medium	68
2013	19.8	Micro	31
		Small	60
		Medium	65
2014	20.5	Micro	28
		Small	48
		Medium	67
2015	31.0	Micro	28
		Small	48
		Medium	55

Source: author's own compilation based on: the raport's: Trendy rozwojowe sektora MMSP w ocenie przedsiębiorców w drugiej połowie 2015, 2014, 2013, 2012, 2011, MG DPiA, Warszawa, 2012, 2013, 2014, 2015, 2016, p.24

Current account and working credits are most commonly awarded to Polish SMEs, since banks, in order to minimise the risk of supporting SMEs, are more willing to issue short- than long-term crediting. The data contained in Table 1.3 once again show the smaller an enterprise, the harder its access to long-term bank credit.

Table. 1.3 Percentage of enterprises using bank credits in 2011-2015

Type of credit	Year	Bank overdraft	Working capital credit	Investment credit	Other type of credit
Micro	2011	17	6	3	2
	2012	20	4	3	5
	2013	15	6	4	7
	2014	16	6	4	6
	2015	12	6	5	9
Small	2011	33	16	17	13
	2012	36	23	18	5
	2013	33	9	11	9
	2014	33	17	10	6
	2015	33	12	9	4
Medium	2011	39	17	20	2
	2012	43	26	26	11
	2013	38	25	25	4
	2014	29	38	17	4
	2015	21	12	24	6

Source: author's own compilation based on: the raport's: Trendy rozwojowe sektora MMSP w ocenie przedsiębiorców w drugiej połowie 2015, 2014, 2013, 2012, 2011, MG DPiA, Warszawa, 2012, 2013, 2014, 2015, 2016, p.24

Every second firm applying for bank credits has been awarded the credit it applied for, 50% applications have been rejected.

Most successful applications have been submitted by medium-sized firms (as many as 78%), followed by small (62%) and micro-enterprises (35%) (PKKP, 2014), which is yet more evidence of the hypothesis of discrimination against micro-enterprises in Poland.

The information in Table 1.4 demonstrates micro-enterprises secure worse terms of crediting with banks in Poland.

Table 1.4 Average rates of credit interest for SMEs in 2011-2015

Year	Credit interest						
	micro	small	medium	difference micro- small	difference micro- medium	difference small- medium	average credit interest
2011	11.5	7.0	8.0	4.0	3.0	1.0	9.0
2012	10	7.0	8.0	3.0	3.0	2.0	8.5
2013	9.0	7.5	6.0	1.5	3.0	1.5	8.0
2014	9.0	7.0	4.5	2.0	4.5	2.5	7.5
2015	8.5	7.5	5.5	1.0	3.0	2.0	7.0

Source: author's own compilation based on: the raport's: Trendy rozwojowe sektora MMSP w ocenie przedsiębiorców w drugiej połowie 2015, 2014, 2013, 2012, 2011, MG DPIA, Warszawa, 2012, 2013, 2014, 2015, 2016, p.25

The data in Table 1.4 above indicate micro-enterprises are offered higher interest rates due to their greater risk: 1 to 2 percentage points more than the average rate for the entire SME sector, 0.5 pp to 4.0 pp more than small enterprises, and 2.0 pp to 4.0 pp more than medium-sized enterprises, depending on the year. In general, the smaller

an enterprise, the higher rates of interest are charged on its crediting. Thus, the details in Table 1.3 corroborate the hypothesis posited in this article.

The hypothesis may also be confirmed with the results of the author's own research¹ into banks in Poland. They imply the banks declare they offer crediting to the SME sector, yet barely 20% provide investment crediting to micro-enterprises (Table 1.5).

Table 1.5 Beneficiaries of bank crediting in Poland

Type of enterprise	The percentage of banks granting credits
Micro	20
Small	60
Medium	100

Source: author's own research

Problems securing bank credits translate into a structure of investment financing. The results in Table 1.6 show own capital including retained profits is the key source of financing (depending on the year: 86% in 2004 and more than 64% in 2013). Fewer than 20% SMEs take advantage of bank crediting, therefore, the gap is filled with leasing.

The data in Table 1.6 span a longer time-frame to allow for capturing of change trends. Analysis of data over time demonstrates numbers of businesses financing their investments with their own capitals has been steadily declining, though ranks of firms employing bank credits vary only slightly, which means problems securing bank credits by the group of enterprises under analysis are not temporary, but long-term.

¹ The author's own research has been conducted with 7 banks, including 6 large international banks and 1 public bank. They account for 50% of the banking market in Poland. The research was a survey questionnaire administered at personal meetings with knowledgeable bank representatives in 2015

Table 1.6 Sources of financing for Polish SMEs in 2004-2013

Year	The percentage of enterprises [%]				
	Owner's capital, including profit	Bank credit	Leasing	UE funds	Other
2004	86,0	14,2	12,6	3,6	0,3
2005	69,1	16,6	10,5	1,4	2,4
2006	73,1	12,7	9,0	1,9	3,3
2007	72,6	17,4	6,9	1,9	1,2
2008	74,1	12,8	7,5	6,5	2,9
2009	64,8	17,7	8,3	7,3	1,9
2010	64,0	10,0	8,0	4,5	1,4
2011	56,0	12,0	11,0	2,2	0,7
2012	67,7	18,7	6,3	3,2	0,2
2013	64,4	19,8	8,8	0,6	1,1

The values do not add up to zero as many sources of financing could be selected.

Source: author's own compilation based on: the raport's: Monitoring kondycji sektora MSP, PKPP Lewiatan, Warszawa 2004, 2005, 2006, 2007, 2009, 2010, 2011; Wyżnikiewicz B., Polskie MMSP na drodze ku nowoczesności, Instytut Badań nad Gospodarką Rynkową, PKPP Lewiatan, Warszawa 2013.

It should be concluded the very criteria of classifying enterprises as SMEs by banks discriminate against the smallest businesses in favour of entities supplying fully transparent information in their integrated books of accounts. The results introduced here indicate a direct proportionality between size of an enterprise and easier access to bank crediting. Merely 20% micro-enterprises are beneficiaries of banks and, if their applications are accepted, they are offered higher interest, a function of greater risk of servicing these businesses.

Results of studies by the National Bank of Poland (NBP) also corroborate the hypothesis that the SME sector encounters more difficult access to bank crediting (NBP, 2015, p. 29).

Analysis of the research by the Polish Agency of Enterprise Development (PARP) reaffirms micro-firms (particularly with turnovers below PLN 1m) (PARP 2010) and businesses operating for no longer than two-three years (NBP, 2015, p. 29) find it hardest to obtain bank crediting.

1.5. Financing of Lesser Poland SMEs in the light of the author's empirical research

For enterprises in Lesser Poland, like in the entire Polish SME sector, equity, chiefly owner capital and retained profits, is the main source of operational financing. The following figures point to no differences between micro (Fig. 1.1) and small enterprises (Fig. 1.2).

The Chi2 test showed that there were no statically significant differences between the micro and small enterprises, and financing of investments from profit ($\text{Chi}^2=0.0244$, $\text{df}=1$, $p=0.87$). The share of enterprises utilising their own capitals is equally large, which means this is the basic source of financing for both the groups.

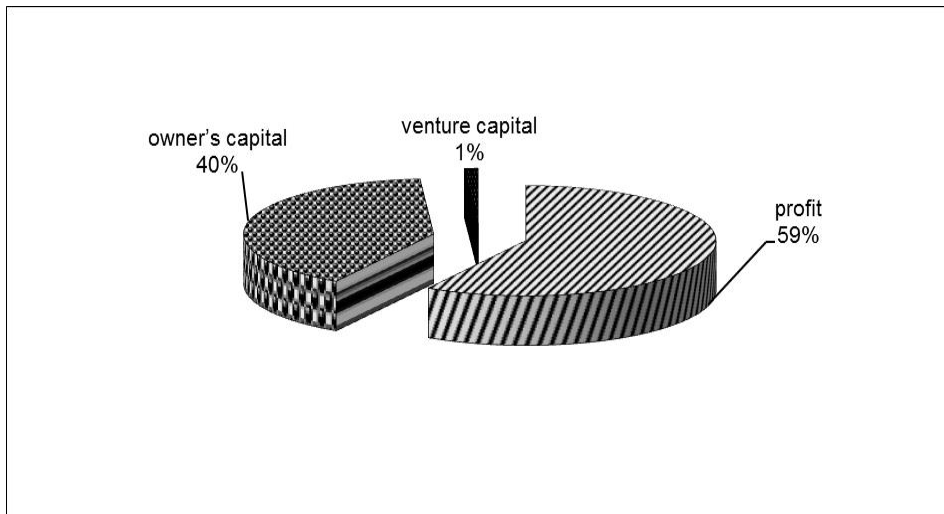


Fig. 1.1 Own sources of micro-enterprise financing.

Source: The author's own research.

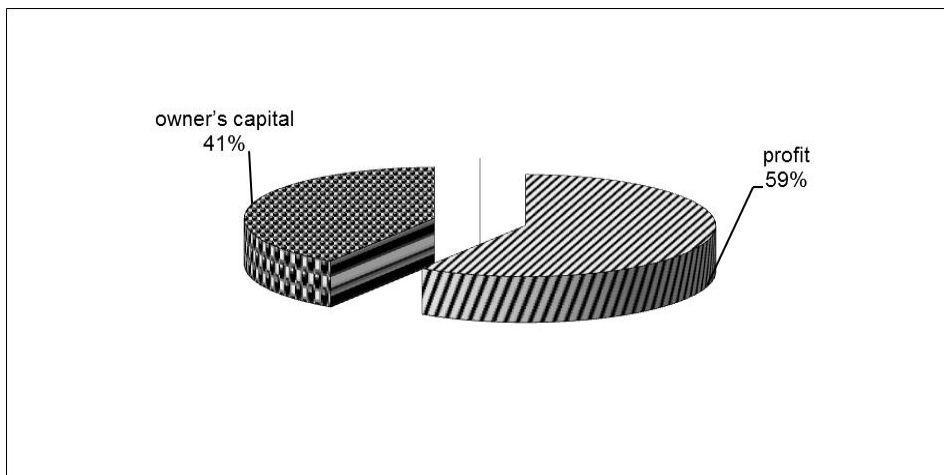


Fig. 1.2 Own sources of small enterprise financing.

Source: The author's own research.

Such a substantial percentage of enterprises employing their own capitals may point to the fact they have trouble securing third-party funding.

The data in Figures 1.3 and 1.4 illustrate the structure of third-party sources of financing. They imply EU funds, bank crediting and leasing come top in both groups of enterprises examined ($\chi^2=0.140$, $df=1$, $p=0.708$)

However, comparing micro (Fig. 1.3) and small enterprises (Fig. 1.4), one can note fewer (by 12 p.p.) micro-enterprises than small enterprises take advantage of bank crediting. This may prove a limited availability of this source to the group of smallest businesses. Micro-entrepreneurs supplement this capital gap with EU funding (ca. 60% of the respondents) and leasing (more than 17%).

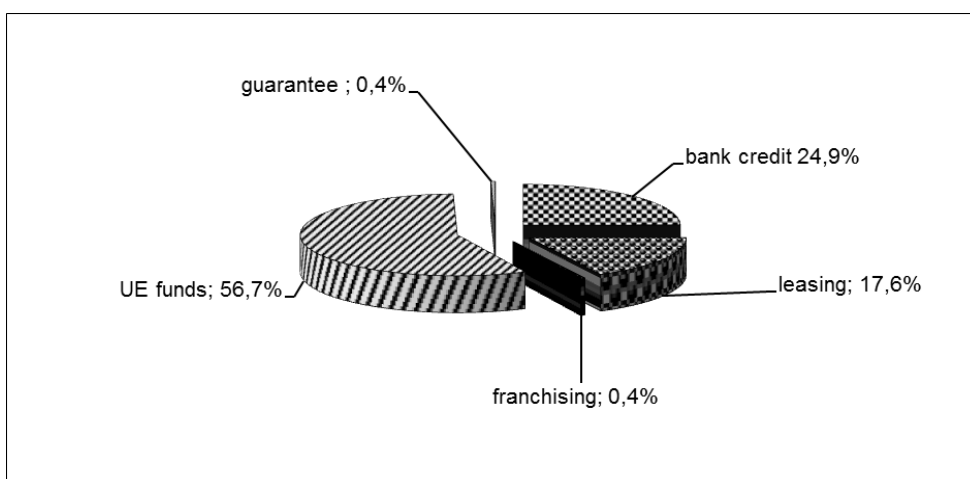


Fig. 1.3 Third-party sources of micro-enterprise financing.

Source: The author's own research.

Fewer small than micro-entrepreneurs have secured EU funding, a possible result of simplified procedures offered by the EU programmes for micro-enterprises and the consequent easier accessibility. It is also clear bank crediting is more freely available to small than micro-firms in Lesser Poland.

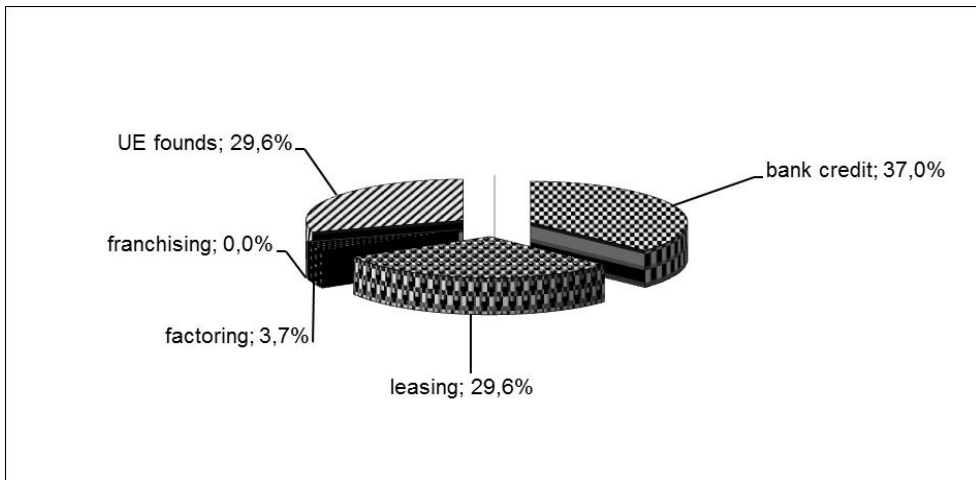


Fig. 1.4 Third-party sources of small enterprise financing.

Source: The author's own research.

Since self-employed individuals are the prevailing legal format among both micro and small enterprises, a part of the enterprises queried supplement capital deficits with bank crediting for private individuals, since it is more readily available, and assign the monies to their business operations. This is true both for micro (20% actual and 11% prospective users) and small enterprises (as many as 43% actual and 4% prospective users). The Chi2 test showed no statistically significant differences between the micro and small enterprises and the use of loans for individuals to achieve the objectives of the company ($\text{Chi}^2=0.277$, $\text{df}=1$, $p=0.59$).

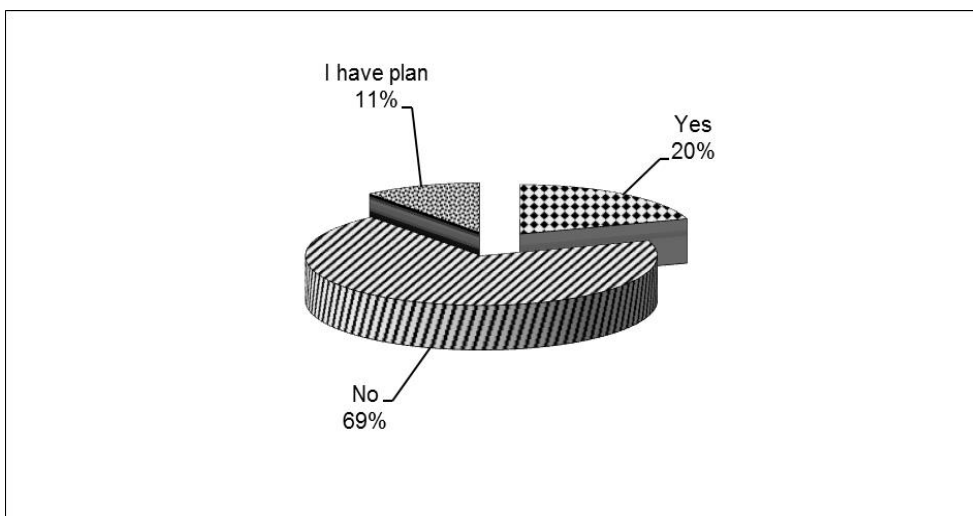


Fig. 1.5 Use of crediting for private individuals as a source of financing for micro-enterprises operations.

Source: The author's own research.

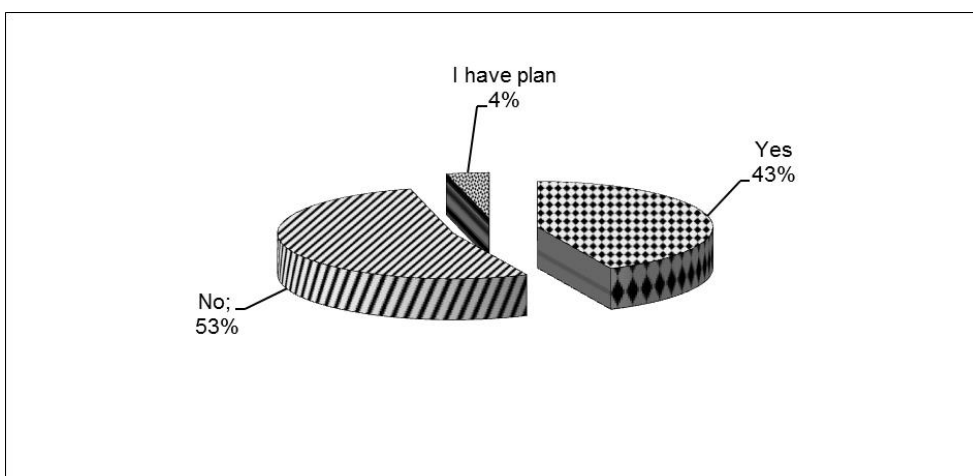


Fig. 1.6 Use of crediting for private individuals as a source of financing for small enterprises operations.

Source: The author's own research.

It can be said in summary micro and small enterprises in Lesser Poland have problems obtaining third-party sources of financing, including bank credits, and therefore to a large extent finance

investments with their own capitals, including retained profits. In view of low profits generated, this has a direct adverse impact on poor growth and development of these businesses.

The resulting capital gap attempt to bridge with private crediting and use it to carry out both their operations and investments. Such a considerable interest in this form of financing shows there is a high demand for bank crediting while its supply is insufficient.

These results also affirm Lesser Poland micro-enterprises resort to bank crediting to a narrower extent than small enterprises do. These differences are far wider than indicated by the PARP or NBP as they reach as much as 16 pp, which corroborates the hypothesis submitted by this author.

1.6. Conclusion

Secondary holistic studies have proved a majority of banks define SMEs as enterprises keeping integrated books of accounts, thus disqualifying most micro and small enterprises that, in Polish conditions, keep abbreviated books. A directly proportional dependence has been demonstrated between size of an enterprises and numbers of businesses securing bank credits. Approximately 50% of small and more than 60% of medium-sized enterprises are issued bank crediting, compared with merely around 30% of micro businesses. Short-term current account crediting, not investment credits, prevail among the latter group, with barely 5% respondents lent for investments. Added to all that, micro-enterprises are offered worse terms than small or medium-sized firms.

The survey of Lesser Poland's SMEs has reaffirmed the hypothesis, with the differences of access to bank crediting between micro and small enterprises even more pronounced, that is, as much as 16 percentage points.

Therefore the results presented above have confirmed the paper's hypothesis: Banks discriminate against micro-enterprises in the process of credit awarding.

These conclusions are shared by A.N. Berger et al., who claim large banks are reluctant to finance small enterprises due to the limited scale of the latter's operations and excessive costs of exploring local markets, where such enterprises operate (Berger, Klapper, Udell, 2001, p. 2131.)

1.7. Lines of future research

Such conclusions give rise to the question whether this is a systemic problem of development of the financial sector and quality of its services, or an isolated issue along the lines of enterprises-bank. Therefore, the author intends to explicate causes of this phenomenon in her further studies.

References:

Barton, S. L., & Gordon, P. J., (1987), Corporate Strategy: Useful Perspective for the Study of Capital Structure? The Academy of Management Review, 12(1), Vol. 67

Berger A.N., Klapper L.F., Udell G.F., (2001), The ability of banks to lend informationally opaque small businesses "Journal of Banking & Finance" Issue Vol. 25,

Berger, A. N., & Frame, W. S. ,(2007), Small Business Credit Scoring and Credit Availability, Journal of Small Business Management, Vol. 45, No 1

Boguszewski, P., (red.), (2014), Instrument szybkiego reagowania na zagrożenia upadłością w sektorze przedsiębiorstw niefinansowych. Koncepcja i implementacja, PARP, Warszawa

Cassar, G., (2004), The Financing of Business Start-Ups. Journal of Business Venturing, Vol 19, No 2

Chittenden, F., Hall, G. C., & Hutchinson, P. J., (1996), Small Firm Growth, Access to Capital Markets and Financial Structure: Review of Issues and an Empirical Investigation, Small Business Economics, Vol 8, No 1

Gregory, B. T., Rutherford, M. W., Oswald, S., & Gardiner, L., (2005), An Empirical Investigation of the Growth Cycle Theory of Small Firm Financing, Journal of Small Business Management, Vol 43, No 4

Helwege, J., & Liang, N., (1996), Is There a Pecking Order? Evidence from a Panel of IPO Firms, Journal of Financial Economics, Vol 40, No 3

Huyghebaert, N., & Van de Gucht, L. M., (2007), The Determinants of Financial Structure: New Insights from Business Start-Ups, European Financial Management, Vol 13, No 1

Kimhi, A., (1997), Intergenerational Succession in Small Family Businesses: Borrowing Constraints and Optimal Timing of Succession, Small Business Economics, Vol 9, No 4

La Rocca, M., La Rocca, T., & Cariola, A., (2011), Capital Structure Decisions During a Firm's Life Cycle, Small Business Economics, Vol 37, No 1

Myers, S. C., (1984), The Capital Structure Puzzle, The Journal of Finance, Vol 39, No 3

Sánchez-Vidal, J., & Martín-Ugedo, J. F., (2005), Financing Preferences of Spanish Firms: Evidence on the Pecking Order Theory, *Review of Quantitative Finance and Accounting*, Vol 25, No 4

Stiglitz J.E., Weiss A., (1981), Credit rationing in markets with imperfect information, *The American Economic Review*, Vol. 71

Sytuacja finansowa sektora przedsiębiorstw w I kw. 2015 r. Raport 2, (2015), NBP, Warszawa

The Report: Doing Business, (2013), Belgium

Trendy rozwojowe sektora MMSP w ocenie przedsiębiorców w drugiej połowie 2013 roku, (2014), MG DPiA, Warszawa

Trendy rozwojowe sektora MMSP w ocenie przedsiębiorców w drugiej połowie 2012 roku, (2013), MG DPiA, Warszawa

Trendy rozwojowe sektora MMSP w ocenie przedsiębiorców w drugiej połowie 2014 roku, (2015), MG DPiA, Warszawa

Trendy rozwojowe sektora MMSP w ocenie przedsiębiorców w drugiej połowie 2015 roku, (2016), MG DPiA, Warszawa

Wu, J., Song, J., & Zeng, C., (2008), An Empirical Evidence of Small Business Financing in China, *Management Research News*, Vol 31, No 12

Wyżnikiewicz B., (2013), Polskie MMSP na drodze ku nowoczesności, Instytut Badań nad Gospodarką Rynkową, PKPP Lewiatan, Warszawa

Monitoring kondycji sektora MSP, PKPP Lewiatan, Warszawa 2004, 2005, 2006, 2007, 2009, 2010, 2011, 2012

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CHAPTER 2

DIVERSITY MANAGEMENT AS A TOOL OF CORPORATE SOCIAL RESPONSIBILITY

2.1. Introduction

Every person is different and unique. For instance, we all have a different appearance, ethnic origin, language and character. Every person thinks differently, reacts differently to stimuli, has different views, perspectives and prejudice. It is said that diversity constitutes a fundamental value of the modern society. Diversity consists in similarities and differences between people in terms of age, culture, physical abilities, disabilities, race, religion, sex, sexual orientation, etc. The diversity impacts the area of functioning of every enterprise. Diversity entails opportunities as well as threats for an enterprise. In recent years, the idea of diversity management has become more and more popular in Poland (Lewiatan Confederation, 2014). Diversity management, in general terms, is a human resources management strategy utilising heterogeneity to fuel the development of the enterprise (Walczak, 2011, pp. 11-19). It is also an important element of corporate social responsibility (CSR), which may be defined as the enterprise's comprehensive involvement in pro-social and pro-ecological activities, as well as acting ethically and responsibly while dealing with stakeholders. By being socially responsible, the companies can gain competitive edge in various areas of business. Skilful diversity management is certainly required for every

organisation and a challenge for its management. It is worth to emphasize, that diversity management is a new strategy of management. What is more, it has its supporters and critics as well. Research says that diversity is important for several reasons, some of which will be discussed in this paper, for instance: good atmosphere at work, a good reputation on the market, positive impact on employees, increased creativity and problem solving, attracting and recruiting a talented employees, better adjustment to handling various clients, gaining a competitive advantage.

The purpose of this article is to analyse and evaluate the diversity management activities undertaken by enterprises. This paper critically reviews the literature on diversity management highlighting its main features. What is more, it discusses the major issues and objectives of managing diversity as a part of CSR. The paper analyses main benefits resulting from competent diversity management at an enterprise as well as examines the level of the application of that concept in the Polish enterprises. It can help to understand how diversity management contributes to organizational success. The undertaken research topic was executed using the critical literature analysis method, reports, papers and conclusions. The structure of the paper consists of three chapters. First of all, the paper shows some light on the idea of diversity management and corporate social responsibility. Secondly, this article looks at how Polish CSR businesses are engaged in social reporting. Finally, it analyses main benefits of diversity management.

2.2. Theoretical approach to Diversity Management

There are numerous definitions of diversity management (DM), hence the author of the paper decided to mention those, which are the most pertinent. The concept of diversity management emerged in the

second half of the 20th century in the USA and Western European countries. At first, it was a tool used to activate minorities on the labour market. DM was focused on counteracting prejudice, whereas the main factors driving the implementation of DM principles were not legal arguments, moral obligations or corporate social responsibility, but rather benefits in the form of increased income generated by enterprises (Kwiatek, 2014, p. 158). DM is a human resources management strategy assuming that diversity in a workplace is one of the key resources of an organisation which contribute to its development and achievement of business goals. It is important to notice and accept diversity in a workplace and to build the enterprise's competitive advantage based on it. The notion of diversity itself at an enterprise may be interpreted in many ways. Diversity is not only about the age or sex of an employee, but also competence, skills, talents and various life and professional experiences. While managing diversity one must notice differences present at the enterprise, as well as consciously establish strategies, policies and programmes which will encourage the air of respect and utilisation of the said differences to the benefit of the organisation (Sznajder, 2013, pp. 6-7). DM is an active phenomenon, including leading and coordinating organisational diversity in a manner ensuring the performance of the organisation's strategic objectives. Therefore, it entails providing employees from various cultural backgrounds with an opportunity to contribute to the performance of these objectives (Mazur, 2010, pp. 125-135). Another definition (Kupczyk, Oleszkiewicz, Kubicka, 2014, p. 237) states that the primary assumption of diversity management is a conviction that diverse personnel constitutes an asset for an enterprise and may become

a source of business benefits and profits under certain circumstances. The objective of activities comprising diversity management is creating such environment at work in which every employee feels

respected and appreciated, and has the best opportunities to utilise his or her individual skills to perform the enterprise's mission (Quaiser-Pohl, Ruthsatz, Endepohls-Ulpe, 2013, p. 37). Such workplace allows employees to feel that they can really influence the functioning of the enterprise, makes them more eager to become engaged in their work, which directly translates into improved results of the entire economic entity. It consists in building a permanently inclusive and empowering workplace (Rewłuszko, 2007, p. 27). In terms of managed equity diversity management is a form of organizational intrapreneurship where individuals/entities attempt to leverage human capital for value-added benefits (Robinson, 2009, p. 17).

DM employs human resources management methods and tools. The selection of methods and instruments should be correlated with staff structure and their application should comply with assumptions of personnel policy at the enterprise (Gajdzik, 2015, p. 93). DM allows a conscious use of employees' diverse potential. Practices connected with diversity management are aimed to ensure the possibility to search for new, previously invisible, talented people belonging to marginalised groups. Therefore, the basic assumption for this idea is to ensure that all diverse employees have various opportunities, including: access to work, career development, salary, work-life balance (Leks-Bujak, 2014, p. 103). What is more, enterprises cannot ignore diversity. Ignoring diversity issues costs time, money, and efficiency. Some of the consequences can include unhealthy tensions; loss of productivity because of increased conflict; inability to attract and retain talented people of all kinds; complaints and legal actions; and inability to retain valuable employees, resulting in lost investments in recruitment and training. discrimination and promoting inclusiveness (Bedi, Lakra, Gupta, 2014, p. 105).

To sum up, one may conclude, that DM is a collection of activities and practices aimed at the execution of enterprise's

assumed goals using employees' heterogeneity. DM requires, in particular, respect, understanding, acceptance and appreciation of people's diversity. DM enables the creation of workplaces in which all employees, regardless of demographic and social differences between them, feel appreciated and respected. Such activities allow the enterprise to fully utilise the employees' potential and favour their development, which may contribute to making human resources management more efficient. DM is an instrument which can help to build supportive work environment. Diversity management may also be treated as one of CSR components, because the workplace and employment issues are a very popular area for the concept. CSR activities with regard to employment concern virtually all human resources management components, i.e. diversity management is a perfect match for the idea of CSR. The CSR constitutes the crucial element of strategy for many enterprises. Due to the activities being socially responsible, the companies can gain the competitive edge in various spheres of business. The beneficiaries of diversity management are frequently groups of people excluded from the society, e.g. people with disabilities. DM at the workplace allows the company to give them a chance for a "new" life. While defining diversity management it is common to pay attention to its strategic and comprehensive nature, being directed toward personnel issues, stressing the fact that the workplace is a key area for DM, treat diversity as a fundamental resource at the enterprise and to emphasise its positive influence on the organisation. What is more, diversity management can be treated as a key to growth of organisations. It seems that many enterprises should implement DM because of its advantages. At this point engagement of Polish enterprises in DM deserves to be examined because it can show the importance of DM in Poland.

2.3. The level of Diversity Management at Polish enterprises

It is worth to start considerations concerning the level of diversity management by mentioning the Diversity Card which constitutes a written obligation undertaken by an enterprise to introduce a ban on discrimination and mobbing at the workplace, to develop and implement an equal treatment and DM policy, to promote diversity and to implement institutional, internal solutions at the organisation aimed at the development of the equal treatment policy, to engage all employees in a dialogue on DM, etc. The initiative has been functioning in the European Union since 2011 and it reached Poland in 2012. The organisation responsible for the Diversity Card is the Responsible Business Forum.

According to the state for August 2016 the card has been signed by 147 Polish enterprises. Becoming one of the card signatories is voluntary and free-of-charge. It allows the enterprise to express its support for the idea of diversity in a workplace and to emphasise the core of the topic. It is necessary to fill in a survey to become a signatory (Responsible Business Forum, 2016). It is worth mentioning that a great majority of economic entities which have signed the card are large enterprises, i.e. those employing over 250 employees. This may indicate that diversity management is still the domain of the largest enterprises which more frequently use modern solutions in the field of employment and at the workplace. It seems that most micro, small and medium enterprises do not see the benefits which diversity management may bring to the company or do not have sufficient knowledge, skills or potential to implement the discussed personnel policy. The aforementioned is confirmed by research concluded in Poland such as the Diversity Barometer and Diversity Index. The index is calculated based on a survey which verified DM in areas such as: strategic management, organisational culture, employment

structure, recruitment, promotions, development, salaries. The Diversity Index in case of small enterprises amounted to 43.1, whereas in case of medium and large enterprises it amounted to 51.07 (Lewiatan Confederation, 2014, p. 9). Figure 2.1 shows selected analysis results (Diversity Barometer).

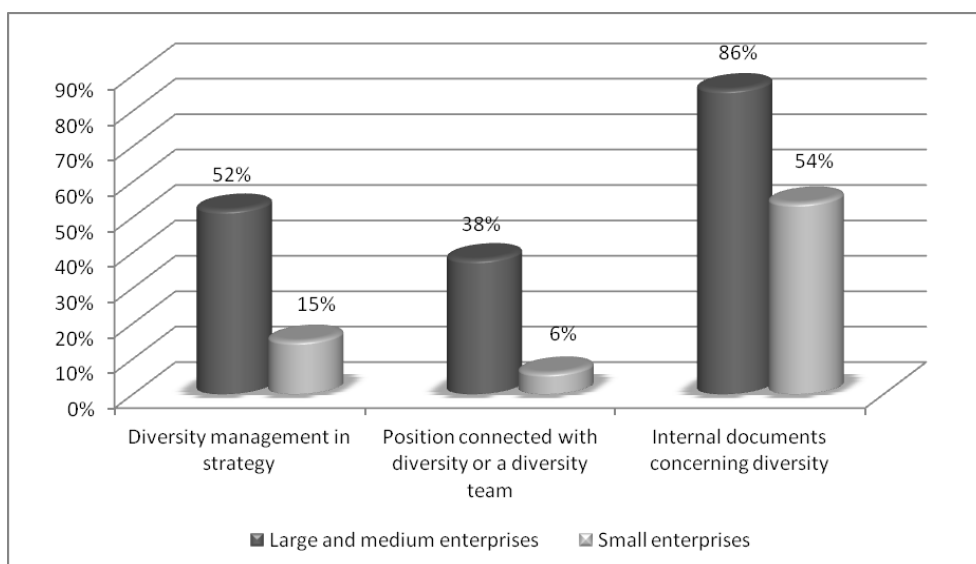


Fig. 2.1 Diversity management in Polish enterprises

Source: own compilation based on: Lewiatan Confederation, (2014), Zarządzanie różnorodnością w miejscu pracy. Raport z II edycji Barometru Różnorodności, Konfederacja Lewiatan, Warszawa, pp. 24 - 25.

Data presented in Fig. 2.1 indicates that only 15% of small enterprises which participated in the analysis have a diversity management strategy. In case of medium and large entities the percentage was 52%. Moreover, only 6% of small and 38% of medium and large enterprises declared that they have a position connected with diversity or a diversity team. As much as 86% of large and medium enterprises and 54% of small ones had internal documents concerning equal treatment with regard to sex, age, disability, sexual

orientation, race, nationality, ethnic origin, religion, beliefs, etc. Unfortunately, the analysis is significantly restricted due to the fact that only 100 entities participated in it. Additionally, they were companies which applied of their own volition, because they wanted to share their experience and good business practices. By taking part in the analysis the organisations also wanted to assess the level of their adherence to diversity management criteria, and thus it may be concluded that their objective behind participation in the survey was to analyse their own organisation. Therefore, the analysis cannot constitute a reference to the entire SME sector. However, it shows certain tendencies, for instance the interdependence between the size of the enterprise and the level of engagement in the idea of diversity management. It emphasises a significant prevalence of large and medium enterprises in terms of activities related to DM. If one were to look at the entire SME sector, it may be concluded that diversity management remains a synonym of novelty and, unfortunately, numerous entrepreneurs are still unfamiliar with issues related with it. This is confirmed, for instance, by results of analysis conducted by the Polish Agency for Enterprise Development (PARP, 2011), which showed that factors such as sex, age, country of origin, whether one has any children and people's sexual orientation are important to entrepreneurs while making a decision on their employment. As much as 42% of companies pay attention to the candidate's age and 50% pay attention to their sex during the recruitment process. The employees' country of origin is important for 21% of entrepreneurs, while their sexual orientation matters to 11% of employers (PARP, 2011, p. 125). The analysis showed that there is a need to undertake a series of educational and informational activities to counteract discrimination and promote diversity management.

It seems that enterprises may apply and implement the activities connected with the DM because of many benefits. The great role in

the process of current concept realization in companies plays advantages which can be achieved in many areas of business.

2.4. Benefits of Diversity Management

Some Polish enterprises are starting to invest in diversity and experiencing its beneficial influence. In order to do so efficiently and consciously, they must prepare their organisation to manage diversity and the organisation must undergo an adaptation process to implement the innovative strategy (Kraczla, Wziątek-Staśko, 2014, p. 327). Enterprises which implemented diversity management at the workplace may derive numerous profits from it. Clearly, a negative outcome of diversity may occur, however usually it is a result of improper management (Bieniek, 2013, pp. 378-379). DM leaders, i.e. firms which have signed the Diversity Card indicate a positive influence on atmosphere at work (74%) and the company's image (71%), attracting and keeping talented employees (58%), employee loyalty (53%), the possibility of gaining a competitive advantage (39%), as well as increased diversity among their clients (27%). Therefore, diversity management has a significant impact on employees employed at the company (Strzelczak, 2016).

The most important benefit of DM in the subject analysis was the way it affected the atmosphere at work, which is connected with organisational culture. Undoubtedly, the right organisational culture creates a positive and proper atmosphere at work, which can be felt during contact between employees and company's stakeholders. A desirable atmosphere at work integrates and turns employees into a society. The employees collaborate to the benefit of the company by pursuing assumed goals. They create the enterprise's identity and an atmosphere favouring the development of the company. The right atmosphere at work is also a measure which can be used to pass on

knowledge expanding the perspective of people employed at the enterprise. A good atmosphere at work helps new employees adapt and favours a more efficient cooperation between employees (Gryszko, 2009, p. 34).

According to DM we can avoid the costs of racial discrimination, such as damage to the organization's image through adverse publicity or the financial penalties resulting from legal cases (Wrench, 2016, p. 11).

While considering benefits of diversity management, the shaping of a positive image of the enterprise in its environment is frequently pointed out, which may be of fundamental importance for numerous stakeholders. Diversity in a workplace shapes the image of a socially responsible enterprise, i.e. an entity which feels responsible for its operations, considers the needs of its stakeholders and adheres to ethical principles, both in case of its employees and clients. Such a company is perceived by its stakeholders as an entity characterised by sensitivity toward social issues and which applies transparent business practices, and which respects differences. Skilful diversity management is one of the most important criteria determining a good and reliable employer. As a result of DM programmes employed at the enterprise, the employees should be satisfied by the fact that they can work at such a company.

An entrepreneur with a good reputation on the market may keep the best employees at the company as well as acquire highly qualified candidates. By respecting diversity in a workplace and appropriately using the heterogeneity of employees, the enterprise gains its employees' trust. Employees identifying themselves with operations of a particular company will certainly be more loyal toward it. It is worth noting that a loss of an employee is connected with a cost which must be borne by the employer. It is important for the entity to make its employees aware of DM programmes in place, because this will

undoubtedly improve their integration. Diversity management may also improve employees' motivation.

Gaining a competitive advantage is another benefit of diversity management. One should consider how such advantage can be gained. It seems that several factors may influence it. One of them may be improved efficiency and creativity of diverse employees (Basset-Jones, 2005, p. 169). It is without doubt that creativity drives innovation at the enterprise, which significantly affect its competitiveness. By employing diverse employees, the enterprise may utilise their skills, qualifications and potential, which contributes to creation of new ideas. Other benefits of DM may also include a better adjustment of the entity to handling various clients, such as people with disabilities, as well as an improved ability to resolve issues at the organisation. Socially responsible enterprises implementing DM frequently introduce numerous solutions for their clients. The most frequently used solution is to liquidate architectonic and communication barriers, which make it difficult for many people to use the company' services and products. They may include the elderly, people with disabilities, those with a different culture, etc. Moreover, by employing diverse employees the enterprise may more easily develop innovative solutions for products, services, supplies, resources, etc. The employees' diversity, their having various demographic and social features, diverse experiences and skills are a source of ideas adjusted to the changing market and clients' needs. Heterogeneity in a workplace favours acquiring new knowledge and skills, e.g. in case people from different countries are employed, one can learn another language, culture or habits from different countries.

It is worth to pay attention to the Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014, which refers to disclosing non-financial information and information concerning diversity by some large companies and groups. Pursuant

to the discussed document it is assumed that a diversification of competences and views of entity's administrative, governing and supervisory bodies favours a good understanding of the enterprise's operations and particular entity's operations. This allows members of those bodies to constructively question management's decisions, as well as makes them more open to innovative ideas. As a result, it contributes to efficient supervision of managers and good management of individuals (The European Parliament and the Council, 2014).

2.5. Conclusions

In order to summarise aforementioned considerations, it should be stated that at the time of socially heterogeneous environment diversity management should be of critical importance for enterprises. A lack of skilful diversity management may lead to conflicts at the organisation, whereas the managers' professional approach to the discussed concept may be highly beneficial for the enterprise in terms of, for instance, good atmosphere at work, building a positive image, a positive influence on employees or an increased competitiveness of the enterprise. The potential of diverse human resources is immense. Therefore, its proper utilisation may translate into the organisation's market success. It seems that diversity management should be an inextricable element of the concept of corporate social responsibility, since a responsible business includes, inter alia, a lack of discrimination of minorities, respecting employee diversity, adhering to ethical principles and good reputation.

References:

Bedi P., Lakra P., Gupta E., (2014), Workforce Diversity Management: Biggest Challenge Or Opportunity For 21stCentury Organisations, Journal of Business Management, Volume 16, Issue 4. Ver. III.

Bassett-Jones N., (2005), The Paradox of Diversity Management, Creativity and Innovation, Creativity and Innovation Managment, Vol. 14, Issue 2.

Bieniek I., (2013), Zarządzanie różnorodnością a trwałość relacji społecznych w organizacji, ZN Wyższej Szkoły Bankowej w Poznaniu, Tom 49 nr 4, Być, mieć, czy władać?, Poznań.

Gajdzik B., (2015), Zarządzanie różnorodnością zasobów ludzkich w przedsiębiorstwie hutniczym, Zeszyty Naukowe WSH Zarządzanie nr 4, Sosnowiec.

Gryszko M., (2009), Zarządzanie różnorodnością w Polsce, Forum Odpowiedzialnego Biznesu.

Kraczla M., Wziątek Staśko A., (2014), Karta różnorodności narzędziem doskonalenia wizerunku współczesnej organizacji, Zeszyty Naukowe Wyższej Szkoły Humanitas Zarządzanie Nr 2, Sosnowiec.

Kupczyk T., Oleszkiewicz A., Kubicka J., Zarządzanie różnorodnością w dolnośląskich przedsiębiorstwach, in: Research Papers of Wrocław University of Economics nr 350, ed. M. Stor, A. Fornalczyk, Uniwersytet Ekonomiczny we Wrocławiu.

Kwiatek A., (2014), Społeczna odpowiedzialność a różnorodność w organizacjach, in: Dokonania współczesnej myśli ekonomicznej: racjonalność - efektywność - etyka, ed. U. Zagóra-Jonszta U., Studia

Ekonomiczne Uniwersytetu Ekonomicznego w Katowicach nr 180, cz. 2. Katowice.

Leks-Bujak E., (2014), *Zarządzanie różnorodnością w organizacji*, Zeszyty Naukowe Politechniki Śląskiej Nr 72, Organizacja i Zarządzanie Nr kol. 1918, Politechnika Śląska, Katowice.

Lewiatan Confederation, (2014), *Zarządzanie różnorodnością w miejscu pracy. Raport z II edycji Barometru Różnorodności*, Warszawa.

Mazur B., (2010), *Zarządzanie zróżnicowaniem kulturowym przedsiębiorstw Podlasia*, Kwartalnik Środowisk Naukowych i Liderów Biznesu Współczesne Zarządzanie No 1/2010.

MillwardBrown SMG/KRC dla PARP, (2011), *Ocena stanu wdrażania standardów społecznej odpowiedzialności biznesu*, Warszawa.

Responsible Business Forum, (2016), *Karta różnorodności*, <http://odpowiedzialnybiznes.pl/karta-roznorodnosci/>, 17.10.2016.

Rewłuszko M. (2007), *Polityka równych szans a zarządzanie różnorodnością*, in: *Przewodnik dobrych praktyk. Firma równych szans*, ed. E. Bem, Gender index, UNDP, EQUAL, Warszawa.

Robinson C. L., (2009), *Diversity Management Pantheons: A Regime of Truths*, Published by Fultus Corporation.

Sznajder A., (2013), *Przewodnik po zarządzaniu różnorodnością*, Konfederacja Lewiatan, Drukarnia W&B, Warszawa.

Strzelczak M., (2016), *Iluzoryczne przeszkody, realne korzyści*, <http://odpowiedzialnybiznes.pl/artykuly/iluzoryczne-przeszkody-realne-korzysci/>, 16.06.2016.

The European Parliament and The Council, (2014), *Directive 2014/95/EU amending Directive 2013/34/EU as regards disclosure of*

non-financial and diversity information by certain large undertakings and groups, Official Journal of the European Union 15.11.2014.

Walczak W., (2011), Zarządzanie różnorodnością jako podstawa budowania potencjału kapitału ludzkiego organizacji, E-mentor nr 3 (40), SGH, Warszawa.

Wrench J., (2016), Diversity Management and Discrimination, Routledge, London and New York.

Quaiser-Pohl C., Ruthsatz V., Endepohls-Ulpe M., (2013), Diversity and Diversity Management in Education: A European Perspective, Waxmann, Münster.

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CHAPTER 3

DIVERSITY MANAGEMENT AS COUNTERACTING DISCRIMINATION OF EMPLOYEES

3.1. Introduction

Diversity is a fundamental value in the modern society. Thus, it should be fully appreciated by employers.

The approach to diversify employees based on their experience, knowledge, skills, behaviour, gender, age, world view, family structure, and shown potential may vary completely across organisations, starting with introducing divisions, inequality, discrimination (negative symptom) through turning the differences into assets, organization's strengths (what may result in including diversity management as an additional component of management).

Therefore, the main objective of this article is to show different approaches to employment management in organizations based on the characteristics possessed by employees i.e. from negative (discrimination) to positive (diversity management) along with the consequences faced by organization.

The author is aware that hereby narrows the diversity management down to activities counteracting discrimination. However, the author also assumes that diversity management focuses on using differences among employees to increase the quality of organization operation as well as considering them to be a source of competitive advantage.

3.2. Discrimination - introduction

Discrimination (from the Latin *discriminatio* – distinction) is each and every action of depriving some people of equal treatment comparing to other people e.g. based on the membership in certain social group (Sozański, 2005, p. 198).

Discrimination may be based on certain biological features (such as: gender, age, skin colour, appearance), ethnicity or national origin, sexual orientation, disease (both physical and mental), disability, religion and belief, political views, membership in a certain class, life situation (single parenthood, poverty, homelessness), and a lifestyle. Discrimination may occur in a number of forms (Zwiech, 2011, pp. 17-20). Taking into account the nature of discrimination, it may be divided into direct and indirect. The first one occurs when an individual is treated less favourably than other is, has been or would be treated in a comparable situation on grounds of certain characteristics possessed by an individual which is qualified as "protected characteristics" (Agencja Praw Podstawowych, 2011, p. 24). In such a case, unfavourable treatment results directly from decisions made on the basis on discrediting attribute (e.g. unfavourable decisions based on ethnicity, gender or age of an individual). Indirect discrimination, on the other hand, takes place when people being in incomparable situations receive the same treatment. In such a case it is not the treatment that differs but rather the effects of that treatment, which will be felt differently by people with different characteristics (Agencja Praw Podstawowych, 2011, pp. 31-32).

Another division of discrimination includes its scope in terms of the opportunity to change social status (Sztompka, 2002, p. 343). It allows breaking it down into total and partial discrimination. Total discrimination takes place when an individual or a group of people has no opportunity for social promotion. Partial discrimination may occur in

various forms such as: depriving of opportunity for promotion to the highest positions in the hierarchy of members who belong to a certain group by creating a limit they cannot reach (so-called glass ceiling), occupational segregation, restricting or closing certain channels of social mobility (by posing restrictions in the access to education) (Sztompka, 2002, p. 343).

Moreover, the literature distinguishes three levels of discrimination, namely: (Branka, Cieślukowska, 2010, p.113):

- individual discrimination – acts of behaviour between individuals,
- institutional discrimination – takes place in a group, organization or institution, and even in society (e.g. at group level: team meetings in certain organization are convened on a Saturday and a single mother is a team member; at society level: crucial documents for foreigners are issued in the Polish language only),
- structural discrimination – takes place when a few life domains overlap simultaneously, thus they increase the deprivation of equal rights and access to some goods (exclusion i.e. inability and incapacity to participate by e.g. physically handicapped in the aspects of the social, economic, political or cultural life considered important by people).

3.3. Discrimination in organizations

Pursuant to the Convention of International Labour Organisation of June 4, 1958 concerning Discrimination in Respect of Employment and Occupation, discrimination includes any distinction, exclusion or preference (...), which has the effect on nullifying or impairing equality of opportunity or treatment in employment or occupation” (Dz. U. nr 42, poz. 218).

It is crucial for employees in every organization to feel their work is evaluated on the basis of the fair criteria, transparent organization principles as well as premises on which an employer takes financial and personal decisions. When organization lacks a transparent remuneration scheme, trade union's right to participate in management is limited and employees' involvement outside the trade union is weak, the problem of equal treatment in organization is still one of the most serious challenges to be faced by the labour market. Discrimination may occur in every aspect of human resource management, namely: establishment and termination of employment relationship, employment conditions, promotion, and access to training in order to improve professional qualifications (Zwiech, Kunasz, 2014, p. 99). For example, the most frequently used discriminatory practices during the recruitment process are as follows:

- addressing offers to women or men only, to people of certain age (younger or older),
- imposing different requirements to female and male applicants for the same position,
- asking different questions to female and male applicants in a job interview,
- making recruitment decision based on the gender of applicant.

When employers use the discriminatory practices, it results in a number of negative effects in organization (Zwiech, Kunasz, 2014, p. 99). They may include as follows: decreasing motivation of employees, discouraging them from developing themselves (all of them, not only potential victims), employees suffer from the negative psychological effects which contribute to frequent absence from work, decreased efficiency of work (e.g. potentially good applicants were not employed due to possessing certain characteristics regardless of their skills, education etc.), valuable employees quit an organization.

Moreover, discrimination revealed to the public may hurt the organization's image.

The negative effects of discriminatory behaviour displayed by employers may also be examined in a wider social and psychological context. In fear of professional development, women may give up motherhood or limit the number of their offspring to maximum two children. Such a situation causes significant demographic problems in society, consequently, it endangers the stability of pension security system as there is decreasing proportion between the working and non-working people. Discrimination of the elderly is another example. On one hand, potential of employees is wasted, such experienced employees could have worked and paid tax and social insurance contributions, on the other hand "young" pensioners increase the burden of the pension system (Lewandowska, Nawrocki, 2010, pp. 30-31, Kunasz, 2016, p. 346).

When we examine the effects of employment discrimination, we will find out most of them are economic ones.

3.4. Diversity in organizational management

Diversity is about difference, opposite, heterogeneity (cf. Chatman, 2010, p. 448). Its understanding may differ depending on the context. In the organization context, diversity is associated with employees hired there. From such perspective, diversity means the differences existing among people and being aware of such differences (feeling similarities and dissimilarities) as well as their impact on the relations among employees and consequently results achieved by them (Bell, 2011, p. 35).

Diversity in the workplace shapes mutual interactions and relations among the three components such as (Loden, 1995,

Arredondo, 1996, p. 8; cf. Seymen, 2006, p. 297; Clair et al. 2005, p. 78):

1. Original identity components: race, gender, sexual orientation, national origin, age, ability, and disability,
2. Secondary identity components: marital status, education, values and belief, social class, family structure, place of residence, religion, and language,
3. Organizational factors: position in the hierarchy and form of employment, employment sector, years of service, trade union membership.

In order to meet objectives in organization that has already implemented diversity in the workplace, efficient diversity management is of key importance. Such management is based on perceiving differences (both visible: gender, age, race, ethnicity, as well as those that cannot be observed: affiliation to social groups, attitude towards life, values, lifestyle (Woźniakowski, 2005, p. 289)) among people in organization (and outside it) and intentional development of strategies, policies and programs to create a climate for respecting and using the said differences to the benefit of meeting objectives. The main aim of diversity management is to create a positive work environment in which each employee would feel respected and appreciated, and consequently would use their full intellectual potential, which in turn, contributes to organization success and is for its benefit (Kaczmarek et al. 2009, p. 8; Amershi et al. 2007, p. 7). Any organization making a decision on including diversity in the management system should (Łączy nas różnorodność ..., 2016, p. 43):

1. Determine objectives and reasons for implementing diversity management;
2. Have support of management personnel in implementing diversity;
3. Appoint an ambassador/mentor to manage diversity on behalf of the management board;
4. Appoint a person/team responsible for diversity management;
5. Carry out an analysis of steps taken so far by organization;
6. Look into the expectations of employees;
7. Carry out benchmark, consultations with experts and non-governmental organizations;
8. Identify the areas of diversity implementation;
9. Create action plan/strategy;
10. Adjust diversity action plan/strategy to the organization strategy and policies;
11. Provide employees with training how to build organizational culture;
12. Promote external and internal communication;
13. Report action related to diversity management.

Implementing the said plan may require going through the following phases of diversity management (Figure 3.1).

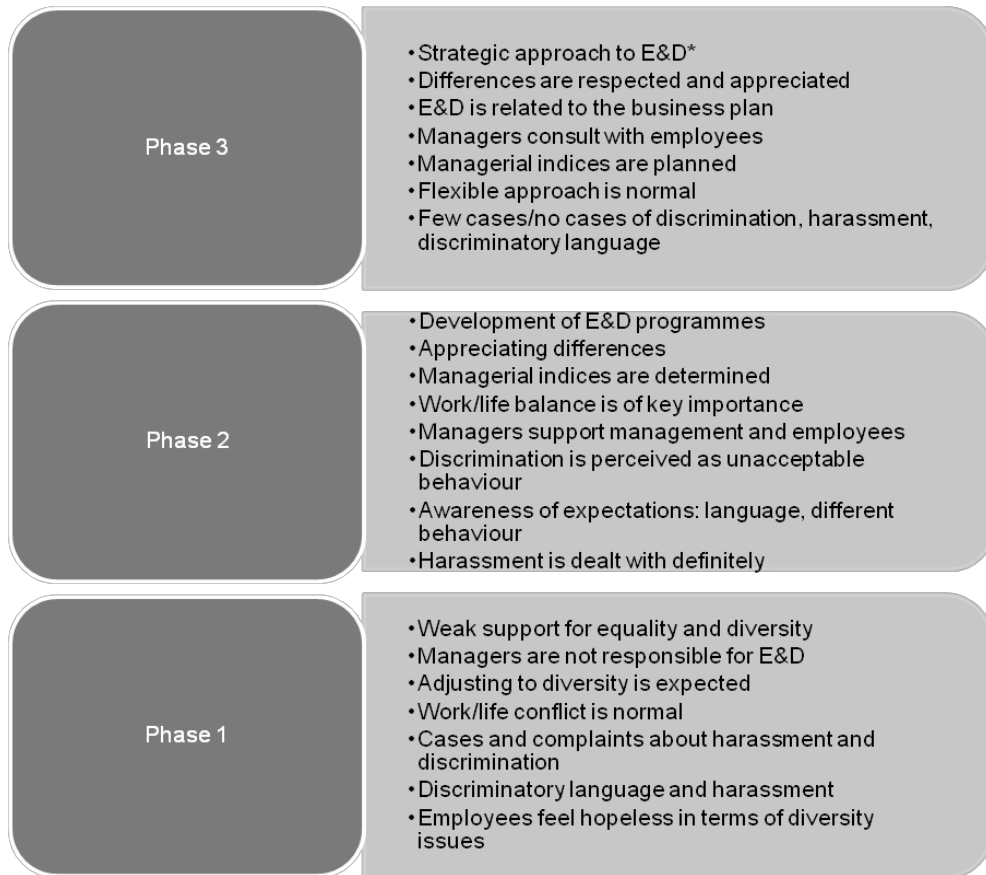


Fig. 3.1. Diversity management – phases of change

*E&D – Equality and Diversity

Source: (Zarządzanie różnorodnością, 2008, p. 7).

Therefore, it is obvious that diversity management is not just a few accidental actions but well-thought strategy assuming that organization development and meeting its business objectives will be more effective when various types of experience will be perceived and used as well as needs arising in organization and its surrounding (Lisowska, Sznajder, 2013, p. 6). Diversity management should be implemented in each domain of human resource management such as: recruitment, selection of employees, employee remuneration, promotion or degradation, training and development as well as

evaluation. Effective diversity management is based on accepting differences between individual employees, creating such workplace in which each employee will be respected, appreciated and has an opportunity to develop to their full potential regardless of their social and demographic status (Lewicka, 2010, p. 227). Effective diversity management is also based on preventing employees from discrimination against their otherness. However, managers cannot regard diversity management as a sufficient response to the employment discrimination issues.

Organizations apply a number of solutions in diversity management; they are as follows (Raportowanie, p. 107):

- providing employees with training for increasing awareness of respecting the values resulting from diversity in the workplace as well as eradicating discrimination in the workplace,
- including women in managing the organization,
- providing men and women with transparent remuneration scheme for the same work or work of the same value,
- looking for new employees also among the people endangered with exclusion from the labour market due to person's disability, long-term unemployment and growing old,
- providing employees with equal access to trainings and promotion,
- remaining impartial in personnel management, e.g. during the recruitment process,
- implementing flexible working time,
- offering employees, including parents, support in combining professional and private life.

3.5. Potential and danger posed by diversity in organisations

Organization may derive a number of benefits from effective

implementation of diversity management. Without any doubt, it increases creativity and innovation of taken steps, organizations are more willing to overcome stereotypical notions, routine actions and procedures as well as to learn from each other. Therefore, employees with diverse talents, inventiveness, knowledge or experience are hired. Equal opportunities, respecting each other, promoting ethical behaviour and openness creates good work environment. Therefore, in the future it may boost loyalty and involvement, improve motivation of employees and well as help in recruiting new and talented employees. Organization policy based on trust, openness and employees' involvement fosters the in-house culture. Equal treatment of employees, fighting against any forms or symptoms of discrimination by transparent and fair remuneration principles, access to trainings, opportunity to improve professional qualifications, to develop and be promoted result in decreasing employees' absence from work as well as their fluctuations, what in turn has a direct impact on organization expenditures. Satisfied employees are better organization ambassadors among prospective employees, clients, business partners as well as other stakeholders. They have a significant impact on the organization perception by its stakeholders, they also create a positive image and improve credibility of organization. Moreover, using the diversity potential organizations know better the expectations and needs of various groups of clients. Consequently, the said expectations and needs are easier to satisfy. (Kaczmarek, 2007, pp. 23-24; Chmiel, 2007, p. 425).

Except from benefits, diverse workplace may cause some adverse effects. A very diverse team may face misunderstandings, dysfunction of efficient interpersonal communication, conflicts which may make difficult cooperation within such a group. Implementing diversity management (its initial phases in particular) may raise some problems caused by culture differences, language barriers,

stereotypes, different manners of perception various issues by employees, responding to them and understanding. Moreover, a crucial problem occurs when organization uses anti-discriminatory tools in groups instead of focusing on individual differences, then paradoxically stereotypes are reinforced not fought with (Bleijenbergh et al. 2010, pp. 413- 421).

3.6. Conclusion

To conclude the issues mentions in this article, it should be stated that at present in huge variability of our surrounding (including the labour market) more and more diverse society, new needs and expectations of clients, each organization should be interested in using the potential of diverse workplace. Supporting diversity in organization, appreciating the otherness of employees and well-thought diversity management may bring notable business benefits. Therefore, taking steps to limit negative effects of diversity and showing its positive implications by organization is justified. It should be also emphasized that building positive relations in organization with diverse gender, age or ethnic origin requires actions aimed at eradicating any symptoms of discrimination.

Stereotypes, prejudices and significant disproportions in employment conditions present in some organizations, may deepen already existing differences between employees what may affect work results and objectives. Understanding the very essence and sense of implementing diversity management may prove very difficult, time-consuming and sometimes even impossible. Such organizations put themselves in a very unfavourable position in the context of development, improving their position in the market or reputation.

References:

Agencja Praw Podstawowych Unii Europejskiej, Europejski Trybunał Praw Człowieka - Rada Europy, (2011), Podręcznik europejskiego prawa o niedyskryminacji, Urząd Publikacji Unii Europejskiej, Luksemburg.

Amershi B., Holmes S., Jablonski H., Keil M., Lüthi E., Matoba K., (2007), Poradnik szkoleniowy: zarządzanie różnorodnością, International Society for Diversity Management, Komisja Europejska.

Arredondo P., (1996), Successful Diversity Management Initiatives: A blueprint for planning and implementation, Sage Publications Ltd., Londyn.

Bell M.P., (2011), Diversity in Organisations, 2nd , South Western Cengage Learning.

Bleijenbergh I., Peters P., Poutsma E., (2010), Diveristy management beyond the business case, equality, diversity and inclusion, An International Journal, Vol. 29, No. 5.

Branka M., Cieślukowska D. (red.), (2010), Edukacja antydyskryminacyjna. Podręcznik trenerski, Wyd. Villa Decius, Kraków.

Chatman J.A., (2010), Norms in mix sex and mixed race work groups, The Academy of Management Annals, Vol. 4, No. 1.

Chmiel N., (2007), Psychologia pracy i organizacji, GWP, Gdańsk.

Clair J.A., Beatty J.E., MacLean T.L., (2005), Out of sight but not out of mind: Managing invisible social identities in the workplace, Academy of Management Review, Vol. 30, No. 1.

Czajka Z., (2013), Dyskryminacja kobiet w pracy zawodowej czy wpływ obiektywnych czynników?, *Polityka Społeczna*, nr 8(473).

Dz. U. nr 42, poz. 218.

Kaczmarek P., Krajnik A., Morawska-Witkowska A., Remisko B.R., Wolsa M., (2009), *Firma = różnorodność. Zrozumienie, poszanowanie, zarządzanie*, Forum Odpowiedzialnego Biznesu, Warszawa.

Kołaczek B., (2009), Dyskryminacja kobiet w zatrudnieniu, *Polityka Społeczna*, nr 5-6.

Kunasz M., (2016), Bierność zawodowa w Polsce na tle wybranych grup krajów unijnych, *Nierówności społeczne a wzrost gospodarczy*, nr 46.

Lewandowska L., Nawrocki M., (2010), Skutki mobbingu i dyskryminacji – dla pracowników, pracodawców, społeczeństwa, *Monitor Prawa Pracy*, nr 10.

Lewicka D., (2010), *Zarządzanie kapitałem ludzkim w polskich przedsiębiorstwach*, PWN, Warszawa.

Lisowska E., Sznajder A., (2013), *Zarządzanie różnorodnością w miejscu pracy. Raport z I edycji Barometru Różnorodności*, Konfederacja Lewiatan, Warszawa.

Loden M., (1995), *Implementing Diversity*, McGraw-Hill, New York.

Łączy nas różnorodność! Przewodnik po karcie różnorodności, (2016), Forum Odpowiedzialnego Biznesu, Warszawa.

Seymen O.A., (2006), The cultural diversity phenomenon in organizations and different approaches for effective cultural diversity management:

a literature review, *Cross Cultural Management*, Vol. 13, No. 4.

Sozański J., (2005), Prawa człowieka w systemach prawnych Wspólnot i UE, Warszawa – Poznań.

Sztompka P., (2002), Socjologia. Analiza społeczeństwa, Wyd. Znak, Kraków.

Tyburcy A., Sokal I., (2016), Dyskryminacja w ofertach pracy w przemyśle spożywczym, Zarządzanie Zasobami Ludzkimi, nr 1(108) .

Woźniakowski A., (2005), Doświadczenia firm amerykańskich w zarządzaniu różnorodnością, w: Praca i zarządzanie kapitałem ludzkim w perspektywie europejskiej, A. Pocztowski (red.), Oficyna Ekonomiczna, Warszawa.

Zarządzanie różnorodnością, (2008), Forum Odpowiedzialnego Biznesu Warszawa.

Zwiech P., (2011), Rodzaje dyskryminacji kobiet na rynku pracy, Polityka Społeczna, nr 4.

Zwiech P., Kunasz M., (2014), Mobbing jako patologia zarządzania ludźmi w przedsiębiorstwach, w: Pracownik na rynku pracy i w organizacji. Wymiar globalny i regionalny, red. M. Kunasz,, Seria Gospodarowanie Kapitałem Ludzkim, Zeszyt nr 5, Volumina, Szczecin.

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CHAPTER 4

NEW EU STRATEGY FOR EQUALITY OF WOMEN AS AN INDICATOR OF ANTI-DISCRIMINATION ON THE LABOUR MARKET IN POLAND

4.1. Introduction

Equality between women and men is a fundamental right of the EU, which should be used to the same extent in legislation, practice, jurisprudence, everyday life and the labour market (Report on the EU strategy.. 2015). The overall objective of this category is to achieve factual dimension. Factual equality requires permanent treatment of its support. Further progress in this area - especially in the labour market - is of great importance for achieving the goals of economic growth and social cohesion which the EU set itself. This is due to the fact that in all EU countries, women represent a significant reservoir of unused labour resources, and the unemployment rate is higher than men despite better education. Hence, a large role is to be played by enhancing the activity of women. They serve this legislation, tools and activities including the policy of gender equality, affecting employment.

The European Union has significantly contributed to the activation of professional and business women through a comprehensive set of legislation on equal treatment and inclusion of gender issues into various policies and instruments of the EU. As a

result, there have been positive changes in the development of society, the labour market and entrepreneurship in all Member States (Kryk 2015, pp. 197-207). However, they are not adequate to expectations as there are still inadequacies in this area. The last global economic crisis (2008-2012) caused a slowdown in EU policies and reforms for gender equality. Moreover, it appeared that the previous Strategy for equality between women and men 2010-2015 was too weak and did not lead in taking sufficient action on gender equality. In truth some of its objectives were able to be accomplished what; however, full gender equality has not been achieved; reference to the interaction of various forms of discrimination is often lacking in this strategy as well as the specific purposes and an effective assessment and gender perspective was taken into account only to a limited extent (Report on the EU strategy ..., 2015) . With this in mind, a new separate strategy for women's rights and gender equality in Europe has been developed and adopted, aimed at creating equal opportunities and focusing on priority areas of the previous strategy, so as to put an end to all forms of discrimination against women in the labour market concerning earnings and pensions, decision-making, access to goods and services, reconciling family and professional life and eliminating all forms of violence against women, discriminatory structures and practices related to gender. The new strategy takes full account of cross-cutting and multi-dimensional forms of discrimination and provides for specific actions to strengthen the rights of different groups of women. It is therefore worth presenting a selection of its elements relating to the issue of equality in the labour market (which are the subject of interest in this study) and to evaluate its merits on the example of Poland, being one of the Member States of the EU.

The aim of this chapter is to attempt to answer the question as to whether actions to support the process of equality on the Polish labour

market in the light of the new EU strategy for gender equality are still necessary? In order to answer this question priorities, objectives and actions relating to the issue of reducing discrimination in the labour market set out in the EU strategy for gender equality for the years 2016-2019 have been presented as well as the situation in Poland, through the assessment of the current situation in relation to indicators to measure the objectives set out in strategy. The article uses the method of analysis of legal acts and statistical data derived from reports and statistical studies on the subject. This has enabled indication of trends and their assessment in the context of the question submitted.

4.2. Selected elements of the EU strategy for gender equality for the period 2016-2019

The document entitled Strategic commitment to gender equality for the period 2016-2019 is based on a continuous and ad hoc evaluation of the previous strategy for 2010-2015, which resulted in, among others, the continuation of initiated work to promote equality between men and women. This means a more concentrated policy on gender equality in five existing thematic priority areas:

- increasing the participation of women in the labour market and equal economic independence for women and men;
- reducing the pay gap, wages and pensions on grounds of gender, thereby combating poverty among women;
- promoting equality between women and men in the decision-making process;
- the fight against violence based on gender, and protecting and supporting victims;
- promoting gender equality and women's rights in the world.

These areas have been slightly expanded and particularized in

order to meet existing challenges and eliminate the existing deficiencies/problem gaps. Objectives and actions necessary to achieve them have been defined within each priority, and also what instruments (legislative, non-legislative and financial) will be used in this process have been outlined and what institutions/bodies are responsible for their implementation.

The first three priorities of the new strategy for gender equality are closely related to the issues of the labour market and the activation of women. Table 4.1 presents objectives and actions for each of these priorities.

Table 4.1 Priorities, objectives and actions relating to the equality of women in the labour market

Priority: Increasing women's participation in the labour market and equal economic independence for women and men	
Objectives	Actions
<ul style="list-style-type: none"> ● achieving an identical employment rate for women and men at 75% and eliminating differences in the level of employment of women in 2020; ● more equal division of time spent on care and home responsibilities, increasing the capacity to maintain a balance between care responsibilities and work responsibilities; ● implementation of the Barcelona objectives concerning childcare and consider increasing the requirements in the context of these goals and expand them to cover their range of care for other dependents; ● promoting women's entrepreneurship and gender equality in the research sector; ● better integration of migrant women in the labour market. 	<ul style="list-style-type: none"> ● Continuation of the efforts activating women to work and combining work with family life, combined with a new initiative - to facilitate meeting the challenges of balancing between professional and private life: <ul style="list-style-type: none"> - changing the rules in the scope of holiday and flexible working conditions, to ensure parents and persons performing duties of care a better balance between work and private life, - determination of policy frameworks that support the participation of parents in the labour market and a more balanced use of holidays and flexible working arrangements, including consideration of targeted use of EU financial instruments to support the Member States and to raise awareness, - continue to monitor and assist

	<p>Member States in achieving the Barcelona objectives concerning childcare, taking into account the results of the public consultation on a balance between work life and private life, to consider the possibility of applying a more comprehensive approach involving, for example, care for other dependents;</p> <ul style="list-style-type: none"> ● Rating directive on social security and to take action following its results; drawing up a report on the implementation of the Directive on self-employed people and possible follow-up; ● The inclusion of the gender dimension to the implementation of the European programme on migration in order to eliminate barriers to employment and the system of course and career assessment of migrants; ● Raising awareness in order to promote women's entrepreneurship, including through the launch of an Internet platform for women entrepreneurs, the development of European networks of female business angels and networks of women's internet resource centres; ● Promoting institutional changes in research organizations in order to remove barriers in gender equality and the involvement of all such organizations in the implementation of plans for gender equality.
Priority: Reducing the pay gap, earnings and pensions on grounds of gender, to combat poverty among women	
<ul style="list-style-type: none"> ● further reduction of the pay gap, earnings and pensions on grounds of gender, and thus reducing unequal access for women and men to financial resources; ● a significant reduction in the diversity of women and men in economic sectors and occupations; 	<ul style="list-style-type: none"> ● Further improving of the implementation and enforcement of the principle of equal pay as a result of an assessment of Directive 2006/54 / WE65, and consideration thereof, among others: <ul style="list-style-type: none"> - increasing transparency of earnings on the basis of a report

<ul style="list-style-type: none"> ● increasing the total number of working hours of women; ensuring effective implementation of legislation on equal pay; ● removal of barriers to access vulnerable groups, such as migrants and single parents into the labour market; ● addressing the causes and consequences of diversity pensions based on gender. 	<p>to be prepared on the action taken by Member States to implement the recommendations of the Commission (C(2014) 1405 final);</p> <ul style="list-style-type: none"> - the impact of the current law of the Court of Justice regarding the use of gender as an actuarial factor affecting the statutory pension insurance contract and private sector occupational pensions, which can prevent lower pensions for women based on their longer life expectancy; - sanctions for earnings discrimination; - effectiveness and efficiency of the functioning of the entities. Equality in order to facilitate access to justice for victims of discrimination; <ul style="list-style-type: none"> ● Continued support of efforts of Member States to ensure equal pay and combat the causes of the pay gap, earnings and pensions by gender; ● The continuation of handling Equal Pay Day by conducting pan-European information activities covering all Member States; raising awareness of the links between salaries, wages and beneficial pension entitlements for the elderly; ● Cooperation with authorities for Equality and to support businesses in their efforts to ensure equal pay by simplifying Kart diversity platforms; ● Consider the introduction of additional measures to improve the gender balance in economic sectors and occupations; support measures to increase the digital literacy of women and girls and promoting the employment of women in the ICT sector and to raise awareness on educational and vocational training; ● Promotion of gender equality at all levels and in all types of education,
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	<p>using the tools of policy coordination and financing instruments according to the priorities set out in the framework of "Education and Training 2020";</p> <ul style="list-style-type: none"> • Continuous development in cooperation with the Member States with a comprehensive • a set of measures to eliminate • a number causes for the differing pensions based on gender, including the development of the indicator for measuring and monitoring of the causes and means of mitigating factors of • gender, eg for health.
Priority: Promoting equality between women and men in decision-making	
<ul style="list-style-type: none"> • Further improvement of gender balance in positions of leadership /decision-making in enterprises (at least 40% of women); • improving data collection and gender balance in decision-making positions in research organizations; • improving the gender balance in decision-making in political and public life, including sport. 	<ul style="list-style-type: none"> • Continuing to support the implementation of the Directive on improving the gender balance among the executive directors of companies whose shares are traded on the stock exchange and other targeted initiatives to improve the gender balance in decision-making processes; • continuation of the collection and dissemination of further data on the representation of women and men in high level decision making positions in close cooperation with the European Institute for Gender Equality; • considering measures to improve the gender balance in terms of political decision-making and to further encourage Member States and supporting the activities of national authorities to promote gender balance in decision-making positions in the area of policy and public affairs; • providing guidance to Member States in the field of a common approach to implement quantitative targets in relation to decision-making positions

	in research.
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Source: (Strategic commitment ... , 2016, pp. 21-27).

Implementation of the objectives requires, among others, incorporating a gender perspective into all activities of the EU (policy, legal and fiscal measures), the enforcement of equal treatment at all levels of economic and social life in all Member States, taking into account the issue of equality in EU funding programmes for 2014-2020 and beyond 2020, continuous improvement of data collection in collaboration with Eurostat, the European Institute for Gender Equality. European Institute for Gender Equality (EIGE), the Council of Europe (CoE), the Fundamental Rights Agency (FRA) and appropriate institutions of the associated countries, the exchange of good practice and peer learning from each other and cooperation with all active entities in the field of gender equality, as well as the annual review of the basic activities undertaken confirmed by a progress report in the scope of equality between women and men, having the task of assessing the need to take additional action.

Quantitative indicators have been developed in order to monitor the implementation of objectives and activities which should be improved. They provide a reference base for the Member States. Comparison of the existing level of individual indicators in the Member States with the level of the EU average, even if it is not perfect, allows for the assessment of the existing status and identifying areas for intensification of activities. Such an assessment of the output state in relation to the new strategy for gender equality has been made for Poland.

4.3. The situation in Poland in the context of the implementation of the new strategy for gender equality for the period 2016-2019

Poland, as a member of the EU, is obliged to implement EU rules on equal treatment and the inclusion of gender issues into

specific policy areas, which it is trying to do. This is reflected both in Polish legislation, as well as actions taken and initiatives that transform into specific effects. Table 4.2-4.4 synthetically shows the existing situation in Poland (which is the result of previous actions) in relation to the newly established indicators relating to the priorities and objectives contained in the strategy for gender equality for 2016-2019. Unfortunately, the existing requirements as to the size of the development prevents the inclusion of a broader commentary on the changes.

Table 4.2. Indicators associated with the priority of increasing the participation of women in the labour market and equal economic independence for women and men

Indicator	Baseline average: EU (year)	Level in Poland	Trend changes in Poland
1. Diversification of the level of employment by gender (20-64)	11,5 percentage points (2014)	14,2 percentage points (2014) ²	Positive, but it is necessary to further reduce the differences in the level of employment of Men and Women
2. Diversification of the level of employment based on gender (20-64 years) in full time equivalent jobs	18,1 percentage points (2014)	13 percentage points (2015) ³	As above
3. Diversification of level of employment in part-time work	34,8 percentage points (2013)	4,1 percentage points (2015) ⁴	Positive - the rate is much lower than the EU average, but generally not well in this area, because among both

² The female employment rate was 59.1%, men 73.3%.

³ 78.8% of men worked at least 40 hours a week, for women this percentage was 65.8%.

⁴ In 2015 the number of women preferring part-time work was 42.3% and 46.2% of men

among parents based on gender			Women and Men there is a large number of people working part-time (over 30%) due to the economic situation and it needs to be improved
4. Time spent in unpaid care work during the week based on gender	Men: 8,9%; Women: 26,4% (2010)	Average 25,9% (2011) Men ⁵ : 7,5%; Women 18,4%	Positive, but needs further support to offload women caring responsibilities and facilitate WLB
5. Involuntary part-time work due to childcare or severely disabled adults, divided based on gender	Men: 4,2%; women: 27,2% (2014)	Men: - 3,3% Women: 13,1 % (2015)	The situation is almost constant and there is a need to include development of social services in the various forms of extra-familial care at an affordable price
6. Children in the care of formal arrangements as a percentage of all children in the age group (children between 0-3 years and 3 years old, in which compulsory schooling begins)	0-3 years: 27% 3-school age: 82% (2013)	0-3 years: 5.7% (2013) 3-school age: 75,3% (2013/14) 82,3% (2014/15)	With regard to children aged 0-3, the situation is changing for the better very slowly, it's necessary to significantly increase efforts; for children of 3 rd -school age there is a positive trend (in the last few years there has been a big improvement), but still not adequate
7. The percentage of economically active population (50-64 years) caring for elderly or disabled relatives at least a few days a week, by gender	Men: 10%; women: 17% (2011)	Men: - Women: -	It is necessary to develop forms of care for the elderly and dependent in the NGO sector, because the state sector is inefficient in this regard. In the private sector the trend is positive, but too slow due to the nature of the sector and the socio-economy

⁵ Own study based on (quality of life in Poland, 2015 p 14).

8. Differences in employment rates based on gender among third-party country nationals	19,5% (2014)	43 percentage points (2015) ⁶	Disadvantageous situation, requiring not only the actions of the state, but also adaption of immigrants
9. Differences in employment rates based on gender among the new third-party country nationals	22,3% (2014)	-	No data to comment
10. The percentage of research organizations that have adopted equality plans	36% (2014)	-	No synthetic data

- No synthetic data; W – women; M - men

Source: own study based on (Education in the school year 2014/2015, 2015, pp 62-65, Equality policy in Poland – update, 2015 p.15, Women and men in the labour market, 2016, p 5, Eurostat (migr_imm2ctz), Report..., 2015, p. 44).

Within the priority to increase women's participation in the labour market and equal economic independence for women and men, Poland had higher levels of the four indicators out of ten (No. 2-5) compared to the EU average, which does not mean it is an ideal situation, the three indicators (7, 9 10) cannot be commented upon because of the lack of statistical data (the fact of the lack of data indicates the weaknesses in the areas to which they relate), and the level of other indicators (1, 6, 8) is much worse than the baseline indicators. It can be said that 2/3 of the indicators in this area need to be improved.

Eight indicators were established in order to monitor the next priority i.e. reducing the pay gap, earnings and pensions on grounds

⁶ Determined by the number of work permits issued for: women 28.5%, men 71.5%.

of gender and to combat poverty among women (table 4.3).

Table 4.3. Indicators for the priority of reducing the pay gap, earnings and pensions on grounds of gender, to combat poverty among women

Indicator	Baseline average: EU (year)	Level in Poland	Trend changes in Poland
1. Pay gap based on gender	16,8% (2013)	7,7% (2014)	Positive - the domestic indicator is more than twice lower than the European, which means there is a smaller variation of wages in Poland, but still should be limited
2. General diversification of earnings due to sex	41,1% (2012)	19% ⁷ (2015)	Positive - recommended further reduce of differences in wage levels
3. Gender segregation in sectors and occupations	Sectors: 18,9%; occupations: 26,9% (2014)	In sections ⁸ 48,6%; occupations: 43,0% (2015)	<i>Constans</i> , the number of employed women is similar to the number of employed men, differences result from the specificity of professions, jobs traditionally planted by women (often lower paid) and related salaries
4. Diversification of pensions based on gender	40,2% (2012) 39,0% (2014)	33,3% (2015)	<i>Constans</i> – need to reduce the differences in the level of pensions, which requires, among others, appropriate changes to the social security system in the context of demographic change and the length of life and the development of social services in the various forms of extra-familial care

⁷ Nationwide Remuneration Study conducted by Sedlak & Sedlak in 2015, <http://wynagrodzenia.pl/artukul/wynagrodzenia-kobiet-i-mezczyzn-w-2015-roku>.

⁸ The average number of women employed according to sectors and professions.

5. Diversification of pension rights based on gender	6,8 % (2012)	16% (2014)	As above
6. The poverty of working women and men	Men: 9,3%; women: 8,4% (2014)	15,2 (2014)*	<i>Constans</i>
7. Risk of poverty rate and social exclusion in old age (65+)	Men: 11,4%; women: 15,6% (2014)	10,6 (2014)* Men: 17,4%; women: 27,1% ⁹	Negative - it is necessary to integrate social economic activities, to reduce the risk of poverty
8. Single parents with children at risk of poverty or social exclusion	49,9% (2013)	12,1% (2014)* 45,5 (2014)**	<i>Constans</i> by 2016 - changes in the policy of social transfers introduced in 2016 (le The 500+ program - the addition of money for the second and each subsequent child in the family) should improve the rate, which is too high

* The relative poverty line (national average)

** Scope of the area of deficiency

Source: own study based on (http://dziennikubezpieczeniowy.pl/pub/100121_luka_emerytalna.pdf, Eurostat (tsdsc340), Kobiety i mężczyźni na rynku pracy, 2016, p. 9-10, Eurostat (ilc_li03), Poverty in Poland in 2013 I 2014, 2015).

The data shows that under a given priority two indicators out of eight (1,2) were significantly more favorable in Poland compared to the EU average, two indicators (4,8) were slightly better than the EU; however, they reflect a negative level of the analyzed phenomenon; the others (No 3,5,6,7) are much worse. Therefore, 3/4 indicators in the area of priority require improvement.

Improvement is also required in the indicators relating to another priority concerning the labour market i.e. promoting equality between women and men in decision making processes (table 4.4). In

⁹ (Nationwide report – Poland 2015, 2015, p. 25).

this case, positive changes have occurred in the size of the four indicators out of seven (1 and 5), but the pace of change is too slow, the level of the other five indicators has remained constant for several years.

Table 4.4. Indicators concerning priority - promoting equality between women and men in decision making processes

Indicator	Baseline average: EU (year)	Level in Poland	Trend changes in Poland
1. The percentage of women among the members of the highest decision-making level in the largest companies registered in the country and listed domestic	21,2% (April 2015)	15% (from 2013 Until now)	Positive, but the changes are too slow
2. The percentage of women among the presidents and CEOs of the largest companies registered in the country and listed domestic	Presidents 7.1% CEOs:3.6% (April 2015)	7% (2013 until now)	For several years, constants - the rate needs improvement
3. The percentage of women among the members of the executive and non-executive bodies of the two highest decision-making level of the largest companies registered in the country and listed domestic	Non-executive directors: 22.5% senior management: 13.7% (April 2015)	On average, in the boards -10.3%,	As above
4. The percentage of women as a manager of higher education institutions	15,5% (2010)	Approx. 10%	As above
5. The percentage of women in the single / lower houses of national / federal parliaments and in the European Parliament	29% (May 2015), the European Parliament: 37%	24% Members of the Sejm (lower house of parliament) (2015)	Positive, but the changes are too slow

6. The percentage of women among the members of national / federal governments and European Commission	27% (May 2015), the European Commission: 32%	13% of the Senate (upper house of parliament) 26% in Government (2015)	As above
7. The percentage of women in managerial positions of the Commission at senior / middle level	28% / 32% (February 2015)	23% in the bodies of the Council of Europe (2015/2016)	As above

Source: own study on the basis of (Policy of equality in Poland - update, 2015, pp. 14, www.naukawpolsce.pop.pl/aktualnosci, http://strasburgre.msz.gov.pl/pl/polska_w_re/polacy_organy/).

The analysis of indicators reflecting the level of equality between women and men in Poland shows that women's participation in the labour market still faces various kinds of obstacles. Most of the indicators relating to this area differ adversely from the EU average, which is not perfect. This indicates, therefore, a need for further action to support the process of equality on the Polish labour market, so as to meet the requirements of the new strategy for gender equality.

4.4. Conclusions

In summary, the EU strategic commitment to gender equality for the period 2016-2019 focuses on the most important aspects of gender equality in the labour market, and its implementation could contribute significantly to eliminate (or at least reduce) numerous “gender gaps” still in the long term. The rationale for its implementation have not yet achieved the objectives of the previous strategy in this area and continue in the present as well as the results of the assessment of the level of the indicators adopted for monitoring the condition of successes on the example of Poland. In fact, by

analogy, we can come to the conclusion that since Poland - which is one of the EU member states - has not met these objectives, a substantial portion of the associated countries also did not. Therefore, nothing else remains as the severity of the action that realizes the effects of the new strategy (among others legal and good practices to promote gender equality). The key to success is on the one hand to raise awareness of the benefits coming from the policy of equality for both genders (from the perspective of both individuals and members of the communities and societies in the broad sense), and on the other - full cooperation in this area at various levels of.

References:

Eurostat (ilc_li03) (download date 9.11.2016).

Eurostat (migr_imm2ctz) (download date 9.11.2016).

Eurostat (tsdsc340) (download date 9.11.2016).

http://dziennikubezpieczeniowy.pl/pub/100121_luka_emerytalna.pdf
(download date 9.11.2016).

http://strasburgre.msz.gov.pl/pl/polska_w_re/polacy_organy/(download date 6.11.2016).

Quality of life in Poland, (2015), GUS, Warsaw.

Women and men in the labour market, (2016), GUS (National Statistical Office), Warsaw.

Kryk B., (2015), The development of women entrepreneurship in Poland as an expression of the implementation of EU equality policy, EU Scientific Papers in Wrocław, Ed. Wrocław University of Economics,
Wrocław,
No 380 (in polish).

Learning and Education in the 2014/2015 and 2015 school year, GUS, Warsaw.

Policy of equality in Poland - update Thematic Department C: Citizens' Rights and Constitutional Affairs of the European Parliament (2015), Brussels,

[http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/510023/IPOL_IDA\(2015\)510023_PL.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/510023/IPOL_IDA(2015)510023_PL.pdf) (download date 6.11.2016).

European Parliament resolution of 13 September 2016 on the formation of labour market conditions with a favourable balance between work and private life (2016/2017(INI)), <http://www.europarl.europa.eu/> (download date 6.11.2016).

Nationwide report – Poland 2015,(2015), COM(2015) 85 final, Brussels.

Report on the EU strategy for gender equality for the period beyond 2015., (2015), (2014/2152(INI)) The Commission on Women's Rights and Gender Equality, document from the meeting of the European Parliament of 13/05/2015, A8-0163/2015.

Strategic commitment to gender equality for the period 2016-2019, (2016), the European Union.

Poverty in Poland in 2013 I 2014, (2015), GUS, Warsaw.

www.naukawpolsce.pop.pl/aktualnosci (download date 6.11.2016).

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CHAPTER 5

DIFFERENCES IN THE SCOPE OF APPLICATION OF MARKETING IN CULTURAL INSTITUTIONS IN THE LIGHT OF RESULTS OF EMPIRICAL RESEARCH AND TYPOLOGY OF CULTURAL INSTITUTIONS

5.1. Introduction

Significant changes are observed in the approach to culture. They are expressed in searching for its relationships with economics and innovativeness of individuals and social groups. This is accompanied by implementation of the principles and rules of marketing into the sphere of culture. On the one hand it is the expression of expansion of the area of culture and on the other hand, expansion of the area of marketing. Taking diversity of cultural institutions into consideration and also multi-paradigm nature of marketing, the objective of the paper is to present differences concerning the scope of application of marketing in cultural institutions in Poland. The paper is based on literature studies and empirical research. While aiming at implementation of the formulated goal, the types of cultural institutions were identified. They prove the occurrence of differences in the sphere of application of marketing in cultural institutions in Poland.

5.2. Application of marketing concepts in the sphere of culture – a literature review

The role of marketing that is associated with the functions of culture in this sphere is often expressed in finding appropriate audience for products that are a result of artistic work (Mokwa, Dawson, Prieve 1980). While defining marketing in the sphere of culture F. Colbert (2007) similarly emphasises that in the case of the sphere of culture application of marketing does not mean that an artist must create a masterpiece while adjusting to the needs and tastes of consumers. The author defines marketing in the context of reaching the market segments that might be interested in the artwork. On the other hand, the forms of artwork promotion, methods of distribution or pricing policy should be adjusted to consumers' needs. According to this definition, enabling adequately large number of consumers to contact with the artwork, and consequently to attain the goals associated with the mission of cultural institutions is the reason for application of marketing in the sphere of culture. Furthermore, the role of marketing is perceived through the prism of shaping the recipients' tastes, creation of relationships with them, making them sensitive to culture and not only satisfaction of currently experienced needs (Colbert, 2007, pp. 4, 12; Diggles, 1986, p. 243; Smoleń, 2013, p. 265; Varbanova, 2013, pp 156-157). The consumer, the artist and the artwork, just like providing contact between artists and recipients are in the centre of interest of marketing in the sphere of culture (Wróblewski, 2012, p. 49).

The analysis of scientific works of the aforementioned Authors on the subject of marketing in the sector of culture allows for stating that adjustment of marketing assumptions to the sphere of culture particularly concerns including the role of an artist, and also the fact

that competitive struggle is replaced by cooperation. The artists' role should be broadly perceived also through the prism of the fact that beside other people of the world of culture and participants in culture that are not professionally associated with art, they are also the artwork recipients (Hirschman, 1993, p. 49).

However, it ought to be stated that satisfaction, of the needs of the recipients who are participants in culture, by the artist does not exclude taking into consideration artist's own needs and the needs of artistic circles in the processes of creation. In fact, recipients who the artists orient their creativity on do not actually need to have different tastes or sensitivity.

Considering the fact that marketing is a multi-paradigm category, there are reasons for implementation of various marketing concepts by the entities of the sphere of culture. Both classical marketing concept as well as the concept of relationship marketing find their application in the sphere of culture. This is related to the fact that implementation of the assumptions of the classical marketing concept should translate into increase in the scope of cultural participation through raising awareness of the needs, and stimulation of motivation to participate in culture among people who have not taken advantage of cultural offer before. On the other hand, enhancement of relationships with culture consumers and other market entities, as well as increase in their loyalty should be the consequence of implementation of major assumptions of the concept of relationship marketing. The concept of strategic marketing which comprises the idea of market segmentation also finds application in cultural institutions. Its implementation in the sphere of culture offers the chance to increase the effectiveness in influencing the market through reaching uniform groups of recipients.

In this context there occurred the need to determine how decision-makers in cultural institutions in Poland are oriented on such

categories as satisfaction of consumers' needs, gaining them and establishing their loyalty, as well as satisfying artists' needs. Recognition of these issues required performance of empirical research that could constitute the basis for identification of the types of cultural institutions showing diversity in the scope of application of marketing in the sphere of culture in Poland.

5.3. Methodology of empirical research and identification of types of cultural institutions

Research process included the literature survey and performance of empirical qualitative and quantitative research while taking into consideration the assumptions of triangulation. Aiming at recognition of diversification of the scope of application of marketing in cultural institutions in Poland and gaining knowledge on several levels within integrated research approach, qualitative research in the form of

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in-depth individual interviews and 2 focussed group interviews were conducted. In-depth individual interviews were performed with people who had artistic accomplishments and /or large experience in management and in cooperation with entities of culture sector in Poland. Culture consumers who make purchase decisions on culture market participated in focused group interviews.

On the other hand, within quantitative empirical research 451 Computer Assisted Telephone Interviews (CATI) were conducted. The research included chief executive officers, managers and artistic directors, managers of marketing, promotion and sales departments, and also owners of entities shaping cultural offer in Poland. Their choice was dictated by the need of recognition of opinions of people who had impact on functioning of cultural institution and application of marketing, which was the objective of the research. While attributing

great importance to the selection of research sample, a database of cultural institutions was determined. It included possibly most up-to-date and representative group of cultural entities in Poland that met the research assumptions. This required integration and verification of available databases. The entities were selected for the research while applying stratified random sampling. Performance of the aforementioned computer assisted telephone interviews with the use of standardised questionnaire developed by me took place in CATI studio of ARC Rynek i Opinia [ARC Market and Opinion] research institute in Warsaw.

For the purpose of identification of types of institutions on the basis of conducted quantitative research, taxonomy method that allowed for clustering entities in such a way that the degree of correlation of objects from the same group should be the largest, and with entities of other groups was the least was applied. Ward's method that belongs to agglomeration methods of clustering was applied.

Criteria that were the subject of empirical research, and that prove the scope of market orientation of the cultural institution were applied for the purpose of identification of types of cultural institutions. They included:

- the ways in which decision-makers in institutions perceive orientation on consumer,
- conditions accompanying aspiration of a cultural institution to satisfy the needs of culture consumers,
- significance attributed to satisfaction of consumers' needs in management of cultural institutions,
- approach to recipients applied in cultural institutions that show implemented types of marketing concepts.

On the other hand variables including the number of workers employed in a cultural institution, period of time of functioning on market, the form of ownership, type of conducted activity, priorities in management, formulation of marketing plans, types of conducted marketing activities, the nature of relationships with other cultural institutions and attitude to the role of the state on the market of culture among others, were used for description of types of cultural institutions.

While identifying similar entities, creating an offer in the sphere of culture, the process of unitarisation of the variables was applied for the purpose of ensuring comparability of features. This regulation allowed for changing the values attributed to responses into a sequence of values belonging to the range [0;1]. In the next stage distance matrix was constructed while calculating Euclidean distance (Kolenda, 2006, pp. 43-44, 53).

Then Ward's method was applied for the purpose of identification of the types of cultural institutions. Four pairs of concentration that were least distant were looked for on the basis of the distance matrix. According to assumptions of this method entities constituting initially separate groups were combined into groups of a higher level while successively reducing their number until all the objects were combined into one cluster. ESS, referred to as error of the sum of squares (Ward, 1963, pp. 236-244) is the measure of the minimum difference towards mean values of created clusters adopted in this method. Next Ward's method was applied for the purpose of identification of cultural institutions. Calculations serving identification of the types of cultural institutions were performed with the use of Numerical taxonomy program.

SC (silhouette coefficient) was applied for the assessment of the quality of results of clustering (Rousseeuw, 1987, pp. 53-65). For the adopted configuration SC is 0.776. According to interpretation of the

value of SC measure proposed by Rousseeuw, the executed classifications have the highest quality if this measure occurs in the range between 0.71 and 1.00. This allowed for stating that typology of cultural institution obtained in this way meets this criterion.

Empirical research was conducted between 2011 and 2014 within the postdoctoral research program N N112 391940 (agreement no 3919/B/H03/2011/40) entitled: „Uwarunkowania i perspektywy rozwoju orientacji rynkowej w sferze kultury” [*„Determinants and perspectives of development of market orientation in the sphere of culture”*]. The project was funded from resources of National Science Centre (Supervisor and the main executor of postdoctoral research project: Magdalena Sobocińska).

5.4. Typology of cultural institutions as an expression of differences in the scope of application of marketing in cultural institutions in Poland

As a result of presented procedures, four types of cultural institutions that were different with respect to the approach to the use of the principles of market orientation and the scope of its implementation were identified. They were:

- cultural institutions oriented on gaining new consumers and satisfaction of their needs,
- cultural institutions oriented on formation of consumers' loyalty towards artworks that satisfy artists' needs,
- cultural institutions oriented on creation of consumers' loyalty and satisfaction of their needs,
- cultural institutions focused on sale and growth of income (Sobocińska, 2015, pp. 281-283).

5.4.1. Type I: Cultural institutions oriented on gaining new consumers and satisfaction of their needs

Cultural institutions oriented on gaining new consumers and satisfaction of their needs constitute the largest typological group (37%). Decision-makers representing this type of entities that create cultural offer believe that recipients give sense to artistic activities and therefore they take into consideration the needs and motivations of participants in culture in management of cultural institutions. For this group of cultural institutions it is also important to take endeavours to satisfy buyers' expectations and even to create goods and services for the purpose of satisfaction of current needs of consumers. At the same time acquiring new buyers of cultural goods and services is also more important for them than forming loyalty of current culture recipients. This is compliant with the concept of relationships marketing. Such an attitude is associated with perceiving the function of cultural institutions in the context of the need of reducing the range of exclusion of individuals from participation in cultural life and pursuit of development through reaching new consumers of culture with their offer.

On the one hand, these cultural institutions perceive marketing according to the essence of this philosophy of operation on market, i.e. through the prism of identification and satisfaction of consumers' needs, and on the other hand in a pragmatic way in the context of activities supporting sale. In comparison with other types of cultural institutions relatively high rate of institutions included in this type, create marketing plans including long-term marketing plans. Taking into consideration features typical of strategic marketing, and associated with development of strategies and long-term plans it should be stated that cultural institutions that form this type are distinguished against others by implementation of its principles. At the same time it should be added that majority of these cultural institutions

often have been conducting marketing research on large samples for over 10 years. Cultural institutions oriented on gaining new consumers indicate introduction of innovations in the offer, as well as expansion and modernisation of physical facilities as their management priorities. They also attribute high priority to development of distribution channels for the purpose of increase in the number of consumers of offered cultural goods and services. Cultural institutions forming this type compete using brand and reputation and also attractive location of service provision more often than other cultural institutions.

Presenting this type of institutions it should be added that it is most often observed among state-owned cultural institutions, particularly museums, and also among large institutions that give employment on the basis of employment contracts to over 100 workers. The fact that these cultural institutions have been operating in the sphere of culture for a long time is also their feature.

5.4.2. Type II: Cultural institutions oriented on formation of consumers' loyalty towards artworks that satisfy artists' needs

The group of cultural institutions identified in performed typology as the second with respect to its size includes entities of the cultural market oriented on creation of loyalty of consumers towards artworks satisfying creator's needs. The share of cultural institutions included in this type in studied population reaches 26%. This type of cultural institutions is formed by market entities that similarly as those included in the first type believe that recipients of culture give sense too artistic activities, but their substantial difference lies in the fact that they perceive the role of marketing in the context of finding relevant recipients for artworks corresponding to artistic vision of their creators and not adjustment of the offer to consumers' taste. People managing cultural institutions included in this group more frequently apply the

approach consisting in establishment of loyalty rather than gaining new consumers.

Perceiving marketing as the leading philosophy of operation of the whole cultural institution is typical of this type; however it does not translate into conducting marketing activities in strategic dimension. This is because a relatively high rate of institutions of this type has neither a strategy nor a marketing plan. However, from the point of view of the perspectives of marketing development in cultural institutions included in this type, it is important that majority of them are aware of the necessity to formulate plans of this type in the future.

It should be added that among priorities of management of cultural institutions oriented on creation of consumers' loyalty towards artworks expressing and satisfying needs of their creators, taking care of artistic quality of the offer is in a high position. The distinct character of cultural institutions that give precedence to artists against other institutions also consists in the fact that having a unique offer is really important for them.

If for cultural institutions included in the first group it is typical to perceive the relationships with other institutions of culture in terms of cooperation with elements of competition, the cultural institutions included in the second type attribute even more importance to cooperation. Approaching relationships with other cultural institutions through the prism of pure cooperation is typical of this type of cultural institutions. Local government-owned cultural institutions, particularly theatres and music institutions as well as art galleries are predominant in this group of entities that create cultural offer. The image is complemented by the fact that among cultural institutions constituting this type, the largest share is represented by market entities that give employment on the basis of work contract to 51-100 people.

5.4.3. Type III: Cultural institutions oriented on creation of consumers' loyalty and satisfaction of their needs

The next group of institutions is constituted by the entities of culture market that are oriented on creation of loyalty of consumers and satisfaction of their needs. The rate of cultural institutions included in the third type in the studied population is 24%. This type of cultural institutions is different from the institutions forming the first group because it is typical of them to approach culture consumers while focussing mainly on establishment of loyalty of existing recipients and not on gaining new participants in culture. It is typical of cultural institutions included in this group to perceive the role of marketing through the prism of creation of goods and services that satisfy current needs of consumers, and not through finding buyers for artworks that express artists' needs. This, in turn, differs this group of institutions from entities creating cultural offer and identified as the second group.

This type of cultural institutions is also characterised by the fact that while aiming at satisfying consumers' needs, they perceive them not as a potential source of income but as important entities whose participation in culture gives sense to artistic activities. The way marketing is approached is the expression of market orientation of these cultural institutions. Cultural institutions forming this type perceive marketing in the context of identification and satisfaction of buyers' needs and also the leading philosophy of operation of the whole cultural institution.

The fact that relatively high rate of cultural institution have a marketing plan, also the one including long time horizon, is the expression of openness of this group of cultural institutions to implementation of the principles of marketing management. Apart from applying some principles of strategic marketing, these cultural institutions also implement some assumptions that are distinguishing

features of relationship marketing. This is because formation of long-term relationships with culture players is the priority in their management.

For cultural institutions included in this type, a unique offer and having a professional team of workers is highly important. Similarly to cultural institutions included in the second type, they firstly perceive their relationships with other cultural institutions in terms of pure cooperation.

Taking into consideration the levels of financing of cultural institutions it must be added that the entities of culture market constituting this group are mainly financed on the level of regions. Local government-owned cultural institutions of an average time of functioning on market, including modern, multi-functional cultural centres are predominant in this group. They most often give employment on the basis of work contract to 21-50 people.

5.4.4. Type IV: Cultural institutions focused on sale and growth of income

The last of identified types of cultural institutions is characterised by the fact that functioning of the entities it is composed of is not compliant with the principles of marketing concepts. Relatively low sensitivity of these cultural institutions to the consumer is proved by the fact that in comparison with the other three types, the people managing them aim at satisfying recipients' needs the least, and if they do, it is determined by their endeavours to increase income.

Adoption of sales perspective by these cultural institutions is also proved by the way they perceive marketing. Despite the fact that in many cases these cultural institutions have marketing services, they approach marketing instrumentally and define it in the context of promotion and activities supporting sales. A relatively high rate of cultural institutions belonging to this type, do not have a marketing

plan because they believe that they do not need it. In majority, cultural institutions of this type do not conduct marketing research. At the same time they do not feel the need to perform marketing research in the future either. However, they attribute great importance to analysing data related to sales, and they indicate growth of income from sale and gaining income other than the one coming from sale of goods and services associated with their main activity to be one of their priorities.

The entities of the sphere of culture do not perceive their recipients as partners who give sense to creators' work while participating in culture. There is a risk in these cultural institutions that economic targets will come before statutory goals associated with development and promotion of culture. From the point of view of showing the existing scope of implementation of marketing concepts in the sphere of culture, and also from the perspective of development of market orientation, it is important that it is the least numerous group. Cultural institutions forming this type constitute 13% of studied population.

Against the three types of culture market entities presented before, these cultural institutions are characterised by the fact that they more frequently diversify the prices of provided services and offered goods, and they plan to shape behaviours of culture consumers with the use of pricing mechanism in a larger degree in the future. Furthermore it is also typical of them that they perceive their relationships with other cultural institutions through the prism of competition, including pure competition and competition with the elements of cooperation. They include private entities of culture market slightly more frequently than other types of cultural institutions. Institutions belonging to this group have been operating on the market of culture for a relatively short period of time and give employment on the basis of work contract to up to 20 people.

Empirically verified typology of cultural institutions in Poland shows diversity in the sphere of application of marketing by them. They are expressed through the prism of reasons and importance attributed to satisfaction of needs of culture participant and also applied approach to consumers that represents implemented type of marketing concept.

5.5. Managerial implications resulting from typology of cultural institutions

Conducted empirical research constitutes the basis for development of typology and identification of types of cultural institutions. They allow for formulation of managerial implications that show the need to expand the scope of application of quantitative and qualitative marketing research by studied cultural institutions and taking their results into consideration in planning future marketing activities for the purpose of improvement of effectiveness of the instruments of influencing the market. Furthermore, in conducted marketing activities attention should be focussed on the need to adopt the time perspective that is longer than the existing one, formulation of plans and marketing strategies, and also communicating these targets to workers of cultural institutions (this particularly concerns the entities of the market of culture included in the second or fourth type of identified cultural institutions). Conducted empirical research also allows for stating that emphasising establishment of loyalty and strengthening relationships with existing cultural consumers is reasonable (this particularly concerns the first and fourth of presented cultural institutions). Among managerial implications, the need to diversify marketing activities and the need to grant great significance

to gaining new participants in culture must be indicated together with enhancement of relationships with existing consumers (this mainly concerns the institutions belonging to the second or third of identified types). The need to raise awareness of the recipient and change the way in which marketing is perceived by entities of the market of culture included in the fourth type, i.e. institutions that approach marketing instrumentally and mistakenly identify it only with promotion and activities aiming at supporting sale, must not be forgotten neither. The analysis of research shows the need to apply the potential resulting from development of new technologies in a larger scope, and consequently, individualisation of activities in the sphere of market communication, distribution of goods and culture services, as well as incorporation of new trends in consumer behaviours in conducted marketing activities, and development of innovative solutions in this sphere in a larger extent.

5.6. Conclusions

Adaptation of marketing concepts to the sphere of culture is determined in a multidimensional way and is associated, among others, with development of new styles of living, changes in hierarchies of life values and the position of culture and leisure time in them and also development of new media.

Conducted primary research that was preceded by literature studies, allowed for empirical verification of the assumptions of typology of cultural institutions with respect to the range of their market orientation while considering the changes in the paradigm of marketing. The research allowed for stating that marketing concepts are implemented by cultural institutions in Poland, however not in their pure form, but in various scopes, while taking into account the

assumptions of classical concept of marketing, as well as relationship marketing and strategic marketing.

References:

Colbert F., (2007), Marketing Culture and the Arts, HEC, Montreal

Diggles K., (1986), Guide to Arts Marketing: The Principles and Practice of Marketing an They Apply to the Arts, Rhinegold Publishing, London

Hirschman, E.C. (1993), Aesthetics, Ideologies and the Limits of the Marketing Concept, Journal of Marketing, vol. 47

Kolenda M., (2006), Taksonomia numeryczna. Klasyfikacja, porządkowanie i analiza obiektów wielocechowych, Wydawnictwo Akademii Ekonomicznej we Wrocławiu, Wrocław

Mokwa M.P., Dawson W.M., Prieve E.A. (ed.), (1980), Marketing the Arts, Praeger Publishers, New York

Rousseeuw P.J., (1987), Silhouettes, a Graphical Aid to the Interpretation and Validation of Cluster Analysis, Journal of Computational and Applied Mathematics, vol. 20

Smoleń T., (2013), Marketing w tworzeniu wartości dla klienta na rynku dóbr kultury – na przykładzie oferty muzeum, Handel Wewnętrzny, nr 3, tom I

Sobocińska M., (2015), Uwarunkowania i perspektywy rozwoju orientacji rynkowej w podmiotach sfery kultury, Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław

Varbanova L., (2013), Strategic Management in the Arts, Routledge, New York

Ward J.H., (1963), Hierarchical Grouping to Optimize an Objective Function, Journal of the American Statistical Association, nr 58

Wróblewski Ł., (2012), Strategie marketingowe w instytucjach kultury, PWE, Warszawa

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CHAPTER 6

HOUSEHOLD SPENDING ON MEDICATIONS AND MEDICAL TREATMENT IN POLAND IN THE YEARS 2005-2014

6.1. Introduction

As a managing entity, a household functions in a certain way, i.e., it does its best to make as efficient use of its resources as possible and to have as high earnings as possible, and thus be able to accomplish its goals. The main aim of every household is to enhance its members' satisfaction with the consumption of goods and services.

Economic and political changes are major factors that have an indirect impact on the market behaviour of households. Generally speaking, these changes add new dimensions to economic development of a country as well as new factors determining economic situation of business entities. In other words, economic and political changes make consumers (household members) alter their behaviour and attitudes, as well as affect the level and structure of household income and expenditure. Nonetheless, it should be borne in mind that not every socio-professional group accepts plans and changes to be introduced as part of governmental policy.

The structure of household expenses is a significant source of information since it shows how society lives in a given country. It also

reflects standard of living and quality of life. As far as modern consumer behaviour is concerned, special attention should be paid to so-called servicisation of consumption, i.e. excessive consumption of services also the ones provided as part of health care. This, as a result, boosts the consumption of intangible assets, such as knowledge, information, actions taken to improve household members' physical and mental state as well as health (Włodarczyk, 2013, p. 106). Hence, expenditure on health, which includes spending on medications or pharmaceutical products, medical devices and equipment, outpatient services and other medical services (Statistical Yearbook..., 2016, p. 307), is one of major elements in the structure of household expenses.

As far as Poland is concerned, there is growing public dissatisfaction with the range, quality and availability of free medical services. But the other side of the coin is that Polish society tends to make excessive use of paid medical services. The author of the present paper assesses changes in household healthcare spending in Poland in the years 2005-2014. The article is aimed at analysing the changes in the level of expenditure on medications, medical devices and equipment, as well as medical services. This level varies among representatives of socio-professional groups who are, at the same time, members of Polish households. For the sake of analysis, the author uses statistical data from reports published by WHO and GUS, i.e., Central Statistical Office of Poland, as well as findings from reports delivered by CBOS, i.e., Public Opinion Research Centre.

6.2. Health care as an aspect of quality of life

Quality of life is a broad notion embracing both material wealth and personal satisfaction with such aspects of life as consumption, natural environment, good health, personal prosperity, social standing,

etc (Bywalec, 2010, pp.41-42; Bywalec, 1991).

Quality of life, both in collective and individual terms, is defined through a number of objective conditions, such as economic conditions, leisure time, collective security, housing conditions, natural environment, health, social environment, as well as subjective conditions that are different and unique to every human being and are reflected in their physical and mental state (Sęk, 1993).

Quality of life is difficult to determine because of the necessity to differentiate between objective and subjective factors. The former, which have an impact on standard of living, i.e., material wealth, should be determined with the use of quantitative and qualitative measures. For instance, one may analyse household income and expenditure incurred on certain types of goods and services. The latter, which reflect quality of life in a given household or society, is difficult to measure. In the case of subjective factors, social satisfaction ought to be determined with the use of subjective indicators that show how people perceive certain situations and enable to describe their physical and mental state (Zielaś, 2004, pp. 14-17; Kędzior, 2003, pp. 15-17).

Quality of life is a major goal of social development in every country and has a profound impact on government policy. Since it is an important element both of economic and social policy, it can be stated that society has become aware of the necessity to depart from a lifestyle cherishing only material aspects of life. Such a trend should be reflected in social policy aimed at, among other things, supporting collective well-being and fulfilling other goals important to society. Therefore, quality of life of household members depends on the one hand on general socio-economic and political situation, and on the other hand on economic and social activity of household members.

Health care is one of key aspects determining quality of life. Correlation similar to the above-mentioned is also observed in this

case. On the one hand, health care depends considerably on government policy, and on the other hand it has a lot to do with households and decisions made by their members.

Current situation with health care system in Poland is determined by a number of factors, one of which has been the case since 2004 when Poland joined the European Union. In order to become a Member State, Poland had to adjust the standard, range and quality of medical services to the EU standards. In fact, changes in Polish health care system have been observed since the first half of the 1990's. Furthermore, a number of reforms were introduced to the system in 1999. As a result, not only did regulatory system change, but also a system of institutions providing health care, rules governing the redistribution of resources devoted to health care, rules governing the management of these resources, and monitoring system. Modern health care facilities manage their assets, seek competitive areas of activity, compete with other units for orders for health care services, which, after all, are the source of their income, and make efficient use of their assets (Trocki, 2002).

Under the Constitution of the Republic of Poland, every Polish citizen shall have a free and equal access to medical services as part of health care system. According to Article 68 of the Constitution, everyone shall have the right to have their health protected and, furthermore, public authorities shall provide citizens, irrespective of their material situation, with access to health care services financed from public funds. Special health care shall be provided to children, pregnant women, disabled people and people of advanced age. Public authorities shall also combat epidemic illnesses and prevent negative health consequences of environmental degradation. Furthermore, Article 71 of the Constitution imposes an obligation on public authorities to provide a mother, before and after birth, with

special assistance. According to Article 76, public authorities shall protect consumers, customers and lessees against activities threatening their health, whereas Article 166 states that public duties aimed at satisfying the needs of a self-governing community shall be performed by units of local government as their direct responsibility (The Constitution..., 1997). Under the Law on Powiat Self-government, its main responsibilities for health care and related activities include the following: health promotion and protection, public assistance, pro-family policy, support for the disabled, protecting people from facing significant threat to their lives and health, as well as preventing from environmental degradation (Law on Powiat..., 1998). On the other hand, under the Law on Voivodship Self-government (Law on Voivodship..., 1998), its main responsibilities for health care include health promotion and protection, public assistance and pro-family policy.

Other legal acts that regulate the functioning of health care system in Poland are as follows: Act on Medical Activity (Journal of Law, 2016), Act on Healthcare Services Financed from Public Funds (Journal of Law, 2015), Act on Patients' Rights and the Commissioner for Patients' Rights (Journal of Law, 2016), Act on Spa Treatment, Health Resorts and Protection Zones of Health Resorts and Health Resorts Municipalities (Journal of Law, 2012), or pharmaceutical law (Journal of Law, 2008).

6.3. Household spending on medications and medical treatment – theoretical considerations

Socio-economic and political changes have an impact on the structure of individual consumption in the sector of households in particular countries. The level and diversification of consumption are subject to numerous studies since they enable to define how

consumption patterns may change (e.g. Kramer, 1997; Kieźel, 1999; Słaby, 2006; Bywalec 2010; Kusińska, 2011; Włodarczyk, 2013; Dąbrowska, Bylok, Janoś-Kresło, Kielczewski, Ozimek, 2015). The structure of individual consumption in the household sector and its change may be a useful indicator showing why certain consumption patterns emerge in different countries.

A number of studies on household behaviour identify the following few main categories in the structure of consumption, namely expenditure on: food and non-alcoholic beverages, alcoholic beverages and tobacco, clothing and footwear, rent or mortgage and furnishings, health care, transport and communications, recreation and culture, education, restaurants and hotels, and other expenses (e.g. Central Statistical Office of Poland, Eurostat; see also: Kramer, 1997, pp. 196-197; Bywalec, 2010, p. 265; Kusińska, 2011, pp. 91-94; Włodarczyk, 2013, p. 145). What is typical of modern consumption model is a low (and dropping year by year) expenditure on food (less than 20%) and, at the same time, high expenditure on services (c.a. 50% of total expenditure) (Dąbrowska, 2006, pp. 142-151; Bywalec, 2010, p. 199).

According to the literature on the subject, one may divide household expenses into basic and free choice, based on the structure of household spending (Grzega, 2004, pp. 76). Basic expenses enable one to meet his/her fundamental needs and include payments for foodstuffs, clothing and footwear, rent or mortgage and furnishings, personal hygiene, and health care. Free choice expenses are incurred on goods and services that enable household members to satisfy their higher-order needs. These include spending on education, recreation, transport and communications, as well as other expenses (Grzega, 2000, pp. 75-76; Grzega, 2004, p. 76).

Household take a number of actions to optimize the way they use their purchasing power. The structure and pattern of consumption,

emerging in every country, have a major impact on individuals' lives. Household members undertake various activities to fulfill both their biological and higher-order needs. The latter are satisfied because of people's strong motivation to improve their health and protect it in a number of ways.

Spending on health care is considered a basic expense. Since it has a major impact on one's life, it should represent a growing percentage in the structure of consumption.

6.4. Spending on medications and medical treatment – Poland in comparison with the EU Member States

As numerous studies show, spending on health care is not high in Poland in comparison with expenditure incurred in the EU Member States. Table 6.1 presents changes in spending on health (calculated as a percentage of GDP) in the years 2005-2014 in Poland compared to the European Union Member States.

Table 6.1 Total expenditures on health as % GDP in EU countries (2005-2014)

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
AT	10,5	10,4	10,4	10,6	11,2	11,2	10,9	11,2	11,1	11,2
BE	9,2	9,2	9,3	9,6	10,4	10,2	10,4	10,5	10,6	10,6
BG	7,1	6,7	6,4	6,6	6,8	7,2	6,9	7,1	7,9	8,4
HR	6,9	7,0	7,4	7,7	8,2	8,2	7,8	7,8	7,8	7,8
CY	6,4	6,3	6,1	6,9	7,4	7,2	7,5	7,4	7,5	7,4
CZ	6,9	6,7	6,5	6,8	7,8	7,4	7,5	7,5	7,5	7,4
DK	9,8	9,9	10,0	10,2	11,5	11,1	10,9	11,0	11,2	10,8
EE	5,0	5,0	5,2	6,1	6,9	6,2	5,8	6,4	6,5	6,4
FI	8,4	8,4	8,1	8,4	9,2	9,0	9,0	9,3	9,5	9,7
FR	10,6	10,5	10,4	10,6	11,3	11,2	11,3	11,4	11,6	11,5
DE	10,5	10,3	10,2	10,4	11,4	11,3	10,9	11,0	11,2	11,3
EL	9,4	9,3	9,4	9,8	9,8	9,2	9,8	9,2	9,3	8,1
HU	8,3	8,1	7,5	7,3	7,5	7,9	7,8	7,7	7,5	7,4

IE	7,3	7,2	7,6	8,6	9,5	8,8	8,1	8,3	8,0	7,8
IT	8,7	8,8	8,5	8,9	9,4	9,4	9,3	9,3	9,2	9,2
LV	6,4	6,8	7,0	6,6	6,8	6,6	6,1	5,9	5,7	5,9
LT	5,8	6,2	6,2	6,6	7,5	7,1	6,9	6,7	6,6	6,6
LU	7,9	7,7	6,8	7,3	8,1	7,7	7,3	7,2	7,1	6,9
MT	8,8	8,9	8,4	8,2	8,3	8,3	9,6	10,0	9,9	9,7
NL	9,6	9,4	9,4	9,6	10,3	10,5	10,5	11,0	11,0	10,9
PL	6,2	6,2	6,3	6,9	7,1	6,9	6,7	6,6	6,4	6,4
PT	10,0	9,7	9,6	9,9	10,4	10,4	10,1	9,7	9,6	9,5
RO	5,5	5,1	5,2	5,3	5,6	5,8	5,5	5,5	5,6	5,6
SK	7,0	7,3	7,8	8,0	9,2	8,5	8,0	8,1	8,0	8,1
SI	8,5	8,4	8,0	8,5	9,4	9,1	9,1	9,4	9,3	9,2
ES	9,6	9,4	9,4	9,6	10,3	10,5	10,5	11,0	11,0	10,9
SE	9,1	8,9	8,9	9,2	9,9	9,5	11,7	11,8	12,0	11,9
UK	8,2	8,4	8,4	8,9	9,8	9,5	9,3	9,4	9,3	9,1

AT – Austria; BE – Belgium; BG – Bulgaria; HR – Croatia; CY – Cyprus; CZ – Czech Republic; DK – Denmark; EE – Estonia; FI – Finland; FR – France; DE – Germany; EL – Greece; HU – Hungary; IE – Ireland; IT – Italy; LV – Latvia; LT – Lithuania; LU – Luxembourg; MT – Malta; NL – Netherlands; PL – Poland; PT – Portugal; RO – Romania; SK – Slovakia; SI – Slovenia; ES – Spain; SE – Sweden; UK – United Kingdom

Source: http://apps.who.int/nha/database/Key_Indicators/Index/en

Household spending on medical treatment can also be calculated as a percentage of total consumer expenditure. This expenses is covered to provide both children and adult people with health care. Table 6.2 shows changes in household spending on health (calculated as a percentage of total expenditure) in the EU Member States in the years 2005-2014.

Table 6.2 Expenditure on health in structure of households final consumption expenditure in EU countries (in % of total expenditure),(2005-2014).*

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
AT	3,7	3,6	3,7	3,6	3,6	3,7	3,6	3,6	3,6	3,6
BE	5,4	5,6	5,6	5,6	6,0	6,0	6,1	6,1	6,2	6,2

BG	4,7	4,2	4,1	4,1	4,2	4,1	5,5	5,3	4,9	4,9
HR	4,1	4,2	4,2
CY	4,4	4,4	4,3	4,3	4,8	4,9	4,9	4,9	4,9	4,9
CZ	2,0	2,2	2,4	2,7	2,5	2,5	2,4	2,5	2,4	2,3
DK	2,7	2,7	2,7	2,7	3,0	3,0	2,9	2,9	2,9	2,9
EE	3,1	3,0	3,0	2,7	2,9	2,9	2,8	2,6	2,6	2,7
FI	4,3	4,3	4,3	4,3	4,3	4,4	4,3	4,3	4,4	4,4
FR	3,8	3,9	3,8	3,9	4,1	4,1	4,2	4,2	4,3	.
DE	4,3	4,3	4,4	4,6	4,9	5,1	5,1	5,1	5,2	5,4
EL	5,4	5,3	5,0	4,8	4,7	4,1	4,1	3,3	4,1	4,1
HU	4,0	4,0	3,9	3,9	4,2	4,4	4,5	4,4	4,4	4,5
IE	3,2	3,3	3,2	3,5	4,5	4,7	4,6	5,4	4,9	4,6
IT	3,1	3,1	3,1	3,2	3,2	3,1	3,3	3,3	3,2	3,3
LV	3,7	3,7	3,7	3,7	4,3	4,2	3,6	3,7	3,8	3,8
LT	5,1	4,2	4,2	4,5	4,7	5,1	4,5	4,7	4,9	4,9
LU	2,0	2,0	2,3	2,2	2,4	2,2	2,2	2,4	2,2	.
MT	3,8	3,9	3,9	4,0	4,1	4,2	4,4	4,5	4,7	4,5
NL	5,2	2,6	2,7	3,0	3,1	3,1	3,2	3,4	3,6	3,7
PL	4,0	4,0	3,9	3,9	4,1	4,0	4,3	4,5	4,5	5,1
PT	4,6	4,5	4,7	4,9	5,2	5,0	5,0	5,0	5,1	5,1
RO	3,3	3,1	3,4	3,8	3,0	5,9	5,8	6,0	.	.
SK	3,3	3,3	3,6	3,5	3,9	4,0	3,9	4,0	4,1	4,0
SI	3,5	3,5	3,4	3,5	3,6	3,7	3,6	3,9	4,0	4,0
ES	3,3	3,3	3,3	3,4	3,6	3,6	3,7	3,9	4,1	4,2
SE	3,2	3,2	3,2	3,3	3,3	3,2	3,2	3,4	3,5	3,5
UK	1,5	1,6	1,7	1,6	1,7	1,7	1,7	1,7	1,8	1,8

AT – Austria; BE – Belgium; BG – Bulgaria; HR – Croatia; CY – Cyprus; CZ – Czech Republic; DK – Denmark; EE – Estonia; FI – Finland; FR – France; DE – Germany; EL – Greece; HU – Hungary; IE – Ireland; IT – Italy; LV – Latvia; LT – Lithuania; LU – Luxembourg; MT – Malta; NL – Netherlands; PL – Poland; PT – Portugal; RO – Romania; SK – Slovakia; SI – Slovenia; ES – Spain; SE – Sweden; UK – United Kingdom

* (.) data not available

Source: National Accounts. Structure of household's final consumption expenditure (current prices), Central Statistical Office of Poland.

As shown in Table 6.2 expenditure on health in the structure of European household consumption did not exceed 6.5% and, furthermore, was not subject to major change during the period under analysis. As far as European countries are concerned, the lowest spending on health was the case with British households, whereas the

highest expenditure was reported in Belgium. Such differences may arise from the fact that in particular countries different systems have been adopted for financing the consumption of medical services. In Poland, spending on health fluctuated between 4 and 5% during the period under consideration and was at an average level in comparison with the Member States.

6.5. Differences in household spending on medications and medical treatment in Poland by socio-professional groups

In this section of the paper, attention is paid to differences in household spending on health care in Poland. To be more specific, particular socio-professional groups are taken into account. Table 6.3 shows monthly per capita expenditure on health expressed in zlotys.

Table 6.3 Average monthly expenditures on health in Polish households per capita by socio-economics groups (in zł), (2005-2014).

Households:	Total	Of employees	Of farmers	Of the self-employed	Of retirees and pensioners
2005	34,72	24,83	19,52	29,71	62,49
2006	36,57	26,67	20,45	33,39	64,88
2007	39,69	30,07	21,52	38,28	70,4
2008	43,4	32,82	24,99	44,14	76,69
2009	47,9	37,29	28,83	48,5	81,67
2010	47,42	37,22	28,89	47,12	80,84
2011	50,41	39,85	27,59	49,66	86,92
2012	52,68	41,54	30,80	50,29	90,43
2013	53,94	41,87	33,23	51,58	94,85
2014	53,95	41,81	33,44	52,62	94,69

Source: Statistical Yearbook..., 2006, p. 297, 300; Statistical Yearbook..., 2011, p. 285; Statistical Yearbook..., 2012, p. 288; Statistical Yearbook..., 2014, p. 305; Statistical Yearbook..., 2015, p. 307; Sytuacja gospodarstw domowych w 2007 r. ...; Sytuacja gospodarstw domowych w 2008 r. ...; own compilation.

According to estimates provided by Central Statistical Office of Poland (GUS), household spending on health care increased in Poland in the years 2005-2014. During the decade under analysis, it grew from 34.72 zlotys per person in 2005 to 53.95 zlotys per person in 2014. Dynamics of change totalled +55.4%. The highest expenditure on health care was incurred by households managed by pensioners and retired people. This correlation has two reasons, namely age (of pensioners and retired people) and necessity to finance higher spending on health due to their limited physical fitness or intellectual capacity. In 2005, expenditure on health incurred by these households increased by nearly 80% compared to total expenditure on health, i.e., calculated for all Polish households, and in 2014 it grew by 68%. Dynamics of change in spending on health financed by households managed by pensioners and retired people totalled +51.5% during the period under analysis.

The remaining groups of households, i.e., managed by the employed, farmers, and the self-employed, spent less than average on health care. The lowest per capita monthly expenditure on health care was the case with households managed by farmers. Their spending on health was 41% lower than total expenditure, i.e., calculated for all households during the period under analysis. In 2005, expenditure on health incurred by farmers was 44% lower than total spending, and in 2014 it was 38% lower. Nonetheless, dynamics of change in healthcare spending financed by households managed

by farmers in the years 2005-2014 totalled 71% (and was much higher than total expenditure, i.e., calculated for all households).

Generally speaking, household healthcare spending includes expenditure on medications, medical services, professional medical devices, private medical consultations. Table 6.4 shows the structure of household healthcare spending in Poland in the years 2005-2014.

Table 6.4 Structure of expenditures on health in Polish households by socio-economics groups (in %), (2005-2014).

EoH	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Households total										
TL	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
MP	71,1	63,1	61,2	60,4	67,1	66,7	66,2	66,3	67,8	67,2
Srv	26,9	28,5	28,7	31,2	30,3	30,7	31,6	31,7	29,8	30,6
Households of employees										
TL	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
MP	62,2	52,1	52,8	51,3	60,1	60,1	59,0	59,2	61,2	61,3
Srv	36,2	38,4	36,8	37,8	37,0	37,5	38,7	39,6	37,2	37,1
Households of farmers										
TL	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
MP	60,4	63,1	62,9	61,6	65,1	64,7	66,6	68,8	66,7	64,4
Srv	37,3	34,6	34,3	36,1	34,6	33,4	32,9	30,8	32,7	33,1
Households of the self-employed										
TL	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
MP	47,4	53,2	45,7	45,9	55,1	52,2	50,3	52,9	55,5	54,6
Srv	49,5	45,6	45,7	45,9	42,5	44,3	47,1	45,5	43,0	44,1
Households of retirees and pensioners										
TL	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
MP	71,1	74,4	72,3	73,2	77,4	77,6	77,0	76,6	77,1	76,3
Srv	25,4	23,5	19,3	18,3	20,0	19,6	20,7	20,4	19,0	20,6

EoH – Expenditures on Health; TL – Total of which; MP - medical products, appliances and equipment; Srv - out-patient services

Source: own compilation: Statistical Yearbook..., 2006, p. 297, 300; Statistical Yearbook..., 2011, p. 285; Statistical Yearbook..., 2012, p. 288; Statistical Yearbook..., 2014, p. 305; Statistical Yearbook..., 2015, p. 307; Sytuacja gospodarstw domowych w 2007 r. ...; Sytuacja gospodarstw domowych w 2008 r. ...

As shown in Table 6.4 about two-thirds of household healthcare spending in Poland during the period under analysis were incurred on medications and pharmaceutical products, as well as medical devices

and equipment (average in the years 2005-2014 totalled 65%). The remaining 30 % were spent on out-patient services and alternative medicine practices. As far as the entire period under discussion is concerned, neither an upward, nor a downward trend was observed in the respective groups of expenses.

Taken the structure of household healthcare spending into account, only households managed by farmers bore a certain similarity to the aforementioned general pattern. Households managed by the employed and the self-employed incurred lower expenditure on medications and pharmaceutical products in comparison to all groups of households.

On the other hand, these two socio-professional groups spent more on out-patient services and alternative medicine services, taken total household healthcare spending into account. Quite different situation was the case with households managed by pensioners and retired people. In the structure of their expenditure on health, the highest percentage, i.e., 75% of total spending on health in the years 2005-2014, was represented by expenditure on medications and pharmaceutical products as well as medical equipment. On the other hand, their spending on medical services represented low percentage of total expenditure in comparison with all groups of households. During the period under analysis, it accounted for 20% of total expenditure on health care.

Another stage in the analysis was to determine percentage that healthcare expenses, covered by particular groups of households, constituted in total consumer expenditure (see Table 6.5).

Table 6.5 The share of average monthly expenditures per capita on health in the total consumer expenditures in households by socio-economics groups (in %), (2005-2014).

Households:	Total	Of employees	Of farmers	Of the self-employed	Of retirees and pensioners
2005	5,0	3,6	3,7	3,4	8,3
2006	4,9	3,6	3,6	3,5	8,1
2007	4,9	3,8	3,5	3,5	8,3
2008	4,8	3,7	3,6	3,7	8,2
2009	5,0	4,0	4,0	4,0	8,1
2010	4,8	3,8	3,7	3,9	7,8
2011	5,0	4,0	3,7	4,1	8,0
2012	5,0	4,0	3,9	3,9	8,1
2013	5,1	4,0	4,2	4,0	8,3
2014	5,0	3,9	4,2	4,0	8,2

Source: <http://stat.gov.pl/obszary-tematyczne/warunki-zycia/dochody-wydatki-i-warunki-zycia-ludnosci/sytuacja-gospodarstw-domowych-w-2015-roku-w-swietle-wynikow-badania-budzetow-gospodarstw-domowych,3,15.html>.

As shown in Table 6.5 healthcare spending accounted for on average 4.95% of total consumer expenditure incurred by Polish households in the years 2005-2014. Taken all groups of households into account, the percentage share of healthcare spending in total consumer expenditure was higher only in the case of households managed by pensioners and retired people, and lower in the case of the remaining households divided by socio-professional groups.

Healthcare spending financed by households managed by the employed accounted for on average 3.84% of total consumer expenditure during the period under analysis. Households run by farmers incurred 3.81% of total expenditure, whereas households

managed by the self-employed financed 3.80% of total consumer expenditure. Hence, it can be stated that expenditure on health represented similar (average) percentage of total consumer expenditure in the case of the aforementioned two groups of households. As it has already been mentioned, in the years 2005-2014 healthcare spending financed by households managed by pensioners and retired people was the highest and totalled 8.34%.

As far as the overall structure of consumption is concerned, household healthcare spending did not change considerably in Poland. Throughout the decade, differences in expenditure on health incurred by Polish households totalled at the most 0.3 percentage point. Taken particular groups of households into account, these differences amounted to 0.4 percentage point in households managed by the employed, 0.7 percentage point in households managed by farmers, 0.6 percentage point in households managed by the self-employed, and 0.5 percentage point in the case of households managed by pensioners and retired people.

Reports published by Public Opinion Research Centre (CBOS) are a useful source of additional information. Based on the analyses conducted by CBOS, it can be stated that the model of medical services consumption did not change considerably between 2005 and 2014. In 2005, 47% of respondents declared they used medical services provided as part of national health insurance, 29% of respondents used both medical services provided by national health insurance, and services provided outside the national health care system for which they paid themselves, whereas 7% of respondents declared they used only paid medical services. In 2014, the percentage of respondents totalled 39%, 41% and 7% respectively. Furthermore, surveys conducted by CBOS confirmed that pensioners and retired people most often used medical services provided as part of national health insurance. Respondents who at least once chose

paid services over national health insurance, i.e., 70%, stated that the main reason behind their decision was the fact they had a shorter wait for a visit. Every fourth respondent chose privately paid services because of higher skills of medical personnel. 17% of respondents used paid services because the service they required was provided conveniently during one visit. For 16% of respondents it was important that doctors put more effort in medical services provided as part of their private practice and provided them more efficiently and timely, whereas 14% of respondents considered more convenient surgery hours as an important reason behind their choice (Use of Healthcare..., 2016).

In a survey conducted by Public Opinion Research Centre (CBOS) in 2014, 28% of respondents were satisfied with the functioning of health care system, whereas 68% expressed their dissatisfaction. In 2016, 23% were satisfied with the health service, while three-fourths, i.e., 74%, were not (Opinions about Healthcare..., 2016). CBOS identified the following three groups of respondents based on their opinions about the health service (Opinions about Healthcare..., 2016):

- Critical (28% of respondents), i.e., people aged 25-44, with higher education, women representing higher percentage than men, more often than the remaining respondents used both medical services provided as part of national health insurance and privately paid services;
- Moderate (44% of respondents), i.e., people who are less critical than the first group (Critical) but more critical than the third group (Satisfied) about the health care system. These respondents completed higher education and, as a rule, were employed;
- Satisfied (28% of respondents), i.e., people expressing positive opinions about the functioning of health care system. This

group of respondents included people advanced in age, i.e., over 65, people with primary and lower secondary education. people living in rural areas, and the unemployed.

According to the survey conducted by Public Opinion Research Centre (CBOS), Polish households spent, on average, 807.15 zlotys on medications and medical services between March and May 2016. In average terms, highest amounts were spent on medications since they were purchased by the greatest number of respondents. On the other hand, smallest amounts were spent on medical and rehabilitation equipment since only 7% of respondents declared such expenses. The aforementioned amounts varied considerably and depended on social and economic standing of those surveyed. The most evident differences were noticed among socio-professional groups. To be more specific, households managed by people of advanced age, i.e., pensioners and retired people, incurred highest expenditure on medications and medical treatment, namely on average 555 zlotys (pensioners) and 487 zlotys (retired people). Similarly high amounts were spent by clerical workers, namely on average 500 zlotys (Households Healthcare..., 2016).

6.6. Conclusion

Summing up the above discussion, it can be concluded that household expenditure on health increased in the case of all socio-professional groups in the years 2005-2014. The highest expenses were covered by households managed by pensioners and retired people, whereas the lowest expenditure was the case with households managed by farmers. Taken the structure of household healthcare spending (averaged for the period under analysis) into account, two-thirds of total expenditure were incurred on medications and pharmaceutical products, as well as medical devices and

equipment, while less than one-third was spent on outpatient services and alternative medicine. Certain differences were observed among particular groups of households. For instance, households managed by the employed, farmers, and the self-employed incurred lower expenditure on medications, but spent definitely more on medical services. Contrary situation was the case with households managed by pensioners and retired people. It was them who incurred considerable expenditure on medications.

The percentage of healthcare spending in total consumer expenditure did not change significantly throughout the decade under analysis. Nonetheless, it is worth emphasizing that it was high in the case of households managed by pensioners and retired people, and accounted for on average 8% during the period under analysis.

References:

Bywalec C., (1991), Wzrost gospodarczy a poziom życia społeczeństwa polskiego, Monografie i Syntezy, Instytut Rynku Wewnętrznego i Konsumpcji, Warszawa.

Bywalec C., (2010), Konsumpcja a rozwój gospodarczy i społeczny, Wyd. C.H. Beck, Warszawa.

Dąbrowska A., (2006), Przemiany w strukturze konsumpcji i jej uwarunkowania, in: Konsument i konsumpcja we współczesnej gospodarce, Janoś – Kresło M., Mróz B. (eds.), SGH, Warszawa.

Dąbrowska A., Byłok F., Janoś-Kresło M., Kiełczewski D., Ozimek I., (2015), Kompetencje konsumentów. Innowacyjne zachowania. Zrównoważona konsumpcja, PWE, Warszawa.

Grzega U., (2000), Poziom i struktura konsumpcji pracowniczych gospodarstw domowych w latach 90, „Handel Wewnętrzny” no. 4-5.

Grzega U., (2004), Uwarunkowania konsumpcji polskich gospodarstw domowych w latach 1990-2002, in: Racjonalność konsumpcji i zachowań konsumentów, Kieźel E. (ed.), PWE, Warszawa.

Household Healthcare Spending. Research report no. 114/2016, (2016), CBOS, Warsaw.

http://apps.who.int/nha/database/Key_Indicators/Index/en,
[01.11.2016]

<http://stat.gov.pl/obszary-tematyczne/warunki-zycia/dochody-wydatki-i-warunki-zycia-ludnosci/sytuacja-gospodarstw-domowych-w-2015-roku-w-swietle-wynikow-badania-budzetow-gospodarstw-domowych,3,15.html> [02.11.2016].

Journal of Laws of the Republic of Poland, (2008), no. 45, item 271.

Journal of Laws of the Republic of Poland, (2012), item 651.

Journal of Laws of the Republic of Poland, (2015), item 581.

Journal of Laws of the Republic of Poland, (2016), item 1638.

Journal of Laws of the Republic of Poland, (2016), item 186. Kędzior Z., (2003), Metodologiczne aspekty badania jakości życia, in: Jakość życia w regionie, J. Karwowski (ed.), US-PAN-KOIZ, Szczecin.

Kieźel E. (ed.), (1999), Rynkowe zachowania konsumentów, Wydawnictwo Akademii Ekonomicznej, Katowice.

Kramer J., (1997), Konsumpcja w gospodarce rynkowej, PWE, Warszawa.

Kusińska A. (ed.), (2011), Konsumpcja a rozwój społeczno-gospodarczy regionów w Polsce, PWE, Warszawa.

Law on Powiat Self-government of June 5, (1998), Journal of Laws of the Republic of Poland 1998, no. 91, item 578.

Law on Voivodship Self-government of June 5, (1998), Journal of Laws of the Republic of Poland 1998, no. 91, item 576.

National Accounts. Structure of household's final consumption expenditure (current prices), Central Statistical Office of Poland, <http://stat.gov.pl/statystyka-miedzynarodowa/porownania-miedzynarodowe/tablice-o-krajach-wedlug-tematow/rachunki-narodowe/> [01.11.2016].

Opinions about Healthcare System. Research report no. 113/2016, (2016), CBOS, Warsaw.

Sęk W., (1993), Jakość życia a zdrowie, Ruch Prawniczy, Ekonomiczny i Socjologiczny, No. 2.

Słaby T., (2006), Konsumpcja. Eseje statystyczne, Difin, Warszawa.

Statistical Yearbook of the Republic of Poland 2006, (2006), Central Statistical Office of Poland, Warsaw.

Statistical Yearbook of the Republic of Poland 2011, (2011), Central Statistical Office of Poland, Warsaw.

Statistical Yearbook of the Republic of Poland 2012, (2012), Central Statistical Office of Poland, Warsaw.

Statistical Yearbook of the Republic of Poland 2014, (2014), Central Statistical Office of Poland, Warsaw.

Statistical Yearbook of the Republic of Poland 2015, (2015), Central Statistical Office of Poland, Warsaw.

Sytuacja gospodarstw domowych w 2007 r. w świetle wyników badań budżetów gospodarstw domowych, Central Statistical Office of Poland, <http://stat.gov.pl> [02.11.2016].

Sytuacja gospodarstw domowych w 2008 r. w świetle wyników badania budżetów gospodarstw domowych, Central Statistical Office of Poland, <http://stat.gov.pl> [02.11.2016].

The Constitution of the Republic of Poland of April 2, (1997), <http://www.sejm.gov.pl/prawo/konst/polski/kon1.htm>, [01.11.2016].

Trocki M. (ed.), (2002), Zarządzanie w zakładach opieki zdrowotnej, IPIS, Warszawa.

Use of Healthcare Services and Insurance. Research report no. 112/2016 (2016), CBOS, Warsaw.

Włodarczyk K., (2013), Rynkowe zachowania polskich konsumentów w dobie globalizacji konsumpcji, Wydawnictwo Adam Marszałek, Toruń.

Zielaś A. (ed.), (2004), Poziom życia w Polsce i krajach Unii Europejskiej, joint publication ed. by A. Zielas, PWE, Warszawa.

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CHAPTER 7

THE APPLICATION OF QUANTILE REGRESSION TO STUDY VARIATION IN MOST URGENT SPENDING OF HOUSEHOLDS WHEN COMPARING TOWNS AND RURAL AREAS

7.1. Introduction

Studies concerning broadly understood consumption are conducted by numerous researchers. Outcomes of their research are of interest for various institutions, both government agencies and non-governmental organisations. Analyses of consumption in households facilitate observations of differences between their various types, while they also indicate social disproportions resulting from affiliation of

a specific social group. Such information constitutes the basis for modelling of consumer behaviour of households and thus in turn gains importance with an increasing standard of living of the society. The growing potential range of goods and services makes it possible to meet diverse needs, as a result of which the decision making process is becoming increasingly important. Thus the possibility to forecast consumer behaviour is becoming a significant element in the national economy (Rudnicki 2000). Various disciplines of science need to be used to explain and investigate processes taking place in various areas of consumption, such as the development of needs, means and methods to satisfy them, benefits resulting from the

satisfaction of needs or effects of consumption (Żelazna, Kowalczyk, Mikuta 2002).

It is necessary to stress disproportions in consumption and the mechanism of their development, which is multifaceted and difficult to interpret (Kramer 1997). When considering the process of consumption as purchase, models of expenses may be created, depending on income, prices and other selected factors. As it was reported by Słaby (2006) Demand for in-depth knowledge on consumer behaviour has been recently accompanied by the rapid development of both new statistical methods and modification of previous approaches. The aim of the study is to analyze different expenditure to meet the most urgent needs, ie. expenditure on food and non-alcoholic beverages, housing, water and energy, depending on the characteristics of internal farm ie. income level and the type of place of residence of the households, using quantile regression.

7.2. Method

In this study quantile regression was used, as it is a method making it possible to use atypical observations (outliers). It was applied for the first time by Koenker and Basset (1978), who observed that in the case of heteroscedasticity estimation of quantile regression at 0.5 may prove to be a more effective method to search for values of parameters than conventional regression based on the expected value of the explained variable. An advantage of this method is connected with the fact that the entire sample is used, thus preventing the problem of burden of estimators of parameters, which would occur if the least squares method was applied for the subsamples identified based on the explained variable (Koenker 2005). Trzpiot (2012) stressed that Quantile regression is an important tool in the estimation of relative quantiles of the explained variable Y, in the case when we

have the matrix of covariance X . It may be used not only to measure effects of changes in values in the centre of distribution, but also in the right or left tails of distribution.

The model of quantile regression may be presented in the form (Koenker 2005, Trzpiot 2012, Davino et al. 2014):

$$y_i = \beta_0^{(p)} + \sum_{j=1}^J \beta_j^{(p)} x_{ij} + \varepsilon_i^{(p)} \quad (1)$$

where:

$$Q_p(y_i | x_{ij}) = \beta_0^{(p)} + \sum_{j=1}^J \beta_j^{(p)} x_{ij} \quad (2)$$

relative quantile of order p of the explained variable Y at known values of variables X_j ,

y_i – values of the explained variable,

x_{ij} – values of explanatory variables ($j=1, 2, \dots, J$),

$0 < p < 1$ – index defining parameters of regression for quantile of order p for the distribution of variable Y .

Each time estimation is run throughout the entire sample; however, for each quantile of the explained variable a different beta parameter is estimated. Estimation of parameters for quantile regression consists in minimisation of the weighted total of absolute values of remainders ascribing them respective weights, i.e. atypical observations are given lower weights, which solves the problem of their incorporation in the model:

$$\min \sum_{i=1}^n \rho_p(|y_i - (\beta_0^{(p)} + \sum_{j=1}^J \beta_j^{(p)} x_{ij})|) \quad (3)$$

where:

$$\rho_p(z) = \begin{cases} pz & dla z \geq 0 \\ (1-p)z & dla z < 0 \end{cases} \quad (4)$$

$$z = y_i - (\beta_0^{(p)} + \sum_{j=1}^J \beta_j^{(p)} x_{ij}) \quad (5)$$

Depending on the character of the phenomenon and distribution of data in empirical applications most frequently from three to nine various regression quantiles are estimated (they are regressions corresponding e.g. to successive quartiles or decyls of distribution). The investigated phenomenon is analysed based on all obtained models. Most frequently estimators of standard errors of coefficients for quantile regression are generated using the bootstrap method¹⁰.

Estimated parameters¹¹ of quantile regression are interpreted similarly as estimators in conventional regression, i.e. parameter $\beta_j^{(p)}$ indicates the increment in a given quantile p of explained variable Y as a result of a unit increase in the j -th explanatory variable X_j , assuming that the other variables do not change. This facilitates variation in the effect of explanatory variables on individual quantiles of the distribution of the explained variable. In turn, the absolute term may be interpreted as the approximated relative distribution of the quantile function for the explained variable Y at the assumption of zero values of explanatory variables. To evaluate the estimated quantile regression we applied:

The Wald test to investigate the significance of evaluations of parameters (the zero hypothesis assumes a lack of significance of each of the parameters of the model separately) (Koenker, Machado 1999):

$$\begin{cases} H_0: \beta_j^{(p)} = 0 \\ H_1: \beta_j^{(p)} \neq 0 \end{cases} \quad z = \frac{\hat{\beta}_j^{(p)}}{D(\hat{\beta}_j^{(p)})} \quad (j=0,1,\dots,J) \quad (6)$$

Measures of goodness of fit of a model to empirical data (Koenker, Machado 1999):

¹⁰ The bootstrap approach was proposed for the first time by Efron (1979).

¹¹ In this study the STATA 12 computer programme was used to estimate models.

$$R^1 = 1 - \frac{\sum_{y_i \geq \hat{y}_i} p \cdot |y_i - \hat{y}_i| + \sum_{y_i < \hat{y}_i} (1-p) \cdot |y_i - \hat{y}_i|}{\sum_{y_i \geq \hat{y}_i} p \cdot |y_i - \hat{\beta}_0^{(p)}| + \sum_{y_i < \hat{y}_i} (1-p) \cdot |y_i - \hat{\beta}_0^{(p)}|} \text{ and}$$

pseudo-R2 (Davino et al. 2014):

$$\text{pseudo-R}^2 = 1 - \frac{\sum_{y_i \geq \hat{y}_i} p \cdot |y_i - \hat{y}_i| + \sum_{y_i < \hat{y}_i} (1-p) \cdot |y_i - \hat{y}_i|}{\sum_{y_i \geq \hat{y}_i} p \cdot |y_i - \hat{Q}| + \sum_{y_i < \hat{y}_i} (1-p) \cdot |y_i - \hat{Q}|} \quad (7)$$

where

y_i – values of the explained variable,

\hat{y}_i – theoretical values of the explained variable,

$0 < p < 1$ – index defining parameters of regression from quantile of order p for distribution of variable Y, here constitutes the weight,

\hat{Q} – quantile estimated from the sample,

$\hat{\beta}_0$ – quantile for explained variable Y from the estimated model at the assumption of zero values of explanatory variables.

These measures theoretically assumed values from the interval [0,1], but they may not be interpreted as coefficients of determination from conventional linear regression, they only constitute a local measure of goodness of fit for the model in relation to a specific quantile, and not a global measure of the goodness of fit in the entire relative distribution. The higher the value of this measure, the better the fit of the model. A good solution seems to be provided by the proposal of Kurzawa, Lira (2015) to supplement measures of goodness of fit and additionally to apply a quantile coefficient of determination. This coefficient was adapted to quantile regression from median regression (c) and it shows goodness of fit of the quantile model to empirical data:

$$\text{quantile } R^2 = 1 - \left[\frac{\text{Med} |r_i^{(p)}|}{\text{Med} |y_i - \hat{\beta}_0^{(p)}|} \right]^2 \quad (8)$$

where:

$\text{Med}|r_i^{(p)}|$ – median from absolute values of remainders,

$\text{Med}|y_i - \hat{\beta}_0^{(p)}|$ – median from deviations of actual values of the explained variable on quantile $\hat{\beta}_0^{(p)}$ for the explained variable Y from the estimated model without explanatory variables.

The higher the value of the quantile coefficient of determination, the better the fit of the model.

7.3. Data

The data sources for this study included unpublished data coming from studies on budgets of households conducted by the Central Statistical Office of Poland in 2013. The analysed annual sample comprised 37181 households.

The structure of expenses in households is determined by preferences and their financial resources. Its main element is connected with the share of expenses incurred on food and soft drinks, which constitute an important measure of opinions on the material standing of households. The higher it is, the worse the economic situation and the lower the standard of living of the society. The most urgent expenses in households also include expenses for the use of dwelling and energy products. Next to expenses for food they constitute the greatest burden for budgets of households (Fig. 7.1). A greater share of the most urgent expenses in budgets of households makes it difficult to satisfy non-urgent needs, thus it results in the deterioration of their standard of living.

Spending of households on food and soft drinks constitute the greatest percentage of total expenses in all households classified according to the place of residence, with their highest share found for rural households (28.3%), while it was lowest in cities of over 500

thousand inhabitants (18.7%). Use of dwelling and energy products in terms of the share in total expenses of households ranks second after expenses for foodstuffs and soft drinks in all households (Fig. 7.1). They are fixed expenses, which increase limits the level of disposable funds, which in turn is a measure of household affluence (Włodarczyk-Śpiewak, 2003). The lowest percentage of expenses for the use of dwelling (flat of house) and energy products in total expenses, amounting to 19.3%, was characteristic of households in the largest cities (over 500 thousand inhabitants), while it was highest for households in cities of 100 to 200 thousand inhabitants, in which expenses to meet the above-mentioned needs accounted for 21.9% household budgets in 2013. These expenses were explained variables in the quantile regression model. In turn, the explanatory variables were assumed to be disposable income of a household (approximated by total expenses), the number of individuals in the household and the place of the residence of the household. The type of the place of residence was coded using zero-one variables and thus 6 categories were distinguished: rural areas, town of less than 20 thousand inhabitants, town of 20 thousand to 100 thousand inhabitants, city from 100 thousand to 200 thousand inhabitants, city with 200 thousand up to 500 thousand inhabitants, city of more than 500 thousand inhabitants. The reference class was assumed to be households in a city of over 500 thousand inhabitants.

Table 7.1 presents basic descriptive statistics of analysed explanatory and explained variables. The greatest variation, measured by the quantile interval, for the households was found for income (2012.81 PLN/month). Moreover, it was also characterised by a relatively high right-hand asymmetry (5.2). Considerable differences between households may also be observed in terms of the level of expenses for the use of dwelling (flat or house) and energy products.

Some of the examined households did not incur expenses for this purpose. In turn, the greatest level of expenses for the use of dwelling and energy products was 13786.66 PLN/month. This implied relatively high variation of households in terms of the analysed trait (quantile interval was 423.55 PLN/month). Moreover, the level of expenses for the use of dwelling (flat or house) and energy products exhibited relatively high right-hand asymmetry (4.92). The lowest level of expenses for food and soft drinks was 9.8 PLN/month, while it was highest at 7814.54 PLN/month. In turn, the lowest number of members of the households was 1 and the highest was 15. Both the number of family members and the level of expenses for food and soft drinks showed weak right-hand asymmetry.

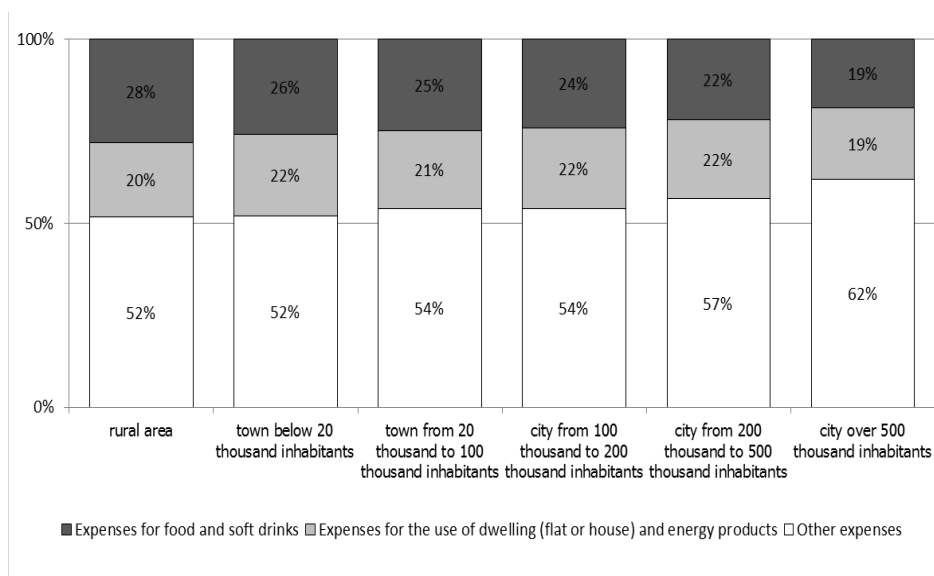


Fig. 7.1 The structure of expenses in households depending on the type of place of residence in Poland in 2013

Source: The authors' study based on unpublished data from the study Budgets of households in 2013 GUS.

Table 7.1 Descriptive statistics for selected variables characterising households in Poland in 2013

Descriptive statistics	Variables			
	Income (PLN/month)	Number of individuals	Expenses for food and soft drinks (PLN/month)	Expenses for the use of dwelling (flat or house) and energy products (PLN/month)
minimum	126.38	1	9.80	0.00
maximum	68274.77	15	7814.54	13786.66
quantile of 0.10	1142.43	1	313.68	165.40
quantile of 0.25	1654.42	2	466.10	301.00
quantile of 0.50	2494.17	2	688.52	476.38
quantile of 0.75	3667.23	4	957.33	724.55
quantile of 0.90	5204.54	5	1247.28	1163.00
quantile interval (quantile 0.75-quantile 0.25)	2012.81	2.00	491.23	423.55
skewness	5.20	1.03	1.21	4.92

Source: The authors' study based on unpublished data from the study Budgets of households in 2013 GUS.

7.4. Selected research results

Analysis of individual estimated quantile regression models was started from their statistical verification, in which we particularly focused on the significance of structural parameters, since they are the only ones which may be interpreted. Almost all estimators of model parameters were characterised by statistical significance (0.05). Moreover, the goodness of fit of the model to empirical data was determined by analyses of pseudo-R², R¹, quantile R², which may be treated as local equivalents of the coefficient of determination as in the classical analysis of regression estimated by the least squares method. Tables 2 and 3 for each model give values of estimated parameters and coefficients describing the goodness of their fit. It needs to be stated that markedly higher values were found

for R1 and quantile R2 in relation to pseudo-R2. Based on the estimated models of quantile regression the variation of the effect of analysed variables such as income, the number of individuals in the household or the place of residence for the identified quantiles of expenses for food and soft drinks as well as the use of dwelling (flat or house) and energy products may be determined.

Table 7.2 presents estimated parameters of classical linear regression and quantiles of regression amounting to 0.1, 0.25, 0.5, 0.75 and 0.9 for expenses for food and soft drinks. When analysing data contained in Table 7.2 it may be observed that the effect of explanatory variables changed with an increase in the level of expenses for food and soft drinks and it was statistically significant at 0.05. It may be stated that both the income and the number of individuals in the household had a positive effect on the level of expenses for the discussed good. Moreover, the effect of income and the number of individuals on the level of expenses for food and soft drinks for successive quantiles of distribution of variable Y was increasing.

For example in quantile 0.1 of the distribution of expenses for food and soft drinks increasing the income by one ceteris paribus unit (i.e. 1 PLN/month) the level of expenses for food and soft drinks increased by approx. 0.04 PLN/month, while in quantile 0.9, i.e. for households with the highest expenses for food it was by approx. 0.18 PLN/month. In turn, the estimator of parameter from the classical linear model indicates that by increasing income by one ceteris paribus unit (i.e. 1 PLN/month) the level of expenses for food and soft drinks increased on average by as little as 0.04 PLN/month. In turn, an increase in the number of individuals ceteris paribus by another person in the household in quantile 0.1 of the distribution of expenses for food and soft drinks results in an increase in expenses for those goods by

approx. 81.92 PLN/month, while in quantile 0.9 it is by approx. 109.30 PLN/month.

Based on analyses of data presented in Table 7.2 it may also be observed that the effect of the type of place of residence also shows a statistically significant and relatively varied effect on expenses for food and soft drinks. The willingness to incur these expenses in households in all analysed types of places of residence was greater than in households from cities over 500 thousand inhabitants (the class of reference). The greatest willingness to pay for expenses for food in rural households was connected in those families with the phenomenon of subsistence farms, which to a considerable degree determines patterns of food consumption. Food from one's farm as a rule is used freely and thus there is a greater tendency to consume it in larger amounts than it would result from the general situation of agricultural households (Stanisławska, Majchrzak 2009).

Table 7.2. Values of estimated parameters of the quantile model and the classical linear model of expenses for food and soft drinks in Poland in 2013.

Explanatory variables		Relative quantile for expenses for food and soft drinks					Classical linear model
		0.10	0.25	0.50	0.75	0.90	
cons		47.64	62.12	97.60	154.63	195.25	191.30
income		0.04	0.07	0.10	0.13	0.18	0.07
the number of individuals		81.92	93.02	102.17	108.40	109.30	112.94
rural area	Reference for comparison= city over 500 thousand inhabitants	n65.82	83.51	84.48	84.93	100.75	64,16
town below20 thousand inhabitants		41.76	50.05	47.00	38.64	51.91	25,29
town from 20 thousand to 100 thousand inhabitants		40.68	42.26	43.64	27.30	29.17	23,48
city from 100 thousand to 200 thousand inhabitants		25.20	34.30	32.41	29.22	28.93	19,36
city from 200 thousand to 500 thousand inhabitants		11.99	16.18	15.59	17.32	7.69 ^a	5,98 ^a
pseudo-R2		23%	28%	32%	35%	38%	47% ^{b)}
R ¹		44%	56%	69%	81%	90%	.
quantile R2		51%	53%	64%	68%	72%	.

Legend: a) statistically non-significant parameter ($p > 0.05$), b) classical coefficient of determination

Source: The authors' study based on unpublished data from the study Budgets of households in 2013 GUS.

Table 7.3 presents estimated parameters of classical linear regression and quantile regression of 0.1, 0.25, 0.5, 0.75 and 0.9 for expenses for the use of dwelling and energy products. When

analysing presented data it was observed that income influenced an increase in the level of expenses for the use of dwelling and energy products, while for successive quantiles of the distribution of discussed expenses this effect was increasing. In turn, the number of individuals in the household influenced the increase in the incurred expenses in households with low levels of expenditure for the use of dwelling (flat or house) and energy products, while its negative effect was observed for households with higher levels of such expenditure.

In quantile 0.9 distribution of expenses for the use of dwelling and energy products, the increasing number of individuals in the household *ceteris paribus* (by 1 person) caused a decrease in the expenditure for the use of dwelling and energy products on average by approx. 44.64 PLN/month. In turn, in quantile 0.25 of the distribution of variable Y an increase in the number of individuals caused an increase in expenditure for the use of dwelling and energy products in the household by approx. 14.37 PLN/month.

The type of place of residence of the household showed a negative effect on the level of expenses for the use of dwelling and energy products for quantiles 0.1, 0.25, 0.5 and 0.75 of the distribution of discussed expenses. In turn, for quantile 0.9 this effect was positive, but it was statistically significant only for the effect of the type of residence such as rural areas and town of less than 20 thousand inhabitants.

When comparing the willingness of the households to incur expenses for the use of dwelling and energy products in households classified according to the population size in their place of residence it may be observed that in households from the biggest cities (over 500 thousand inhabitants) it was highest in relation to the other analysed groups of households. In turn, the estimated parameters of the classical linear model were mostly statistically non-significant.

Table 7.3 Values of estimated parameters of the quantile model and the classical linear model of expenses for the use of dwelling and energy products in Poland in 2013

explanatory variables		relative quantile for expenses for the use of dwelling and energy products					Classical linear model
		0.10	0.25	0.50	0.75	0.90	
Cons		222.52	248.19	263.50	213.78	128.14	245.32
Income		0.03	0.05	0.10	0.21	0.39	0.13
the number of individuals		7.27	14.37	11.97	-10.06	-44.64	0.84 ^{a)}
rural area	Reference for comparison= city over 500 thousand inhabitants	-194.77	-182.46	-156.74	-71.87	58.69	-32,58
town of less than 20 thousand inhabitants		-92.02	-67.91	-38.65	-7.41 ^{a)}	26.80	11,30 ^{a)}
town from 20 thousand to 100 thousand inhabitants		-47.21	-32.77	-24.45	-20.90	1.00 ^{a)}	-7,72 ^{a)}
city from 100 thousand to 200 thousand inhabitants		-17.35	-10.51	-0.79 ^{a)}	-1.79 ^{a)}	13.23 ^{a)}	13,68 ^{a)}
city from 200 thousand to 500 thousand inhabitants		-16.04 ^{a)}	-7.56 ^{a)}	6.96 ^{a)}	15.20 ^{a)}	21.45 ^{a)}	24,45
pseudo-R2		9%	11%	13%	18%	31%	22% ^{b)}
R ¹		12%	13%	27%	55%	80%	.
quantile R2		36%	36%	36%	40%	58%	.

Legend: a) statistically non-significant parameter ($p > 0.05$), b) classical coefficient of determination

Source: The authors' study based on unpublished data from the study Budgets of households in 2013 GUS.

7.5. Concluding remarks

Based on the analyses we may state that:

- Spending of households on food and soft drinks constitute the greatest percentage of total expenses in all households classified according to the place of residence, with their highest share found for rural households (28.3%), while it was lowest in cities of over 500 thousand inhabitants (18.7%).
- Use of dwelling and energy products in terms of the share in total expenses of households ranks second after expenses for foodstuffs and soft drinks in all households. The lowest percentage of expenses for the use of dwelling (flat or house) and energy products in total expenses, amounting to 19.3%, was characteristic of households in the largest cities (over 500 thousand inhabitants), while it was highest for households in cities of 100 to 200 thousand inhabitants, in which expenses to meet the above-mentioned needs accounted for 21.9% household budgets in 2013.
- Income in households had a positive effect on the level of expenses for food and soft drinks and for the use of dwelling and energy products. Moreover, the effect of income for the most urgent expenses increases in the successive quantiles of the distribution of these expenses.
- Increase in the number of individuals in households implies an increase in expenses for food and soft drinks; however, for high quantiles of the distribution of these expenses (from quantile 0.50) this increase is stable. In turn, the effect of the number of individuals on expenses for the use of dwelling and energy products is negative for high quantiles of the distribution of these expenses (from quantile 0.75). In contrast, in households

with low expenditure for the use of dwelling or energy products, the number of individuals in the household had a positive effect on the increase in these expenses.

- The effect of the type of place of residence of households showed a positive and statistically significant effect on the level of expenses for food and soft drinks. In turn, in the case of expenses for the use of dwelling and energy products this effect in most cases was negative.
- Willingness in households to incur expenses for food and soft drinks was higher in all identified types of size of the place of residence in comparison to the largest cities (over 500 thousand inhabitants). In contrast, in the case of expenses for the use of dwelling and energy products this willingness was lower in the most analysed classes than in the largest cities.

References

Davino C., Furno M., Vistocco D., (2014). Quantile Regression. Theory and Applications. John Wiley & Sons. Ltd. Oxford.

Efron, B., (1979). Bootstrap methods: Another look at the jackknife. The Annals of Statistics 7 (1), 1–26.

Hao, L., Naiman, D. Q. (2007). Quantile Regression, Quantitative Applications in the Social Sciences, v. 149.

Koenker R., Bassett G. Jr. (1978) Regression quantiles. Econometrica Vol. 46. No. 1, 33-50.

Koenker R., Hallock K. F. (2001). Quantile Regression, „Journal of Economic Perspectives”, No. 5

Koenker R. (2005), Quantile Regression. Econometric Society Monographs. (No. 38). Cambridge University Press.

Koenker R. & Machado J. (1999). Goodness of fit and related inference processes for quantile regression. Journal of the American Statistical Association 94, 1296-1310.

Kramer J., (1997). Konsumpcja w gospodarce rynkowej [Consumption in the market economy]. PWE, Warszawa.

Kurzawa I., Lira J., (2015). The application of quantile regression to the analysis of the relationships between the entrepreneurship indicator and the water and sewerage infrastructure in rural areas of communes in Wielkopolskie voivodships. XVI Konferencja Naukowa Metody Ilościowe w Badaniach Ekonomicznych 2015, Warszawa.

Rousseeuw P. J. Leroy A. M., (1987). Robust regression and outlier detection. John Wiley and Sons. New York.

Rudnicki L., (2000). Zachowanie konsumentów na rynku [Market behaviour of consumers]. PWE, Warszawa.

Słaby T. (2006). Konsumpcja [Consumption], Eseje statystyczne. Difin, Warszawa.

Stanisławska J., Majchrzak A., (2009). Preferencje konsumpcyjne w zakresie artykułów żywnościowych w gospodarstwach domowych rolników na tle pozostałych grup społeczno-ekonomicznych ludności [Consumption preferences for foodstuffs in households of farmers in comparison to other socio-economic groups], Roczniki Naukowe SERiA, vol. XI, book 3, 324.

Trzpiot G., (2012). Ekstremalna regresja kwantylowa [Extreme quantile regression]. Studia Economiche Uniwersytetu Ekonomicznego w Katowicach - Zeszyty Naukowe Wydziałowe no. 91, Katowice, 11-20

Włodarczyk-Śpiewak K., (2003). Czynniki determinujące strukturę konsumpcji młodych gospodarstw domowych [Factors determining the structure of consumption of young households]. *Rozprawy and Studia*, vol. 482, Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, Szczecin.

Żelazna K., Kowalczyk I., Mikuta B., (2002). *Ekonomika konsumpcji: elementy teorii* [Economics of consumption: elements of theory]. Wydawnictwo SGGW, Warszawa.

WINNET

CENTRE OF EXCELLENCE®

Winnet Centre of Excellence® (WCE®) is a platform created for the purpose of doing and promoting teaching, policy making and research on Gender, Innovation and Sustainable Development. WCE® operates through the international network of researchers from universities in Lithuania, Poland, Sweden, Finland, Sri Lanka, China and Armenia. This initiative is possible thanks to the cooperation with the WINNET Sweden. Our activities were financed by the Swedish Institute under the project TP Winnet BSR (Thematic Partnership Winnet Baltic Sea Region, Winnet BSR, Swedish Institute: 2013 - 2016). WCE® has been established in November 2014 at the Faculty of Economics and Management, University of Szczecin by a decision of partners of the Thematic Partnership Winnet BSR. WCE® Coordinators are: dr Marta Hozer- Kocmiel and dr Sandra Misiak-Kwit, University of Szczecin.

The concept of the WCE® draws on a Winnet Model which combines theory and practice and is based on cooperation between public administration, policy and decision makers, business, non-governmental organizations and academia in order to improve social and economic situation of women at all levels (Quadruple Helix principle). So far, the Winnet model was implemented through Winnet Women's Resource Centers (WRCs), a non profit womens movement and institution created in Sweden in the nineties. The WRCs have contributed to increase women's participation on a broad and not segretated labor market, female entrepreneurship and innovation, incuding in ICT sector, in crossborder co-operation and in rural

development. Establishing the WCE® has strengthen Winnet organisations at local, regional, national and European levels providing support through policy oriented research and recommendations.

Joint projects implemented by members of the Winnet Center of Excellence®:

- Winnet Eastern Partnership (2016 – 2017), Swedish Institute Baltic Sea Cooperation. The main objective is the implementation of the Winnet Model in the EAP countries;
- Thematic Partnership Winnet Baltic Sea Region, Winnet BSR, Swedish Institute (2013 - 2016) - One of the aim is to create the BSR Partnership Platform for Gender, Innovation and Sustainable Development;
- Going abroad, South Baltic Programme (2011 - 2012) - Project aimed to strengthen the position of female entrepreneurs with micro-businesses;
- FEM - Female Entrepreneurs Meetings in the Baltic Sea Region, Baltic Sea Region Interreg III B (August 2004 - July 2007) - The aim of FEM was to strengthen the structures that support women's entrepreneurship through co-operation and the exchange of knowledge and best practices;
- W.IN.NET Europe, Interreg IIIC (2006 - 2008) - The aim was to create WINNET Europe - the European Association of Women Resource Centres;
- Women In Net 8, WINNET8, Interreg IVC (2010 - 2011) - The objective was to contribute to regional growth by improving women's participation in the labour market, focusing on: the lack of women in innovation and technology, the lack of women in entrepreneurship.

More information about us and our activities can be found on the website: <http://www.balticsearegion.org/>

If you would like to be a member of WCE® or have any question concerning our activities, please contact us. You can reach us under the addresses given below.

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