### Anna Malarska\*

# DURATION OF UNEMPLOYMENT IN THE AREA OF THE DISTRICT JOB CENTRE OF PABIANICE IN THE YEAR 2005 EMPIRICAL ANALYSIS OF CHANGES IN TIME BY DEMO-SOCIAL FEATURES

### Abstract

Duration is one of the most serious drawbacks of the national unemployment. Some data on the unemployment structure including duration of remaining unemployed and selected demo-social features are available on the government websites. The subject literature shows results of standard, empirical analysis of the Polish unemployment structure from the point of view of its duration and selected demo-social features. On the other hand, estimates of the average duration of unemployment regardless of its range and its cross sections, are unknown.

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The paper attempts to assess the average duration of unemployment on the local labour market of the area of the District Job Centre of Pabianice. The characteristic is determined by means of individual information about each of the unemployed person and the moments of their registration and deregistration over the period from January 31 to September 30, 2005 with quarterly frequency.

The study uses tools of duration analysis dedicated to right censored data. We can find the data in the stream analysis of unemployment in which both its duration and the status of an individual are known, i.e. information about whether an observation is complete or not.

Results of conducted estimates concerning the average duration of unemployment are presented by means of the cross sections that are also used in the registers of Job Centres. These standard criteria of the unemployed typology are: sex, age, level of education, marital status and job seniority.

Results and suggestions coming from the conducted investigations enrich analyses concerning trends observed by analysts of the District Job Centre of Pabianice.

Key words: unemployment, local labour market, duration of unemployment, average time of remaining unemployed, analysis of changes in time, demo-social features of unemployment.

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### **1. Introduction**

Polish unemployment is characterized by many pejorative features. For persons remaining in the unemployment resource, its duration is particularly overwhelming. So far, there have not been any suggestions about the way that duration of unemployment is measured. This paper is an attempt to estimate an average duration of unemployment. Having a synthetic formula, it enables to illustrate transformations within the process of remaining in the unemployment resource. The measure is not a classic arithmetic mean but its identically interpreted equivalent based on a distribution of the Kaplan-Meier estimator (see R o s s a, 2005) using right censored data.

The paper shows exclusively this mean's estimates which may be a basis of evaluation of flexibility of the local labour market as well as Job Centres' effectiveness. Numerical information reflects seasonal trends in changes occurring on the labour market. Taking into consideration individual data concerning unemployment (data of Testing Economic Activity of Population), we can see that duration of remaining in the unemployment resource is shorter in the periods of the economic boom (quarters II and III of the year), and longer in the remaining ones.

Owing to comprehensiveness and interpretative complexity of data, the author ignores modelling of duration of unemployment as well as presentation of assessment of the risk (probability) of remaining unemployed. What is more, due to a multitude of threads, the author also does not include a searching but otherwise valuable analysis of the structure of the resource of the unemployed in the District Job Centre of Pabianice. The Centre handles an interpretation of these issues very well, and overall conclusions resulting from detailed and multidirectional analyses of the structure are convergent, regardless of the classification of characteristics applied. It is enough to say that in the District Job Centre of Pabianice, in contrast to the national register, unemployed men dominate over unemployed women (from 52% to 53%). In general, also men flow out from the unemployment resource more often (depending on the quarter, from 49% to 59%). In the unemployment resource, persons of mobile age account for about 2/3 of the unemployed. In the unemployment outflow, the advantage is even bigger and amounts to about 80% in the favour of persons of mobile age. In the unemployment resource slightly above 25% of persons have secondary education and almost 2/3 of the unemployed have basic vocational education and lower. In the unemployment outflow, however, the share of the unemployed with basic vocational education decreases significantly, and the share of the unemployed with secondary, post-secondary and tertiary education increases. From the point of view of the job seniority of the unemployed in both the resource and the outflow, persons with the job seniority exceeding 5 years dominate. In the unemployment outflow, however, the increase in the share of

persons with no professional experience is noticeable (from about 22% to about 25%). Classification of the unemployed according to their marital status reveals a very interesting phenomenon. Married persons dominate in the resource, however, in the unemployment outflow, the domination of single persons can be observed.

The paper presents only one of the threads of the conducted investigations, namely changes in the average duration of remaining in the unemployed resource in time.

The source statistical material comprises individual information about the unemployed, i.e.:

 territorial code, the area of the District Job Centre of Pabianice includes 6 settlements and one commune,

### - gender,

- level of education,

- marital status,

- job seniority,

 dates of: birth, registration and deregistration of the unemployed from the resource if such an event took place.

The information about the date of birth enables to determine the age of the unemployed and dates of registration and the possible deregistration allow to identify a complete observation and determine individual duration of unemployment.

The classification of the unemployed in the whole area of the District Job Centre of Pabianice, considering the status of the state of the unemployed by the included points of time of the analysis, is presented in Table 1.

Table 1

Time	Number of ex and present unemployed	Number of observations by the state's status	% of total	Status of observation
21.01	11.500	426	3.70	complete
31.01	11 506	11 080	1	censored
21.02	11.468	429	3.74	complete
31.03	11 468	11 039		censored
20.00	10.570	568	5.37	complete
30.06	10 570	10 002	-	censored
20.00	10.514	563	5.35	complete
30.09	10 514	9 951	1.40 <u>-</u> 9670	censored

Unemployment resource in the District Job Centre of Pabianice by status of the unemployed and moment of the analysis in the year 2005

Source: own study on the basis of data of the District Job Centre of Pabianice.

Absolute volumes of the unemployment outflows, i.e. subsets of complete observations, are relatively small. They merely account for from 3.7 to 5.4% of the whole population. The insufficient volume is of great importance in the stratal analyses of duration of unemployment. It restricts freedom of selection of cafeterias of almost all characteristics of the unemployed, except for the gender. A consequence of the application of generally rich natural classification of the given characteristic is too frequent lack of some of the variants of the characteristic. Hence, in the classification:

- of the age of the unemployed, a division into 10-year age groups was applied,

- job seniority was divided into 3 classes, that is no seniority, seniority from 0 to 5 years and above 5 years,

- level of education was divided into 3 classes, that is tertiary, post-secondary and secondary and remaining,

 marital status was divided into 3 classes, that is married woman/married man, bachelor/ maiden and remaining.

The accepted criteria of classification of the characteristics mentioned above enable only to conduct two-stage desagregation of data about the age of the unemployed by each of the included characteristic of the unemployed simultaneously.

The national labour market is characterized by its better and worse periods of the economic situation following changes in the economic situation of the country. However, the year 2005 witnessed of a mild downward trend of the main synthetic indices of the labour market. The confirmation of these changes is presented in Fig. 1.

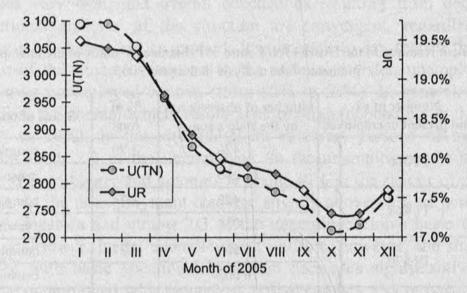


Fig. 1. Number of the unemployed in total (U(TN)) and the unemployment rate (UR) in Poland in 2005 [Own study on the basis of data of the Central Statistical Office<sup>a</sup>]

<sup>a</sup> See http://www.praca gov.pl/.

Similar changes in trends in time are expected from numerical characteristics describing the local labour market. Their convergence with this feature is a subject of the presented analyses.

# 2. Duration of remaining unemployed by gender

Results of the statistical analysis of individual data on unemployment in the area of the District Job Centre of Pabianice are, among others, estimates of the average duration of remaining unemployed (ctb) by the most important demographic criterion, namely gender of the unemployed. As time passes, this characteristic, according to expectations resulting from unemployment investigations conducted by means of national data, has gained properties of statistically significant impingement on the volume of ctb.

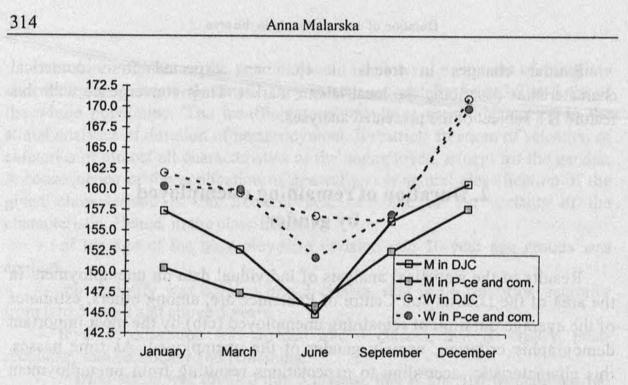
Table 2

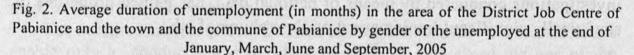
Duration of unemployment (in months) in the area of the District Job Centre of Pabianice and the town and the commune of Pabianice by gender of the unemployed at the end of January, March, June and September, 2005

		Ge	nder	
Point of time	Male	Female	Male	Female
	DJC of	Pabianice	Pabianice and	I the commune
31.01.05	157.4	162.0	150.4	160.3
31.03.05	152.7	159.5	147.4	160.0
30.06.05	144.9	156.8	145.9	151.7
30.09.05	156.2	156.1	152.5	157.0

Source: own calculations on the basis of data of the District Job Centre of Pabianice.

The effect of visualization of data from Table 2 is the Figure of the following form:





Source: own study.

**Conclusion 1:** Average duration of unemployment of men and women in the area of the District Job Centre of Pabianice differs. In the year 2005 and particularly in its first half, men handled finding jobs far better than women in the area of both the District Job Centre of Pabianice and the town and the commune of Pabianice.

From the point of view of the time criterion in the first half of the year 2005, the downward trend of changes in average ctb, regardless of the gender and the operation range of the District Job Centre of Pabianice, was noticeable. This favourable trend slumped significantly in the third quarter of the year 2005 in almost every distinguished category of the unemployed.

### 2. Duration of remaining unemployed by age and gender

The second standard demographic criterion of the unemployed typology is the age. Its influence on the ctb diversity is presented in Table 3.

The effect of visualization of data from Table 3 is the Figure of the following form.

#### Table 3

The Clipping	Report.	31.0	1.05			31.03	3.05	and the set of
Age	D	ŊС		nice and mune	DJC		Pabianice and commune	
18–24 25–34 35–44 45–54 55–59 Total 18–24 25–34 35–44	Mean	Std. err.	Mean	Std. err.	Mean	Std. err.	Mean	Std. err
18-24	111.8	1.5	109.3	1.8	105.0	4.6	107.6	4.7
25-34	133.3	4.4	122.8	4.2	132.5	5.3	119.9	4.7
35-44	150.7	1.3	139.7	1.6	147.7	3.8	139.2	4.0
45-54	162.7	1.6	161.3	2.0	162.8	2.4	164.6	2.4
55-59	172.4	1.6	171.8	2.0	164.4	4.4	164.0	5.5
Total	163.2	1.2	161.1	1.4	159.4	2.3	159.5	2.7
- 3/4- 1-4E		30.0	6.05	Re Carto		30.0	9.05	ALL PROPERTY.
18-24	65.7	1.6	64.9	1.8	57.0	1.4	58.2	1.4
25-34	120.1	7.4	99.4	2.5	103.9	1.7	105.4	1.9
35-44	134.0	5.1	140.4	3.9	112.7	3.0	112.9	3.2
45-54	160.0	3.1	160.8	3.7	163.0	3.0	163.2	3.4
55-64	175.9	2.6	177.6	2.7	168.4	6.3	167.0	7.4
Total	153.1	3.7	159.0	3.0	158.0	3.1	158.4	3.8

Average duration of unemployment (in months) in the area of the District Job Centre of Pabianice and the town and the commune of Pabianice by age of the un- employed at the end of January, March, June and September, 2005

Source: own study on the basis of data of the District Job Centre of Pabianice.

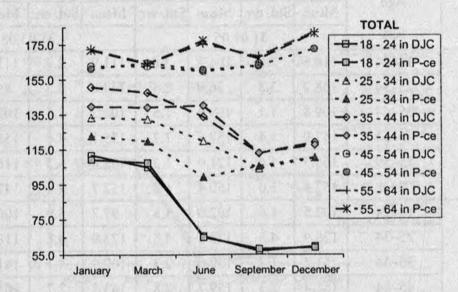


Fig. 3. Average duration of unemployment (in months) in the area of the District Job Centre of Pabianice and the town and the commune of Pabianice by age of the unemployed at the end of January, March, June and September, 2005

**Conclusion 2:** Regardless of the moment of analysis, the average ctb increases together with the age in both the area of the District Job Centre of Pabianice and the town and the commune of Pabianice. Persons of non-mobile age (45 and more) handled finding jobs the worst, regardless of the moment of investigation. In comparison to the whole area, the District Job Centre of Pabianice together with the commune, did not always offer all the unemployed better prospects for leaving unemployment than the district.

With the passage of time, in the first half of the year 2005, we could observe the downward trend of changes in the average ctb, regardless of the age and the operation range of the District Job Centre of Pabianice. This favourable trend slumped significantly in the third quarter of the year 2005 in some of distinguished categories of the age of the unemployed and the operation range of the District Job Centre of Pabianice.

Table 4 illustrates diversity of the average duration of unemployment considering the simultaneous division of the unemployed by gender and age.

Table 4

Gender	er fer den des	D	DJC	11112	nice and mune	De D	ŊС	1	nice and mune
Gender	Age	Mean	Std. err.	Mean	Std. err.	Mean	Std. err.	Mean	Std. en
10 mm 11	Section Sec.	and the second	31.0	1.05			31.0	3.05	-
	18-24	110.6	2.6	104.2	3.8	111.9	2.3	111.1	2.9
	25-34	138.7	3.8	86.0	2.4	144.0	2.3	89.3	1.9
м	35-44	109.8	1.1	109.0	1.5	102.2	1.5	102.4	2.0
	45-54	157.9	1.4	157.1	1.7	155.1	4.6	155.5	5.8
	55-59	164.3	1.6	121.9	1.3	153.8	6.3	116.3	3.9
	Total	157.4	1.0	150.4	1.3	152.7	3.5	147.4	4.6
	18-24	102.5	1.6	102.0	1.8	97.7	3.9	100.4	4.1
	25-34	128.9	4.5	123.8	4.5	123.9	4.8	118.8	5.3
F	35-44	151.2	1.7	139.6	2.3	149.4	4.1	141.0	4.2
Noter	45-54	161.4	2.3	159.7	2.8	163.3	2.7	165.1	1.9
	55-59	170.1	3.9	166.6	5.5	166.7	6.2	168.6	7.0
	Total	162.0	1.7	160.3	2.0	159.5	2.7	160.0	3.1
Total	Total	163.2	1.2	161.1	1.4	159.4	2.3	159.5	2.7

Average duration of unemployment (in months) in the area of the District Job Centre of Pabianice and the town and the commune of Pabianice by gender and age of the unemployed at the end of January, March, June and September, 2005

and an and		D	JC		nice and mune	D	JC		nice and mune
Gender	Age	Mean	Std.err.	Mean	Std.err.	Mean	Std.err.	Mean	Std.err
	N. 5		30.0	6.05			30.09.05   1.8 53.1   2.2 101.0   2.2 102.3   1.5 146.0   2.2 161.3   1.4 152.5   1.8 59.2   2.2 108.7		
	18-24	55.8	1.5	51.5	1.4	53.7	1.8	53.1	1.9
	25-34	130.2	3.7	101.2	2.4	101.9	2.2	101.0	3.1
м	35-44	98.0	3.0	101.5	2.7	100.5	2.2	102.3	2.3
М	45-54	153.5	2.3	156.0	2.4	146.0	1.5	146.0	1.7
	55-64	166.1	3.2		-	167.9	2.2	161.3	2.9
the state of the s	Total	144.9	4.5	145.9	4.0	156.2	1.4	152.5	1.5
	18-24	67.3	2.0	65.2	2.4	58.1	1.8	59.2	1.9
1.15 - 50-00	25-34	97.6	3.1	100.0	3.2	106.3	2.2	108.7	2.3
F	35-44	140.2	5.0	145.2	2.3	115.2	3.2	114.3	3.6
F. A.	45-54	161.7	4.9	161.3	5.5	162.0	4.3	162.4	4.7
glacester	55-64	180.0	3.0	1 12 1	109_20M	165.3	9.7	169.5	10.1
laiv shait	Total	156.8	3.9	151.7	4.6	156.1	4.6	157.0	5.1
Total	Total	153.1	3.7	151.2	3.3	158.0	3.1	158.4	3.8

Tab	le 4	(contd.)

Source: own study on the basis of data of the District Job Centre of Pabianice.

The following Figures are the effect of visualization of data from Table 4.

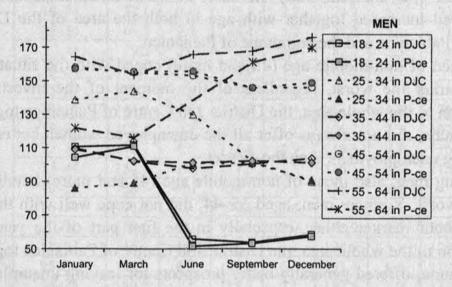


Fig. 4. Average duration of unemployment (in months) in the area of the District Job Centre of Pabianice and the town and the commune of Pabianice by age of unemployed men at the end of January, March, June and September, 2005

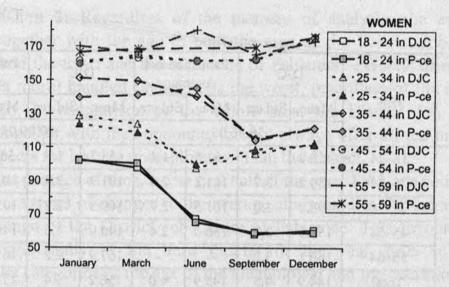


Fig. 5. Average duration of unemployment (in months) in the area of the District Job Centre of Pabianice and the town and the commune of Pabianice by age of unemployed women at the end of January, March, June and September, 2005

Source: own study.

An identical scale of the axis of ctb as well as complete conformity of graphic signs of the above figures for men and women facilitate visual orientation while comparing levels of presented characteristic by gender and age in time.

**Conclusion 3.** Duration of unemployment by age and gender of the unemployed was simultaneously significantly diversified. Regardless of the moment of the analysis, only in case of women duration of remaining unemployed increased together with age in both the area of the District Job Centre of Pabianice and the commune of Pabianice.

Women of non-mobile age (45 and more) coped with the situation on the labour market the worst, regardless of the moment of the investigation. In comparison to the whole area, the District Job Centre of Pabianice together with the commune, did not always offer all the unemployed women better prospects for leaving unemployment than the district.

Among men, also those of non-mobile age (45 and more) handled finding jobs the worst. Younger men, aged 35–44, did not cope well with the situation on the labour market either, especially in the first part of the year 2005. In comparison to the whole area, the District Job Centre of Pabianice together with the commune, offered generally better prospects for leaving unemployment for all the unemployed men.

In the first half of the year 2005, we could observe the general downward trend of changes in the average ctb, regardless of the age and the operation range of the District Job Centre of Pabianice. This favourable trend slumped significantly in the third quarter of the year 2005 in some of distinguished categories of the age of the unemployed and the operation range of the District Job Centre of Pabianice.

# 3. Duration of remaining unemployed by the level of education

Table 5 shows diversity of the average duration of unemployment by the level of education and the age of the unemployed. We should treat the information about the oldest unemployed in all of the categories of the level of education very carefully, since we have to do with a very small representation of the investigated unemployed, especially those with tertiary education. In June 2005, there were no such persons in Pabianice and the commune at all.

The effect of visualization of data from Table 5 is the Figure of the following form.

Table 5

P.I.	negative Correct	E	ŊС		nice and mune	D	лС		nice and mune
Education	Age	Mean	Std. err.	Mean	Std. err.	Mean	Std. err.	Mean	Std. err
	1 States - St	a second	31.0	1.05			31.0	3.05	and the state
A start of the solar	18-24	72.1	2.6	72.5	2.7	74.2	3.0	73.9	3.8
	25-34	68.7	2.6	68.4	3.3	71.3	2.1	71.7	2.3
	35-44	79.2	2.6	77.3	3.9	82.7	2.3	81.1	3.8
Tertiary	45-54	148.1	11.3	103.0	7.3	167.2	3.7		
	55-59	69.7	3.2	68.9	4.0	-	_	-	-
	Total	144.0	5.6	99.9	3.4	151.1	4.6	76.7	2.7
	18-24	100.3	2.3	97.7	2.8	101.7	2.2	102.8	2.2
	25-34	118.7	4.5	118.4	4.9	119.3	7.1	116.7	8.5
Post-sec.	35-44	154.3	1.7	117.3	1.5	146.1	4.5	116.7	2.2
and sec.	45-54	135.5	1.6	134.1	2.1	135.0	2.2	Para -	-
	55-59	173.2	3.4	170.5	5.4	·	-	-	-
	Total	163.0	1.6	160.8	2.0	143.9	2.5	119.0	3.3
1250	18-24	114.3	1.9	111.5	2.4	105.6	5.5	108.7	5.9
	25-34	132.3	6.0	121.0	6.6	133.3	6.0	119.4	5.3
Demaining	35-44	140.7	1.4	138.5	2.1	139.5	3.9	138.3	4.9
Remaining	45-54	162.9	1.9	161.6	2.4	163.1	2.8		-
	55-59	146.3	1.5	146.3	1.8	- 11 - 11 - 11 - 11 - 11 - 11 - 11 - 1	-	- (C	-
	Total	158.0	1.4	156.1	1.7	154.3	2.8	130.1	4.4
Total	Total	163.2	1.2	161.1	1.4	153.1	2.3	129.4	3.7

Average duration of unemployment (in months) in the area of the District Job Centre of Pabianice and the town and the commune of Pabianice by level of education and age of the unemployed at the end of January, March, June and September, 2005

Eduction		E	DIC		nice and mune	C	ыC		nice and mune
Education	Age	Mean	Std. err.	Mean	Std. err.	Mean	Std. err.	Mean	Std. err
	St. A. Start	1. Carlos and	30.06	5.05	144 - 14 A.		30.09	0.05	No. 1
	18-24	62.4	3.1	47.9	2.7	39.0	3.7	41.0	3.8
	25-34	65.2	3.8	66.0	4.3	78.0	2.7	79.4	3.3
Tertiary	35-44	85.7	2.2	1 11 1 <u>1</u>	· · · · · · · · · · · · · · · · · · ·	84.1	3.9	82.7	5.7
NEW COLLARS	45-54	171.2	2.8	-	1	170.8	4.3	118.1	4.1
ate out mean	Total	139.8	6.9	68.1	4.0	155.0	4.1	110.8	3.2
to survey all	18-24	52.7	1.7	52.0	2.3	52.3	1.3	51.8	1.8
	25-34	95.8	4.1	96.7	4.2	98.7	3.2	101.8	3.6
Post-sec.	35-44	118.5	2.5	118.5	3.0	112.4	4.2	114.1	4.3
and sec.	45-54	135.8	2.9	133.8	3.9	123.3	1.7	123.4	2.0
al a Canada - Angol	55-64	175.4	5.3			172.8	5.9	170.3	7.7
	Total	149.1	6.3	124.2	3.0	156.1	4.6	157.0	5.3
the West Connerse	18-24	67.4	2.0	66.5	2.2	57.6	1.7	58.9	1.8
and the second	25-34	134.1	3.2	105.2	2.2	106.8	2.0	107.2	2.2
Pamaining	35-44	131.3	6.0 ·	138.5	5.3	103.2	1.5	102.7	2.0
Remaining	45-54	161.6	2.6	165.2	2.0	160.5	4.3	160.8	4.8
	55-64	149.9	2.6	150.2	2.9	153.3	7.2	153.5	7.6
	Total	150.1	4.1	158.7	2.1	153.2	3.6	153.7	4.1
Total	Total	153.1	3.7	151.2	3.3	158.0	3.1	158.4	3.8

Table 5 (contd.)

Source: own study on the basis of data of the District Job Centre of Pabianice.

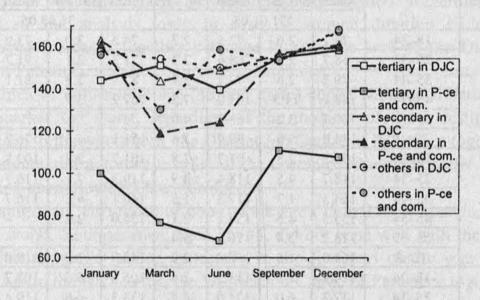


Fig. 6. Average duration of unemployment (in months) in the area of the District Job Centre of Pabianice and the town and the commune of Pabianice by level of education of the unemployed at the end of January, March, June and September, 2005

**Conclusion 4.** As far as statistical categories are concerned, duration of unemployment by age and level of education of the unemployed was diversified significantly. On average, the unemployed having tertiary education did not remain in the unemployment resource long. Persons of post-secondary and secondary education, in relation to the remaining, i.e. persons having basic vocational and lower education (depending on the age), either succeeded or failed when they coped with duration of unemployment. Since June, however, duration of remaining unemployed increased together with the age of this group of people. In comparison to the whole area, the District Job Centre together with the commune offered the unemployed of various levels of education, particularly those of tertiary education, next post-secondary and secondary education, generally better prospects for leaving unemployment than the district in total.

### 4. Duration of remaining unemployed by job seniority

Table 6 shows diversification of the average duration of unemployment by job seniority and age of the unemployed.

Table 6

Average duration of unemployment (in months) in the area of the District Job Centre of Pabianice and the town and the commune of Pabianice by job seniority and age of the unemployed at the end of January, March, June and September, 2005

Job seniority	A	D	лC	Diana and	nice and mune	D	JC	the second second second	nice and mune
(in years)	Age	Mean	Std. err.	Mean	Std. err.	Mean	Std. err.	Mean	Std. err
Charles of the second			31.0	Contraction of the second second second second			31.0	Contract of the local division of the local	Conse.
	18-24	116.2	1.6	115.9	1.6	106.7	6.5	104.5	7.4
	25-34	141.0	4.5	129.4	4.6	135.0	13.0	122.3	13.2
No job	35-44	157.7	1.2	149.1	1.1	146.7	3.1	150.7	1.3
seniority	45-54	164.1	2.4	163.0	3.0	150.0	2.6	151.1	2.9
	55-59	172.0	3.0	175.9	2.0	124.2	3.9	120.0	6.1
	Total	165.5	1.6	164.9	2.0	136.2	4.7	134.0	5.8
	18-24	79.6	2.3	73.8	3.4	91.7	4.3	97.8	2.4
	25-34	86.6	3.5	89.5	2.6	130.9	4.6	125.3	4.0
15	35-44	117.0	2.3	114.1	3.6	144.2	6.0	114.9	4.9
1-5	45-54	139.8	1.4	136.5	1.8	153.2	5.0	155.7	5.0
and the second second	55-59	159.4	5.7	100.8	5.4	141.9	11.1	105.1	7.0
	Total	147.5	3.6	121.2	2.3	142.6	3.9	140.3	4.3
Contraction Sec.	18-24	45.1	1.5	41.4	2.2	70.9	1.5	69.7	2.2
	25-34	70.2	1.1	65.9	1.6	83.2	2.2	78.1	2.1
5+	35-44	123.9	2.0	108.5	2.9	137.4	5.9	137.6	7.0
51	45-54	162.0	1.2	141.6	1.4	165.9	1.3	166.7	1.4
-16 100-1	55-59	144.6	1.4	142.8	2.2	170.1	3.7	173.6	3.5
	Total	157.6	1.1	136.4	1.4	167.0	2.2	166.8	2.7
Total	Total	163.2	1.2	161.1	1.4	159.4	2.3	159.5	2.7

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Job seniority (in years)	Age	D	JC	A PARTY AND	nice and mune	D	ŊС	10010121235	nice and mune
(in years)		Mean	Std. err.	Mean	Std. err.	Mean	Std. err.	and the second se	Std. err
			30.00	5.05	The second		30.09	and the second se	Color State
to propagate	18-24	66.8	1.8	65.8	2.0	59.1	1.4	59.6	1.5
stave god sat	25-34	133.4	6.3	88.2	2.2	95.5	1.9	91.9	2.0
No job	35-44	126.4	2.3	110.0	2.0	105.2	4.1	107.1	4.8
seniority	45-54	133.6	9.8	144.4	6.4	151.9	3.9	153.0	4.5
discharation in	55-64	76.9	1.0	1		112.4	2.5	-	-
	Total	129.0	5.7	136.3	4.4	141.3	2.3	141.9	2.8
istrat m	18-24	55.1	1.4	55.6	1.4	50.0	2.6	41.4	2.1
	25-34	97.8	2.8	96.8	3.2	104.7	2.6	105.9	2.8
1-5	35-44	118.9	4.2	117.5	5.0	104.9	3.0	105.7	4.0
1=5 [	45-54	159.9	3.0	162.3	2.2	146.4	3.9	147.4	4.6
(acres)	55-64	157.5	8.7	-	-	155.8	8.8	147.2	9.7
	Total	146.8	3.2	142.3	3.7	145.3	4.9	142.4	5.6
an a	18-24	30.2	3.9	31.6	4.3	33.0	8.2	33.0	8.2
	25-34	82.4	2.3	78.9	2.2	74.8	2.1	68.0	2.4
5 +	35-44	129.8	7.9	143.0	2.2	115.8	1.9	115.4	2.2
5	45-54	159.0	5.2	156.4	6.3	161.3	4.1	161.6	4.4
	55-64	179.1	1.8	-	-	173.3	4.9	173.1	5.8
	Total	159.7	4.3	154.9	5.1	163.6	3.0	164.1	3.1
Total	Total	153.1	3.7	151.2	3.3	158.0	3.1	153.2	3.2

Table 6 (contd.)

Source: own study on the basis of data of the District Job Centre of Pabianice.

The effect of visualization of data from Table 6 is the following Figure.

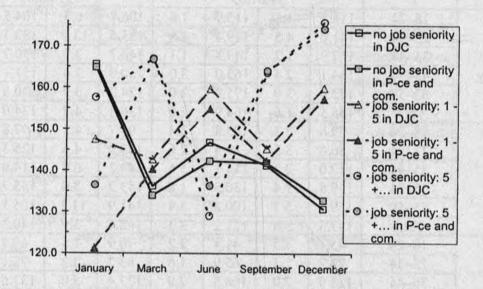


Fig. 7. Average duration of unemployment (in months) in the area of the District Job Centre of Pabianice and the town and the commune of Pabianice by job seniority of the unemployed at the end of January, March, June and September, 2005

**Conclusion 5.** Taking into account statistical categories, duration of unemployment by age and job seniority was diversified significantly. In January 2005 on average, the unemployed with no job seniority remained in the unemployment resource the longest. In March their situation changed diametrically for the better. However, in June and September, it slightly worsened.

The unemployed with job seniority from 1 to 5 years did not always have the situation stable in time. In June 2005 they found themselves in the relatively worst situation.

In fact, only in June 2005, the unemployed with long job seniority (5 years and more), managed to compete with others for vacancies effectively.

The result of comparative analysis of the average duration of unemployment for persons of various job seniority between the area of the District Job Centre and Pabianice together with the commune is ambiguous. Persons of the particular job seniority (depending on the age) coped with duration of unemployment in various ways.

# 5. Duration of remaining unemployed by martial status

Table 7 illustrates diversification of the average duration of unemployment by marital status and age of the unemployed.

Table 7

Average duration of unemployment (in months) in the area of the District Job Centre of Pabianice and the town and the commune of Pabianice by marital status and age of the unemployed at the end of January, March, June and September, 2005

		DJC		Pabianice and commune		DJC		Pabianice and commune	
Martial status	Age	Mean	Std. err.	Mean	Std. err.	Mean	Std. err.	Mean	Std. err.
		4	30.0	6.05	1.312		30.0	9.05	
	18-24	63.1	1.4	59.6	1.8	56.3	2.7	52.3	3.8
Constanting and	25-34	95.5	3.3	101.1	3.0	107.0	1.7	108.5	2.0
Mar. F/Mar.	35-44	115.8	3.3	114.4	1.6	109.0	2.8	109.2	3.0
м	45-54	156.4	4.5	157.7	4.9	164.3	3.8	165.2	3.2
	55-64	177.1	2.5	179.8	1.9	166.0	6.9	164.3	8.3
Section 1	Total	155.2	4.2	161.7	4.1	160.5	4.1	160.5	4.6

Manialatat	nag volao Prasta da	E	JC		nice and mune	D	ŊС		nice and mune		
Martial status	Age	Mean	Std. err.	Mean	Std. err.	Mean	Std. err.	Mean	Std. err		
			30.0	6.05			30.0	9.05	05 58.8 1.4 92.3 1.9 118.2 3.9 135.2 0.8  19.1 1.6 83.2 4.6 94.9 3.2		
的是國家組	18-24	65.4	1.5	63.5	2.1	56.4	1.5	58.8	1.4		
favlupe of	25-34	131.1	4.9	90.4	2.8	91.1	2.1	92.3	1.9		
Maid./Bach.	35-44	136.2	7.8	137.5	8.0	115.4	3.5	118.2	3.9		
Walu./ Bach.	45-54	167.9	1.6	122.6	1.3	170.6	2.6	135.2	0.8		
	55-64	141.1	6.0	142.9	5.9	2	1 1. C	- 1919 -	-		
	Total	140.7	5.7	132.0	3.6	148.7	2.7	119.1	1.6		
An She mercanin	18-24	7.0	2,1	7.0	2.1	84.2	3.6	83.2	4.6		
in newperchase	25-34	88.7	4.3	83.6	6.3	95.8	2.6	94.9	3.2		
Remaining	35-44	107.5	2.1	104.9	2.9	136.5	6.1	131.3	9.0		
	45-54	140.9	3.6	143.8	3.0	138.3	2.2	138.4	2.6		
	55-64	139.7	1.3	139.0	2.0	4	-	-	-		
	Total	140.5	2.2	139.8	2.3	136.2	4.0	133.8	5.2		
Total	Total	153.1	3.7	151.2	3.3	158.0	3.1	158.4	3.8		

Table 7 (contd.)

Source: own study on the basis of data of the District Job Centre of Pabianice.

The effect of visualization of data from Table 7 is the Figure of the following form.

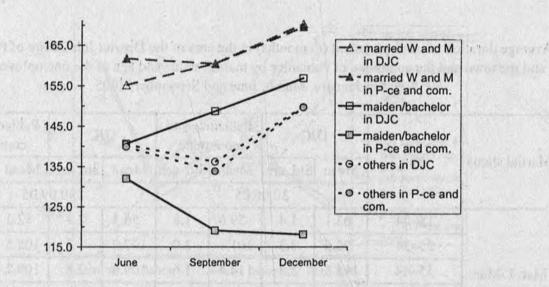


Fig. 8. Average duration of unemployment (in months) in the area of the District Job Centre of Pabianice and the town and the commune of Pabianice by marital status of the unemployed at the end of January, March, June and September, 2005

**Conclusion 6.** Duration of unemployment by age and job seniority of the unemployed was diversified statistically significantly (June, 2005 is an exception). Unemployed bachelors and maidens, but only in Pabianice and the commune, remained in the unemployed resource the shortest on average. Both in the area of the District Job Centre and Pabianice together with the commune, the married unemployed coped with finding jobs the worst. They remained in the unemployed resource on average the longest in both moments of the analysis of the year 2005.

Generally, the youngest category of the unemployed, regardless of the marital status, coped most effectively with finding jobs however, in case of bachelors and maidens, the trend broke down significantly for persons aged 25–34.

The final outline of the described trends observed in the year 2005 will be known after identifying the analysed characteristic at the end of December of the current year. The increase in its level is expected. However, its transformations, from the point of view of population's structure by the introduced demo-social criteria, are somewhat unpredictable.

### 6. Final remarks

The presented information about the average duration of unemployment in the area of the District Job Centre of Pabianice is a kind of informational novelty for the Centre. Trends in changes in this characteristic in time entirely confirm relations following from penetrating observations of transformations in the structure of the unemployed by various data cross sections. However, the biggest advantage of this depiction is the quantification of the characteristic which, using a synthetic formula, assesses and verifies effectiveness of the work of the Centre within the scope of fighting against or alleviating effects of unemployment in case of the random category of the unemployed.

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# Anna Malarska

# Czas trwania bezrobocia w obszarze PUP Pabianice w 2005 roku. Analiza empiryczna zmian w czasie według cech demo-społecznych

Jedną z istotniejszych dolegliwości krajowego bezrobocia jest jego długotrwałość. Na internetowych stronach rządowych dostępne są dane o strukturze bezrobotnych wg czasu pozostawania bez pracy oraz wybranych cech demo-społecznych. Z literatury przedmiotu znane są wyniki standardowych, empirycznych analiz struktury bezrobotnych w Polsce z punktu widzenia czasu trwania bezrobocia i wybranych cech demo-społecznych. Nieznane są natomiast szacunki średniego poziomu czasu trwania bezrobocia bez względu na zakres zjawiska i jego przekroje.

Rekomendowany artykuł podejmuje próbę oceny średniego czasu trwania bezrobocia na lokalnym rynku pracy obejmującym obszar działania PUP Pabianice. Charakterystyka ta wyznaczana jest na podstawie indywidualnych informacji o osobniczych właściwościach bezrobotnych oraz momentach ich rejestracji i wyrejestrowania w okresie 31.01.05–30.09.05 z częstością kwartalną.

W badaniu wykorzystuje się narzędzia analizy trwania zjawisk dedykowane danym prawostronnie cenzurowanym, jakie występują w analizach strumieniowych bezrobocia, w których znany jest czas trwania bezrobocia jednostki i jej status (tzn. informacja o tym, czy obserwacja jest kompletna, czy też nie).

Wyniki dokonanych szacunków średniego czasu trwania bezrobocia prezentowane są w takich przekrojach, jakie figurują w rejestrach urzędów pracy. Standardowymi kryteriami typologii bezrobotnych są: płeć, wiek, poziom wykształcenia, stan cywilny i staż pracy bezrobotnych.

Wnioski wynikające z przeprowadzonych badań istotnie wzbogacają i doskonale wpisują się w analizy prawidłowości obserwowane przez analityków PUP w powiecie pabianickim.