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**DISABLED PEOPLE ON THE LABOUR MARKET
IN POLAND – FOCUS ON RURAL AREAS
OF THE MASOVIAN VOIVODSHIP**

Key words: disabled people, labour market, economic activity, rural areas, Poland, Masovian Voivodship

ABSTRACT. The aim of the paper was to present and assess the economic activity of disabled people on the Polish labour market from a country, voivodship, and Masovian Voivodship rural areas' perspective. The study used data from the Labour Force Survey in Poland collected by the Central Statistical Office and original data collected by a questionnaire, using public institutions, NGOs and direct interviews. The adopted research period covered the years 2007-2018. Japanese candlestick charting as well as tabular and selected statistical methods were used to present the research results. Levels of analysed Polish labour market indicators for disabled people increased noticeably in the analysed period, however persisted significantly below those for non-disabled people. At a voivodship level, the study showed that rates and changes of economic activity in the group of disabled people differed visibly. The highest economic activity rates were observed in the Subcarpathian, Lubusz and Holy Cross voivodships, while the lowest in the West Pomeranian and Lesser Poland voivodships. In 15 voivodships, the unemployment rate decreased significantly in the analysed period. Survey results highlighted a relatively high employment rate and low earnings rates in the researched group of disabled people from the Masovian Voivodship, where the level of education had a significant positive impact on those rates.

INTRODUCTION

The World Health Organization estimates indicate that about 15% of the world population experiences some physical or mental disabilities [WHO 2011]. One in six people in the European Union experience a varying degree of disability that range from mild to severe. For disabled people the poverty rate is 70% higher than the average partly due to limited access to work [EC 2010]. Disability constitutes a restriction or inability for work, but cannot be considered a demographic feature [Wolfe 1984]. Paid work is considered by Western governments as a key route to social inclusion for disabled people [Hall, Wilton 2011]. Work participation of disable people is influenced not only by factors related to a disease or disorder, but also external or personal factors (as noted by the WHO's international classification of functioning, disability and health framework), which can have a positive or negative impact [WHO 2001, Achterberg et al. 2009]. Significant differences in

labour market outcomes are being observed on the basis of disability problems [Acemoglu, Angrist 2001, Jones 2008]. Although the proportion of disabled people in employment is increasing, rates persist significantly below those for non-disabled people [Hall, Wilton 2011]. The barriers standing in front of disabled people in accessing paid work are considered an important contemporary social challenge [Watson et al. 2012]. The adverse position of disabled people on the labour market in relation to rates of work attachment (the proportion of employed or self-employed) and levels of earnings has been proved in numerous research studies [Rigg 2005]. Tania Burchardt [2003] states that low rates of participation can be an effect of the presence of employer discrimination and the social exclusion of disabled people. According to Robert Wilton and Stephanie Schuer [2006], disabled people face exclusion from service work primary on grounds not connected with their capacity to perform the essential functions of specific jobs, by facing exploitation in downgraded service occupations, and due to limiting the capacity to accommodate disabled workers in non-profit and public organizations as a consequence of funding cuts and market discipline. Ill health or disability may reduce an individual's productivity at work and, as a consequence, earnings. However, the observed worse income situation of disabled people may partly be due to employers discriminating based on disability [Jones 2008]. Gary Becker [1971] points to the prejudice problem, while Edmund Phelps [1972] indicates imperfect information.

Lidia Jabłońska-Porzuczek [2019] states that the situation of disabled people on the Polish labour market depends primarily on the attitudes of employers and other employees, architectural and technical barriers, and prejudice related to discrimination against this social group. Elżbieta Kryńska [2013] claims that the situation of disabled people on the Polish labour market is more difficult due to the low level of education of that social group. Education affects the human capital level. However, low or no income can limit or prevent it from increasing, as a consequence, limited funds for education [Anand, Sen 2000, Paszkowicz, Garbat 2005]. Lidia Jabłońska-Porzuczek and Sławomir Kalinowski [2018] observed that disabled people are affected by economic exclusion as well as low social integration. Public policies point out the greater inclusion of disabled people in the labour market and suggest ways of accommodative measure implementation [Shier et al. 2009]. Unfortunately, the disadvantageous situation of disabled people on the labour market in Poland is a consequence of frequent amendments to legal regulations [Jabłońska-Porzuczek, Kalinowski 2018]. Nevertheless, Justyna Kołodziejczyk [2017] notes that, in Poland, there have been positive changes in the approach to employing disabled people since 2012. More and more enterprises are interested in employing that group of people and create jobs especially for them. Paweł Ulman [2011] observes an increase in interest in the problems of disabled people (legal, social and cultural changes) aiming at the equal treatment of them with other social groups.

RESEARCH MATERIAL AND METHODS

The aim of the paper was to present and assess the economic activity of disabled people on the Polish labour market from a country, voivodship, and Masovian Voivodship rural area perspective. Secondary and primary data were used in the study. Country and regional data came from the Central Statistical Office, in particular the Labour Force Survey in Poland. The adopted research period covered the years 2007-2018. Original data were collected by a questionnaire, using public institutions (District Labour Offices, District Family Support Centres, Municipal Social Welfare Center), NGOs, and direct interviews. The study covered a group of disabled people residing in rural areas of all counties of the Masovian Voivodship, who had a disability certificate issued by a relevant authority. The survey was conducted in all counties of the Masovian Voivodship. The sample selection was intentional. As a result, 135 questionnaires were accepted for further analysis. The collecting data period lasted from March to December 2018. Japanese candlestick charting, tabular and selected statistical methods were used to present the research results. Japanese candlestick charting is a commonly used form of technical analysis on stock market share prices [Marshall et al. 2006]. Knowledge about the opening, closing, highest and lowest values of the described variable in the analysed time period are needed to construct a Japanese candlestick chart. The real body and two shadows are the parts of each candle. The real body of the candle reflects the range between the opening and closing values while the lower and upper shadows represent the highs and lows of the described variable in the analysed period. The real body is white, if the value in the closing period is greater than the opening one. Otherwise, the real body of the candle is black [Nison 1994, Gdakowicz 2014].

RESEARCH RESULTS

In Poland, according to the National Census of Population and Housing 2011 [GUS 2013], there were 4.7 million people with legal or/and biological disabilities.

Table 1 indicates that the level of professional activity of disabled and non-disabled people in Poland, in 2007-2018, varied significantly, both in the case of the labour force participation rate, employment rate and unemployment rate. In the analysed period, on average, the level of economic activity rate of disabled people was almost four times lower than in the group of non-disabled, 16.7 and 60.3%, respectively. What is worth noting is the level of the labour force participation rate of disabled people, which increased by 15% in 2007-2018, while in the same period its level in the case of non-disabled people grew by less than 3%. The low level of professional activity results from the fact that disabled people do not take up work because of poor health, and for fear of losing social assistance benefits [Giermanowska 2016]. Similar results, as in the case of the economic activity rate, were observed for the employment rate. In the analysed period, the average level of the employment rate of disabled people was less than 15%, while in the group of non-disabled – over 55%. However, an increase of over 20% in the employment rate in the group of disabled people has been observed. The results confirm the study by Edward Hall and Robert Wilton [2011] and are in line with the research results of Lidia Jabłońska-Porzuczek and Sławomir Kalinowski [2018]. It is worth noting that the level of disabled

Table 1. The economic activity of disabled and non-disabled people in Poland in 2007-2018

Years	Economic activity rate [%]		Employment rate [%]		Unemployment rate [%]	
	disabled	non-disabled	disabled	non-disabled	disabled	non-disabled
2007	15.1	59.0	13.2	53.4	12.9	9.5
2008	15.6	59.4	13.7	55.3	12.3	6.9
2009	15.7	59.8	13.8	55.0	12.1	8.0
2010	16.8	60.0	14.4	54.3	14.4	9.5
2011	17.0	60.2	14.5	54.5	14.6	9.5
2012	17.4	60.5	14.7	54.5	15.5	9.9
2013	17.3	60.6	14.4	54.4	16.9	10.1
2014	17.4	60.8	14.8	55.5	14.8	8.8
2015	16.5	60.8	14.5	56.3	12.3	7.3
2016	16.3	60.9	14.6	57.2	10,9	6.0
2017	17.6	60.8	16.1	57.9	8.4	4.8
2018	17.3	60.7	16.2	58.4	6.5	3.8

Source: own calculations and elaboration based on data from the Labour Force Survey in Poland

people employment in Poland is far below the European Union average [European Commission 2010]. Analysis of the unemployment rate in Poland in the 2007-2018 period pictured a more difficult situation of disabled people on the labour market. Despite an observed decline in unemployment in the group of disabled people (by about 50%), its level was, on average, 60% higher than in the group of non-disabled people. The results confirm the studies of Paweł Ulman [2011].

Figure 1 presents the economic activity rate in the group of disabled people in Poland on a voivodship level. In the entire analysed period 2007-2018, in 16 voivodships, the economic activity rate oscillated between 10 and 25%. The highest average labour force participation rate (more than 20%) was observed in the Subcarpathian, Lubusz and Holy Cross voivodships. On the other hand, in the case of the West Pomeranian and Lesser Poland voivodships, the average economic activity rate equaled only 13%. At a voivodship level, the study confirmed that changes of the economic activity rate in the group of disabled people, in Poland, from 2007 to 2018, were visible but presented different trends. An increasing labour force participation rate was observed in 11 voivodships, while in 5 voivodships experienced a decrease of economic activity rates. The biggest positive changes occurred in the Pomeranian (99%), West Pomeranian (55%) and Silesian (47%) voivodships, while the most noticeable decrease was in the Lublin (30%), Holy Cross (13%) and Podlaskie (13%) voivodships. In the case of the Masovian Voivodship, on average, 15% of disabled people were active in the analysed period and a positive change of that rate (11%) was observed.

Figure 2 shows that the employment levels in the analysed group were strongly related to economic activity levels in the analysed period. At a voivodship level, the average highest employment rates were observed in the Subcarpathian (20%) and Lubusz (19%)

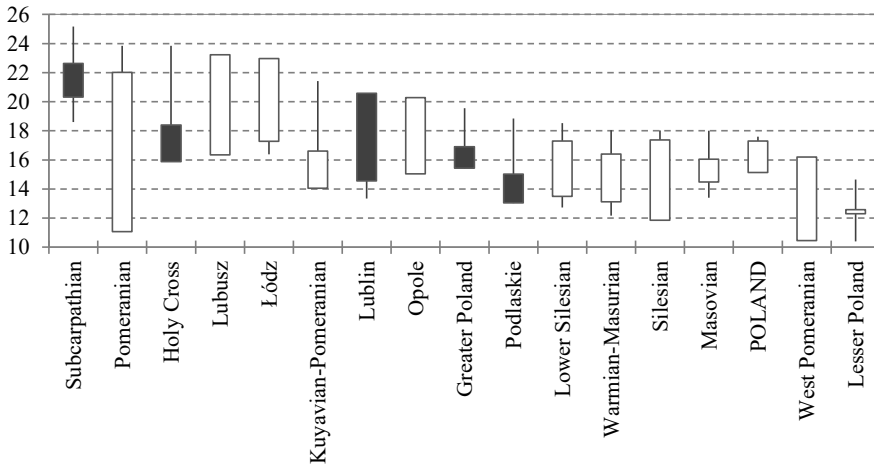


Figure 1. The economic activity rate of disabled people in Poland in 2007-2018 – a voivodship perspective

Source: own calculations and elaboration based on data from the Labour Force Survey in Poland

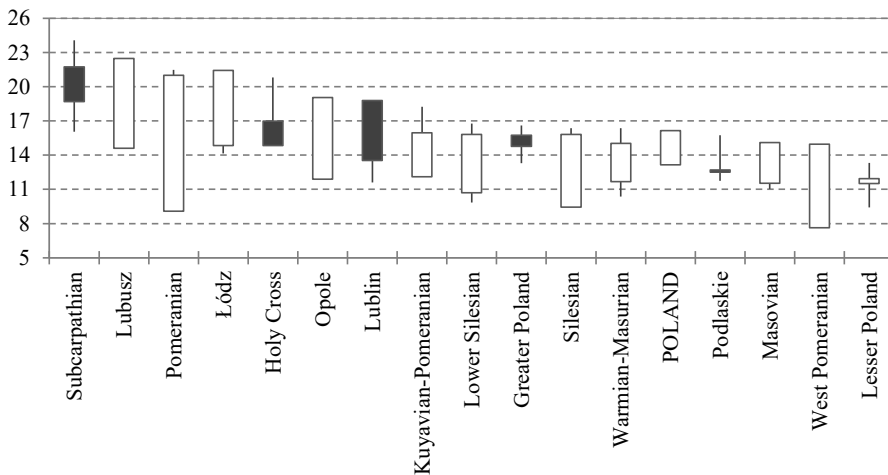


Figure 2. The employment rate of disabled people in Poland in 2007-2018 – a voivodship perspective

Source: own calculations and elaboration based on data from the Labour Force Survey in Poland

voivodships, while in the West Pomeranian and Lesser Poland voivodship the rate was only 11%. According to Lidia Jabłońska-Porzuczek and Sławomir Kalinowski [2018], the employment rate in individual voivodships depends primarily on the number of sheltered workshops and their employees. The employment rate in the analysis of employment rate changes in Polish voivodships in the 2007-2018 period showed that employment rate growth was observed in 11, while a decrease in 5 voivodships. In the case of the Pomeranian and West Pomeranian voivodships, the employment rate doubled in the analysed

period, while the Lublin, Subcarpathian and Holy Cross voivodships experienced the biggest decrease of that rate, 28, 14 and 13%, respectively. In the 2007-2018 period, in the Masovian Voivodship, only 13% of disabled people were employed on average, however a positive change of the employment rate constituting 31% was recorded.

Figure 3 presents the levels and changes of the unemployment rate in the group of disabled people in Poland on a voivodship level. It is worth noting that the average unemployment rate in the Silesian, Lower Silesian, West Pomeranian, and Masovian voivodship was greater than 16%, while in the Subcarpathian, Lubusz, and Lesser Poland voivodship was lower than 10%. Big black bodies of almost all candles on the chart indicate the improved situation of disabled people. The Podlaskie, Kuyavian-Pomeranian, Lubusz, and Masovian voivodships experienced the largest decrease in the unemployment rate of more than 70%. The only voivodship where the unemployment rate increased was the Subcarpathian voivodship.

The study involved 135 disabled people of working age living in the rural areas of the Masovian Voivodship (Table 2). The structure of people participating in the study was diverse in terms of demographic characteristics, i.e. gender, age and education. The prepared survey was completed by 73 women (aged 18-59) and 62 men (aged 18-64). Most people had primary (26%), higher (20%) and basic vocational (20%) education. The average age of the respondent was 41. Respondents were asked to indicate their status on the labour market. Only 26% of respondents worked, while as many as 100 respondents did not work. 36% of women (26 out of 73) were employed or self-employed, while that percentage in the male group was only 15% (9 out of 62 men). Almost no one answered the question indicating activity or inactivity (most likely due to a misunderstanding of the question). The level of education had a significant impact on the professional activity

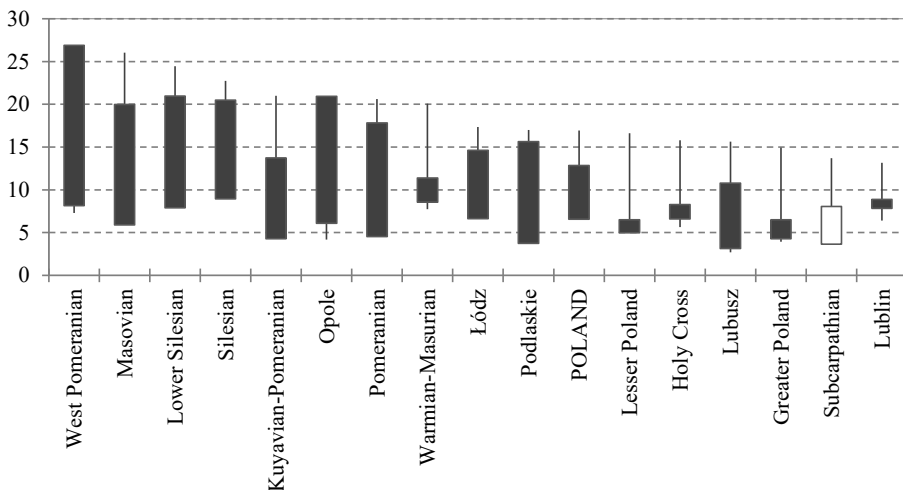


Figure 3. The unemployment rate of disabled people in Poland in 2007-2018 – a voivodship perspective

Source: own calculations and elaboration based on the data of the Labour Force Survey in Poland

Table 2. The economic activity of disabled people in rural areas of the Masovian Voivodship in 2018 – characteristics

Features	Variants	Number of persons
Employed/ self-employed	yes	35
	no	100
Sex	female	73
	male	62
Education	none/incomplete primary	7
	primary	35
	lower secondary	8
	basic vocational	28
	secondary	10
	secondary vocational	8
	postgraduate	11
Net monthly income [PLN]	< 750	26
	751-1,500	19
	1,501-2,250	9
	2,251-3,000	0
	> 3,000	1

Source: own calculations and elaboration based on own survey data

in the analyzed group. 35% of people with a higher education worked, while only one person with primary education was employed. The employment rate in the analysed group was significantly higher than the average value for the Masovian Voivodship. The cause of that difference could be found in the reluctance of the unemployed to fill in the questionnaire, a different understanding of the work definition (some respondents may have considered working in the household as a professional job while receiving social benefits), and in a relatively high share of people with a higher education in the analysed group. Moreover, it is worth noting that none of the 135 respondents indicated the Agricultural Social Insurance Fund (Polish: KRUS) as the authority issuing the disability certificate despite living in the countryside. Due to the fact that the question about the generated monthly net income should be considered sensitive, it was not mandatory. Consequently, 55 respondents answered this question. Over 47% of disabled people who answered the question about their income indicated a value below PLN 750. Less than 35% of respondents marked an income in the range of PLN 750-1,500 net. Only one person indicated a net income of above PLN 3,000. The level of education was positively correlated with an income, however, in the whole studied group, net income above PLN 3,000 involved only one person. It is worth noting that net income below PLN 750 presented in Table 3

concerned inactive persons characterized by a total incapacity for work caused by their health condition. The fact that most of the respondents did not work was noticeable in the level of income achieved. Disabled people who do not work most often depend on social assistance benefits, unemployment benefits and disability pensions. People with a significant degree of disability due to health restrictions are not able to work.

CONCLUSIONS

The presented study of economic activity of disabled people on the Polish labour market in the 2007-2018 period from a country, voivodship and Masovian rural area perspective lead to the following conclusions. Levels of analysed Polish labour market indicators for disabled people increased noticeably in the analysed period, however persisted to be significantly below those for non-disabled people, i.e. levels of labour force participation and the employment rate were almost four times lower, while the unemployment rate was more than 60% higher. At a voivodship level, the study showed that rates and changes of economic activity in the group of disabled people differed visibly. The highest economic activity rates were observed in the Subcarpathian, Lubusz and Holy Cross voivodships, while the lowest in the West Pomeranian and Lesser Poland voivodships. An increasing labour force participation rate and employment rate were observed in 11 voivodships. The average unemployment rate was the lowest in the Subcarpathian, Lubusz, and Lesser Poland voivodships, while the lowest was observed in the Silesian, Lower Silesian, West Pomeranian, and Masovian voivodships. It should be considered positive that in 15 voivodships the unemployment rate decreased significantly in the analyzed period. Survey results highlighted a relatively high employment rate and low earnings rates in the researched group of disabled people from the Masovian Voivodship. The level of education had a significant positive impact on those rates.

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OSOBY Z NIEPEŁNOSPRAWNOŚCIĄ NA RYNKU PRACY W POLSCE
– SKUPIENIE NA OBSZARACH WIEJSKICH
WOJEWÓDZTWA MAZOWIECKIEGO

Słowa kluczowe: osoby z niepełnosprawnością, rynek pracy, aktywność zawodowa,
obszary wiejskie, Polska, województwo mazowieckie

ABSTRAKT

Celem pracy jest przedstawienie i ocena aktywności zawodowej osób z niepełnosprawnością na polskim rynku pracy, z perspektywy obszarów wiejskich Polski w ujęciu regionalnym, ze szczególnym uwzględnieniem województwa mazowieckiego. W badaniu wykorzystano dane z badania aktywności ekonomicznej ludności w Polsce, zebrane przez GUS oraz oryginalne dane pozyskane za pomocą kwestionariusza ankiety z wykorzystaniem instytucji publicznych, organizacji pozarządowych i wywiadów bezpośrednich. Przyjęty okres badawczy obejmował lata 2007-2018. Do prezentacji wyników badań wykorzystano japońskie wykresy świecowe, metody tabelaryczne oraz wybrane metody statystyczne. Poziomy wskaźników polskiego rynku pracy dla osób z niepełnosprawnością wzrosły zauważalnie w badanym okresie, jednak utrzymywały się znacznie poniżej tych dla osób pełnosprawnych. Z badań wynika, że na poziomie województw poziomy i zmiany aktywności ekonomicznej w grupie osób niepełnosprawnych były wyraźnie zróżnicowane. Najwyższe wskaźniki aktywności gospodarczej na rynku pracy odnotowano w województwach podkarpackim, lubuskim i świętokrzyskim, a najniższe w województwach zachodniopomorskim i małopolskim. W 15 województwach stopa bezrobocia znacznie spadła w analizowanym okresie. Wyniki badania wskazały na relatywnie wysoki wskaźnik zatrudnienia i niski poziom dochodów w badanej grupie osób z niepełnosprawnością zamieszkałych w województwie mazowieckim, w którym poziom wykształcenia miał znaczący pozytywny wpływ.

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