

## THE DISTRIBUTION OF SOCIAL SECURITY PAYMENTS AMONG REGIONS OF POLAND – COMPARATIVE ANALYSIS

Anna Gawrońska, Stanisław Paszkowski

Poznań University of Life Sciences

**Abstract.** The paper presents description and comparison of old-age pensions, disability pensions in case of inability to work and survivor's pensions for agricultural and employees' social insurance systems. Research was conducted among regions of Poland in 2008. In the study data of the Agricultural Social Insurance Fund and the Social Insurance Institution, as well as sources of widely available domestic statistics were used. The study employed basic measures of descriptive statistics. In the agricultural social security system there is a serious imbalance of the relationship between the insured and the beneficiaries. This situation indicates the need to subsidize the system in the future. The agricultural pensions are paid at the lowest amount in a substantial part of provinces. Average monthly pensions paid by ASIF in 2008 was almost a half lower than the employee pension. All pensions, both for employee's and farmer's, were lower than the average wage in provinces.

**Key words:** social security payments, Agricultural Social Insurance Fund, Social Insurance Institution

### INTRODUCTION

In Poland there are two social insurance systems. One of them is the universal system, tasks of which are performed by the Social Insurance Institution (SII) (Polish name Zakład Ubezpieczeń Społecznych, abbreviation ZUS). The second system is the system of insurance directed mainly to farmers and members of the household who live at a farm. The duties of the latter are fulfilled by the Agricultural Social Insurance Fund (ASIF) (Polish name, Kasa Rolniczego Ubezpieczenia Społecznego, abbreviation KRUS). The farm holders covered by Agricultural Social Insurance Fund pay the quarterly lower social-security insurance contribution, than people who are employed or run the non-agri-

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Corresponding author – Adres do korespondencji: Anna Gawrońska, Poznań University of Life Sciences, Department of Finance and Accounting, Wojska Polskiego 28, 60-637 Poznań, Poland, gawronska@up.poznan.pl; Stanisław Paszkowski, Poznań University of Life Sciences, Department of Economics and Economic Policy in the Agribusiness, Wojska Polskiego 28, 60-637 Poznań, Poland, paszkowski@up.poznan.pl

cultural business activity. In the same time, the average monthly social security benefits from the agricultural social insurance system are significantly lower than benefits from SII. Benefits entitled from the social security insurance, both as part of the employees', as well as agricultural insurance system, include among others: old-age pensions, pensions on account of the inability to work and survivor's pensions [Bobola 2008, Luczka-Bakula, Jabłońska-Porzuczek 2008, Podstawk 2008, Wasilewski, Charembski 2006].

The main purpose of the study was to determine and to compare the level of social security benefits for the agricultural and employees' social insurance system among provinces of Poland in 2008. The analysis relies on the comparison of benefits paid by ASIF versus Social Insurance Institution. For each of the systems the relations between the number of currently paid pensions to the number of insured people has been defined. The study also identifies the level of pensions on the background of the minimal wage, average wage in 2008, as well as the average monthly available income per capita in employees and farmers household.

## MATERIALS AND METHODS

The subject of the research was the level of: old-age pensions, pensions in case of inability to work (disability pensions) and survivor's pensions paid as a part of the agricultural and employees' social insurance system. The research was conducted among provinces in Poland in 2008 (separate units at NUTS 2). The data of the Agricultural Social Insurance Fund "Kwartalna informacja statystyczna. IV kwartał 2008 r." and the Social Insurance Institution "Informacja o świadczeniach pieniężnych z Funduszu Ubezpieczeń Społecznych oraz niektórych świadczeniach z ubezpieczenia społecznego", as well as the sources of widely available domestic statistics were used.

The study employed basic measures of descriptive statistics. The level of differentiation of the tested pension benefits among regions has been established with the use of the variation coefficient (v). Moreover, the separate types of pensions have been classified with using the simple grouping scheme, involving the construction of frequency distribution. As a result the considered regions were classified on the basis of the amount of paid benefits. Such classification allows to determine the accuracy of the distribution of the benefits among regions, as well as the comparison between the employees and the agricultural social security system.

In order to deepen the analysis, the indicators illustrating the number of pensions in relation to the number of insured people, the level of types of social security benefits on the minimum wage and average salary in 2008 (%), as well as the share of types of social security benefits in the average monthly per capita available income in employees and farmers household in 2008 (%) were conducted.

## RESULTS

The average monthly number of pensions in total from employees' social insurance system was 7413.7 thousand in 2008. So it was almost five times higher than the number of such benefits paid by the Agricultural Social Insurance Fund (Table 1). Also the

Table 1. Average monthly number of pensions and the number of insured in SII and ASIF according to provinces in 2008 (in thousands)

Tabela 1. Przeciętna miesięczna liczba emerytur i rent oraz osób ubezpieczonych w ZUS i KRUS według województw w 2008 roku (w tys.)

Details Wyszczególnienie	Number of pensions		Number of insured <sup>a)</sup>		Number of pensions per one insured person	
	Liczba emerytur i rent SII/ZUS	ASIF/ KRUS	Liczba ubezpieczonych <sup>a)</sup> SII/ZUS <sup>b)</sup>	ASIF/ KRUS	Liczba emerytur i rent na osobę ubezpieczną SII/ZUS	ASIF/ KRUS
<b>TOTAL/ OGÓŁEM</b>	<b>7413.7<sup>c)</sup></b>	<b>1477.7<sup>d)</sup></b>	<b>14925.7</b>	<b>1574.4</b>	<b>2.01</b>	<b>1.07</b>
Dolnośląskie	617.0	62.0	1165.1	64.4	1.89	1.04
Kujawsko-pomorskie	381.7	89.6	813.2	93.8	2.13	1.05
Lubelskie	354.2	197.8	711.0	184.7	2.01	0.93
Lubuskie	199.7	25.6	412.8	20.6	2.07	0.80
Łódzkie	532.9	125.5	1011.7	130.6	1.90	1.04
Małopolskie	644.9	113.8	1171.0	166.4	1.82	1.46
Mazowieckie	951.3	222.8	2161.7	223.6	2.27	1.00
Opolskie	183.3	33.4	350.0	42.0	1.91	1.26
Podkarpackie	382.5	99.3	710.8	104.7	1.86	1.05
Podlaskie	171.4	104.6	378.8	111.0	2.21	1.06
Pomorskie	412.1	45.3	886.2	52.5	2.15	1.16
Śląskie	1127.7	51.5	1834.3	49.0	1.63	0.95
Świętokrzyskie	236.1	81.1	440.6	86.9	1.87	1.07
Warmińsko-mazurskie	248.6	53.5	559.7	55.1	2.25	1.03
Wielkopolskie	635.9	133.2	1342.7	153.3	2.11	1.15
Zachodniopomorskie	334.7	35.1	684.8	35.8	2.05	1.02

<sup>a)</sup> On the 31.12.2008.<sup>b)</sup> Without senior citizens and pensioners, people receiving benefits and pre-retirement benefits and people receiving social pensions. Including the number of insured who were not assigned to individual provinces. Assigning to provinces on the basis of the reported place of residence of the insured.<sup>c)</sup> Without pensions carried out on the legal validity of international agreements, without pensions for people with the right also to the agricultural benefit and without injury pensions financed from FIS but paid by the MOND, MIA, MJ. Assigned to the province according to the office of the SII branch carrying out the payment of the pension for the particular beneficiary.<sup>d)</sup> Including 'GBRZ' and pensions financed by PF, but paid by the MOND, MIA, MJ in the concurrence with benefits financed from budget of MOND, MIA, MJ.<sup>a)</sup> Na dzień 31.12.2008r.<sup>b)</sup> Bez emerytów i rencistów, osób pobierających zasiłki i świadczenia przedemerytalne oraz osób pobierających renty socjalne. Łącznie z liczbą ubezpieczonych, którzy nie zostali przypisani do poszczególnych województw. Przyporządkowanie do województw na podstawie miejsca zameldowania ubezpieczonego.<sup>c)</sup> Bez emerytur i rent realizowanych na mocy umów międzynarodowych, bez emerytur i rent osób posiadających prawo także do świadczenia rolniczego oraz bez rent wypadkowych finansowanych z FUS, a wypłacanych przez MON, MSWiA, MS. Przyporządkowane do województwa według siedziby oddziału ZUS dokonującego wypłaty emerytury bądź renty dla danego świadczeniobiorycy.<sup>d)</sup> Łącznie z GBRZ oraz emeryturami finansowanymi z FER, a wypłaconymi przez MON, MSWiA, MS w zbiegu ze świadczeniami finansowanymi z budżetu MON, MSWiA, MS.

Source: Own elaboration based on: Kwartalna informacja statystyczna 2009, Informacja o świadczeniach pieniężnych... 2009.

Źródło: Opracowanie własne na podstawie: Kwartalna informacja statystyczna 2009, Informacja o świadczeniach pieniężnych... 2009.

number of insured in SII in 2008 significantly exceeded the number of insured in ASIF (over nine times). In both systems, the number of pensions was lower than the number of insured persons. This situation should be regarded as favorable, because there are more contributors than the recipients of benefits. However, it should be noted, that the ratio of the number of pensioners in relation to the number of insured persons in social insurance system amounted to 2.01, while in the case of benefits paid by ASIF, this factor was equal to 1.07 (Table 1). A growing number of persons receiving agricultural pensions, with constant or declining number of paying the insurance premium will cause the pension system of agricultural insurance to be more vulnerable to the reduction of revenues from contributions.

The provinces which stand out from others, as far as the average monthly number of pensions from SII in 2008 is concerned, were: Śląskie and Mazowieckie. The number of benefits in these regions was: 1127.7 thousand and 951.3 thousand appropriately, that is over five times more than for example in Podlaskie (171.4 thousand). Also in those provinces there were the highest number of insured persons. The lowest number of the average monthly number of pensions, workers' pensions and the number of insured were characterizing such provinces as: Lubuskie, Opolskie and Podlaskie (Table 1).

Average monthly number of pensions in total, paid by the Agricultural Social Insurance Fund in 2008 was 1477.7 thousand while the number of insured persons was 1574.4 thousand (Table 1). The highest number of social security benefits from the agricultural social insurance system was paid in provinces Mazowieckie and Lubelskie. These provinces were also characterized by the highest number of insured (Table 1). Moreover in such provinces as: Łódzkie, Małopolskie, Podlaskie and Wielkopolskie the average monthly number of pensions in the examined year exceeded 100 thousand. The lowest average monthly number of analyzed benefits and the number of insured were characterizing such regions as: Lubuskie, Opolskie and Zachodniopomorskie (Table 1).

Analyzing the individual forms of social security benefits it is possible to conclude that in case of both social insurance system old-age pensions are the highest share of the whole benefits. In turn survivor's pensions, represented the smallest share. The attention should be paid to the fact that the survivor's pensions from the agricultural insurance system constituted only 3.0% of the whole number of benefits, however that from SII – over 17% (Figure 1). Such a large difference in the allocation of the survivors may be due to the fact, that a large number of farmers also work outside agriculture, e.g. as a teachers, skilled workers or non-agricultural business owners. Such persons are normally subject to social security insurance [Fedyszak-Radziejowska 2010]. Overload of professional responsibilities, poor working conditions are often conducive to cause an accident, diseases and often death. Hence, in the case of the employee pension insurance, the share of paid survivors is higher than in that addressed to farmers agriculture. A small percentage of survivors' pensions paid under the Act on the social insurance for farmers may be also caused by relatively low age of farmers who apply for a pension.

The average number of agricultural old-age pensions in total in 2008 was over four times lower than the number of such pensions paid off from SII. In the case of disability pensions, ASIF paid over five times less than SII, whereas the survivors' pensions – over 29-times (Table 2).

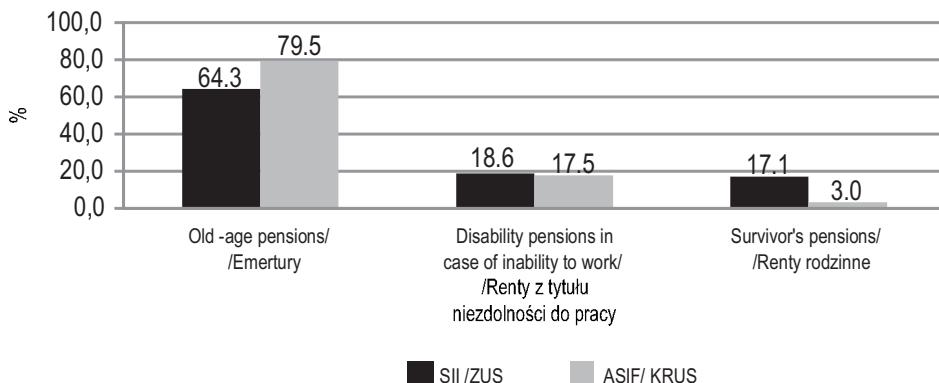


Fig. 1. The structure of social security benefits from SII and ASIF for 2008

Rys. 1. Struktura świadczeń emerytalno-rentowych z ZUS i KRUS w 2008 roku

Source: Own elaboration based on Table 2.

Źródło: Opracowanie własne na podstawie tabeli 2.

The highest number of old-age pensions paid off by SII was noted in 2008 in Śląskie (723 thousand) and Mazowieckie (670 thousand). This follows the fact that both provinces belong to the most populous regions in Poland (over 25% of the total population of the country in 2008 came from these regions [Rocznik Statystyczny Województw 2008]). In remaining provinces the number of old-age pensions from SII was fluctuating between 118 thousand in Podlaskie and 407 thousand in Dolnośląskie. In 2008 the highest number of old-age pensions from the agricultural social insurance system (on average above 100.0 thousand monthly) was paid in provinces: Mazowieckie, Lubelskie and Łódzkie. In turn the lowest number of old-age pensions paid from ASIF (below 30.0 thousand) was registered in such provinces as: Lubuskie, Opolskie and Zachodniopomorskie (Table 2).

In 2008 the highest number of disability pensions paid by SII was registered in such provinces as: Śląskie, Wielkopolskie, Mazowieckie, Małopolskie and Dolnośląskie. Provinces Opolskie and Podlaskie indicated the lowest number of such benefits (below 30.0 thousand). Then, in such provinces as Lubelskie and Mazowieckie average number of agricultural disability pensions was exceeding 30.0 thousand. In turn, the average number of such benefits was not higher than 5.0 thousand in Lubuskie and Opolskie (Table 2).

The survivor's pensions are benefits which have the smallest participation in the whole number of social security benefits paid from Agricultural Social Insurance Fund. In 2008 the average monthly number of survivors' pensions was fluctuating from 0.1 thousand in Śląskie to 7.4 thousand in Mazowieckie. It is worth to notice that in case of survivors' pensions paid off by SII, particularly in Śląskie the highest average number of such benefits (218.5 thousand) was observed. Besides, in such provinces as: Dolnośląskie, Małopolskie, Mazowieckie and Wielkopolskie, number of workers' survivors' pensions exceeded 100.0 thousand. The lowest number of survivors' pensions

Table 2. The monthly number of social security benefits from SII and ASIF according to the provinces in 2008 (in thousands)

Tabela 2. Miesięczna liczba i rodzaje świadczeń emerytalno-rentowych z ZUS i KRUS według województw w 2008 roku (w tys.)

Details Wyszczególnienie	Old-age pensions Emerytury		Disability pensions in case of inability to work Renty z tytułu niezdolności do pracy		Survivor's pensions Renty rodzinne	
	SII/ZUS	ASIF/ KRUS	SII/ZUS	ASIF/ KRUS	SII/ZUS	ASIF/ KRUS
	TOTAL/ OGÓŁEM	4765.3 <sup>a)</sup>	1175.2 <sup>b)</sup>	1380.8 <sup>a)</sup>	258.4 <sup>b)</sup>	1267.6 <sup>a)</sup>
Dolnośląskie	406.6	49.8	109.4	10.5	101.0	1.7
Kujawsko-pomorskie	236.0	66.8	75.7	19.8	70.0	3.0
Lubelskie	209.5	152.5	90.2	40.2	54.5	5.2
Lubuskie	119.3	20.4	48.8	4.6	31.6	0.6
Łódzkie	368.7	103.9	81.0	17.7	83.2	3.9
Małopolskie	400.6	87.2	135.1	23.6	109.2	2.9
Mazowieckie	670.3	183.0	136.2	32.4	144.8	7.4
Opolskie	128.4	29.5	22.0	3.1	32.8	0.8
Podkarpackie	237.1	79.7	81.2	17.3	64.2	2.3
Podlaskie	118.4	87.4	27.3	14.0	25.7	3.3
Pomorskie	260.7	32.6	76.2	11.0	75.2	1.7
Śląskie	723.0	45.8	186.2	5.6	218.5	0.1
Świętokrzyskie	152.4	66.8	40.8	12.0	42.9	2.3
Warmińsko-mazurskie	151.4	41.0	54.7	10.4	42.5	2.1
Wielkopolskie	369.6	99.0	149.1	29.7	117.2	4.6
Zachodniopomorskie	213.5	27.6	67.0	6.6	54.2	1.0

a) Without pensions carried out on the legal validity of international agreements, without pensions for people with the right also to the agricultural benefit and without injury pensions financed from FIS but paid by the MOND, MIA, MJ. Assigned to the province according to the office of the SII branch carrying out the payment of the pension for the particular beneficiary.

b) Including pensions financed from the PF, but paid by the MOND, MIA, MJ in concurrence with the benefits financed from the budget of MOND, MIA, MJ.

a) Bez emerytur i rent realizowanych na mocy umów międzynarodowych, bez emerytur i rent osób posiadających prawo także do świadczenia rolniczego oraz bez rent wypadkowych finansowanych z FUS, a wypłacanych przez MON, MSWiA, MS. Przyporządkowane do województwa według siedziby oddziału ZUS dokonującego wyплатy emerytury bądź renty dla danego świadczeniobiorcy.

b) Łącznie z emeryturami finansowanymi z FER, a wypłaconymi przez MON, MSWiA, MS w zbiegu ze świadczeniami finansowanymi z budżetu MON, MSWiA, MS.

Source: Own elaboration based on: Kwartalna informacja statystyczna 2009, Informacja o świadczeniach pieniężnych... 2009.

Źródło: Opracowanie własne na podstawie: Kwartalna informacja statystyczna 2009, Informacja o świadczeniach pieniężnych... 2009.

from SII, similarly like old-age pensions and disability pensions, was paid in Podlaskie (25.7 thousand) (Table 2).

The amount of average monthly old-age pensions in total number of pensions paid by SII was 1471 PLN in 2008, and it was about twice higher than the agricultural old-age pensions (746 PLN). In the case of social security payments, similar tendency was observed. The employees' disability pension in total from SII was the 162.2% of the pension from the ASIF. In turn, the average monthly survivor's pension in total from the Agricultural Social Insurance Fund in 2008 was 774 PLN, i.e. about 60.0% of the employees' survivor's pension (1292 PLN) (Table 3). Pensions paid by ASIF, appear to be significantly lower than those offered within the occupational social security system.

Regional diversity of the average monthly old-age pension from the Agricultural Social Insurance Fund and SII in 2008 among provinces was smaller (the coefficient of variation was appropriately: 3.6% and 8.8%). The amounts of the old-age pension from the Agricultural Social Insurance Fund have fluctuated from 666 PLN in Śląskie to 769 PLN in Podlaskie. In case of average monthly old-age pension paid from SII, only in Mazowieckie and Śląskie these amounts were higher than in total and were appropriately: 1509 PLN and 1811 PLN. It should be noticed that Śląskie was characterized by the lowest monthly average agricultural old-age pension and simultaneously with the highest occupational old-age pensions (almost three times higher) (Table 3).

The level of average monthly disability pensions in ASIF was very similar among regions in 2008 ( $v = 1.9\%$ ). The highest pension amounted 703 PLN (Opolskie), whereas the lowest 660 PLN (Mazowieckie). In the case of average monthly disability pensions from SII, it was possible to observe the significant differences in amounts of this benefit among provinces. Those values fluctuated from 918 PLN in Podkarpackie to 1443 PLN in Śląskie (table 3). The levels of variability of the employees' disability pensions and survivors pensions were similar in particularly provinces (appropriately  $v = 11.9\%$ ,  $v = 11.1\%$ ). The lowest survivors pensions were paid in Podkarpackie (1091 PLN), and highest in Śląskie (1670 PLN). The level of survivors' pensions paid by ASIF, characterized a twice as less variations in the regional coverage of the country ( $v = 5.3\%$ ). The difference between the highest and the lowest agricultural survivor's pension was approximately 22% (Table 3).

In case of average monthly social security benefits paid by SII in 2008, a certain number of specific relations was noticed in their regional layout. Provinces were characterized by a comparatively permanent membership in the particular class interval, determining the level of examined benefits. For example, Dolnośląskie, Pomorskie and Śląskie were standing out the most often with the highest average pensions from SII. Then, such regions as: Lubelskie, Lubuskie, Podkarpackie, Podlaskie, Świętokrzyskie and Warmińsko-Mazurskie were the provinces in which the level of social security benefits was usually very low. In these provinces the old-age pensions did not exceed 1364 PLN, disability pensions 996 PLN, and the survivors' pensions were lower than 1160 PLN (Table 4).

In case of agricultural old-age pensions, their highest level (which exceeded 769 PLN) occurred in Podlaskie and Warmińsko-Mazurskie. Next, the highest disability pensions

Table 3. Average monthly social security benefits from SII and ASIF<sup>a)</sup> according to provinces in 2008 (in PLN)

Tabela 3. Przeciętne miesięczne świadczenia emerytalno-rentowe z ZUS i KRUS<sup>a)</sup> według województw w 2008 roku (w zł)

Details Wyszczególnienie	Old-age pensions Emerytury		Disability pensions in case of inability to work Renty z tytułu niezdolności do pracy		Survivor's pensions Renty rodzinne	
	SII/ZUS	ASIF/ /KRUS	SII/ZUS	ASIF/ /KRUS	SII/ZUS	ASIF/ /KRUS
<b>TOTAL/ OGÓŁEM</b>	<b>1471,3<sup>b)</sup></b>	<b>745,6<sup>c)</sup></b>	<b>1096,4<sup>b)</sup></b>	<b>675,8<sup>c)</sup></b>	<b>1292,1<sup>b)</sup></b>	<b>774,1<sup>c)</sup></b>
Dolnośląskie	1462,5	724,9	1211,8	696,9	1317,0	814,1
Kujawsko-pomorskie	1381,6	764,8	957,8	683,6	1181,7	822,5
Lubelskie	1319,5	757,3	995,8	687,1	1107,4	788,8
Lubuskie	1345,5	700,9	1036,3	694,0	1157,5	810,5
Lódzkie	1371,6	750,9	954,4	668,2	1183,5	790,8
Małopolskie	1421,6	727,8	1104,2	662,7	1251,2	740,8
Mazowieckie	1509,2	761,9	1042,8	660,1	1248,4	749,8
Opolskie	1411,1	737,6	1117,1	703,0	1235,5	776,5
Podkarpackie	1272,3	734,2	918,4	678,7	1091,7	752,8
Podlaskie	1315,9	769,1	1046,1	671,2	1119,4	775,1
Pomorskie	1460,2	747,5	1122,5	668,4	1280,3	777,4
Śląskie	1811,0	666,0	1442,6	674,8	1670,6	741,4
Świętokrzyskie	1321,1	740,1	970,2	665,6	1130,7	759,8
Warmińsko-mazurskie	1346,4	768,8	997,8	687,7	1137,1	767,9
Wielkopolskie	1431,2	745,8	1017,4	673,7	1237,4	750,0
Zachodniopomorskie	1424,5	745,5	1078,6	693,4	1229,8	907,1

a) Without payments from other insurance systems in case of the concurrence of entitlements to benefits from these systems with entitlements to benefits from the social security fund.

b) Without pensions carried out on the legal validity of international agreements, without pensions for people with the right also to the agricultural benefit and without injury pensions financed from FIS but paid by the MOND, MIA, MJ. Assigned to the province according to the office of the SII branch carrying out the payment of the pension for the particular beneficiary.

c) Including pensions financed from the PF, but paid by the MOND, MIA, MJ in concurrence with the benefits financed from the budget of MOND, MIA, MJ.

a) Bez wyplat z innych systemów ubezpieczeniowych w przypadku zbiegu uprawnień do świadczeń z tych systemów z uprawnieniami do świadczeń z funduszu emerytalno-rentowego.

b) Bez emerytur i rent realizowanych na mocy umów międzynarodowych, bez emerytur i rent osób posiadających prawo także do świadczenia rolniczego oraz bez rent wypadkowych finansowanych z FUS, a wypłacanych przez MON, MSWiA, MS. Przyporządkowane do województwa według siedziby oddziału ZUS dokonującego wypłaty emerytury bądź renty dla danego świadczeniobiorcy.

c) Łącznie z emeryturami finansowanymi z FER, a wypłaconymi przez MON, MSWiA, MS w zbiegu ze świadczeniami finansowanymi z budżetu MON, MSWiA, MS.

Source: Own elaboration based on: Kwartalna informacja statystyczna 2009, Informacja o świadczeniach pieniężnych... 2009.

Źródło: Opracowanie własne na podstawie: Kwartalna informacja statystyczna 2009, Informacja o świadczeniach pieniężnych... 2009.

Table 4. Average monthly social security benefits paid from SII according to provinces in 2008 (in PLN)

Tabela 4. Przeciętne miesięczne świadczenia emerytalno-rentowe wyplacane przez ZUS według województw w 2008 roku (w zł)

Social security benefits paid from SII (in PLN) Świadczenia emerytalno- -rentowe wypłacane przez ZUS (w zł)	Number of provinces Liczba województw	Percentage of provinces Odsetek województw	Provinces Województwa
Old-age pensions/ Emerytury			
< 1364.2	6	37.5	lubelskie, lubuskie, podkarpackie, podlaskie, świętokrzyskie, warmińsko-mazurskie
< 1364.2–1412.5)	3	18.75	kujawsko-pomorskie, łódzkie, opolskie
<1412.5–1460.9)	4	25.00	małopolskie, pomorskie, wielkopolskie, zachodniopomorskie
< 1460.9–1509.2)	1	6.25	dolnośląskie,
> 1509.2	2	12.50	mazowieckie, śląskie
Total/ Suma	16	100.00	
Disability pensions in case of inability to work/ Renty z tytułu niezdolności do pracy			
< 996.4	5	31.25	kujawsko-pomorskie, lubelskie, łódzkie, podkar- packie, świętokrzyskie
< 996.4–1038.4)	3	18.75	lubuskie, warmińsko-mazurskie, wielkopolskie
< 1038.4–1080.5)	3	18.75	mazowieckie, podlaskie, zachodniopomorskie
< 1080.5–1122.5)	2	12.50	małopolskie, opolskie
> 1122.5	3	18.75	dolnośląskie, pomorskie, śląskie
Total/ Suma	16	100.00	
Survivor's pensions/ Renta rodzinna			
< 1159.9	6	37.50	lubelskie, lubuskie, podkarpackie, podlaskie, świętokrzyskie, warmińsko-mazurskie
< 1159.9–1212.2)	2	12.50	kujawsko-pomorskie, łódzkie,
< 1212.2–1232.5)	1	6.25	zachodniopomorskie
< 1232.5–1252.7)	4	25.00	małopolskie, mazowieckie, podkarpackie, wiel- kopolskie
> 1252.7	3	18.75	dolnośląskie, pomorskie, śląskie
Total/ Suma	16	100.00	

Source: Own elaboration based on Table 3.

Źródło: Opracowanie własne na podstawie Tabeli 3.

appeared in such provinces as: Dolnośląskie and Opolskie (above 697 PLN), whereas the survivor's pensions in: Kujawsko-Pomorskie and Zachodniopomorskie (higher than 822 PLN) (Table 5).

In order to deepen the analyses, the rates depicting the share of individual types of social security benefits in minimal wage in 2008 were calculated. Old-age pensions paid by SII in all provinces were higher than the minimum wage. The highest rate was noted in Śląskie (160.8%), and the lowest – in Podkarpackie (113.0%). In case of disability pensions paid by SII, only in Dolnośląskie benefits were higher than the minimal wage appropriately about 7.6% and in Śląskie – about 28.1%. In turn, employees' survivor's

Table 5. Average monthly social security benefits paid from ASIF according to the provinces in 2008 (in PLN)

Tabela 5. Przeciętne miesięczne świadczenia emerytalno-rentowe wypłacane przez KRUS według województw w 2008 roku (w zł)

Social security benefits paid from ASIF (in PLN) Świadczenia emerytalno- -rentowe wypłacane przez KRUS (w zł)	Number of provinces Liczba województw	Percentage of provinces Odsetek województw	Provinces Województwa
Old-age pensions/Emerytury			
< 719.9	2	12.50	śląskie, lubuskie
< 719.9–734.9)	3	18.75	dolnośląskie, małopolskie, podkarpackie
< 734.9–751.8)	6	37.50	lódzkie, opolskie, pomorskie, świętokrzyskie, wielkopolskie, zachodniopomorskie
< 751.8–768.8)	3	18.75	kujawsko-pomorskie, lubelskie, mazowieckie,
> 768.8	2	12.50	podlaskie, warmińsko-mazurskie
Total/ Suma	16	100.00	
Disability pensions in case of inability to work/Rentę z tytułu niezdolności do pracy			
< 671.2	5	31.25	lódzkie, małopolskie, mazowieckie, pomorskie, świętokrzyskie
< 671.2–679.8)	4	25.00	podkarpackie, podlaskie, śląskie, wielkopolskie
< 679.8–688.4)	3	18.75	kujawsko-pomorskie, lubelskie, warmińsko- -mazurskie
< 688.4–696.9)	2	12.50	lubuskie, zachodniopomorskie
> 696.9	2	12.50	dolnośląskie, opolskie
Total/ Suma	16	100.00	
Survivor's pensions/Renta rodzinna			
< 761.7	6	37.50	małopolskie, mazowieckie, podkarpackie, śląskie, świętokrzyskie, wielkopolskie
< 761.7–782.0)	4	25.00	opolskie, podlaskie, pomorskie, warmińsko-ma- zurskie
< 782.0–802.3)	2	12.50	lubelskie, lódzkie
< 802.3–822.5)	2	12.50	dolnośląskie, lubuskie
> 822.5	2	12.50	kujawsko-pomorskie, zachodniopomorskie
Total/ Suma	16	100.00	

Source: Own elaboration based on Table 3.

Źródło: Opracowanie własne na podstawie tabeli 3.

pensions in majority of provinces exceeded the amount of the minimal wage in 2008. The exceptions were in Lubelskie (the rate was 98.4%), Podkarpackie (the rate was 97.0%) and Podlaskie (99.4%) (Table 6). All social security benefits paid from agricultural social insurance system were lower than the minimal wage (agricultural old-age pensions about 30–40%, disability pensions about 38–41 %, and survivor's pensions about 20–35%) (Table 6).

Amounts of individual social security benefits paid by ASIF and SII were also compared to the amount of average salary in 2008. It was possible to state, on the basis of data presented in Table 7, that all social security benefits, both as part of the agricultural,

Table 6. Average monthly social security benefits paid from SII and ASIF according to the provinces in 2008 (in % of the minimal wage<sup>a)</sup>)Tabela 6. Przeciętne miesięczne świadczenia emerytalno-rentowe wypłacane przez ZUS i KRUS według województw w 2008 roku (w % płacy minimalnej<sup>a)</sup>)

Details Wyszczególnienie	Old-age pensions Emerytury		Disability pensions in case of inability to work /Renty z tytułu niezdolności do pracy		Survivor's pensions Renty rodzinne	
	SII/ZUS	ASIF/ /KRUS	SII/ZUS	ASIF/ /KRUS	SII/ZUS	ASIF/ /KRUS
	in % of the minimal wage/ w % płacy minimalnej					
Dolnośląskie	129.9	64.4	107.6	61.9	117.0	72.3
Kujawsko-pomorskie	122.7	67.9	85.1	60.7	104.9	73.1
Lubelskie	117.2	67.3	88.4	61.0	98.4	70.1
Lubuskie	119.5	62.3	92.0	61.6	102.8	72.0
Łódzkie	121.8	66.7	84.8	59.3	105.1	70.2
Małopolskie	126.3	64.6	98.1	58.9	111.1	65.8
Mazowieckie	134.0	67.7	92.6	58.6	110.9	66.6
Opolskie	125.3	65.5	99.2	62.4	109.7	69.0
Podkarpackie	113.0	65.2	81.6	60.3	97.0	66.9
Podlaskie	116.9	68.3	92.9	59.6	99.4	68.8
Pomorskie	129.7	66.4	99.7	59.4	113.7	69.0
Śląskie	160.8	59.2	128.1	59.9	148.4	65.8
Świętokrzyskie	117.3	65.7	86.2	59.1	100.4	67.5
Warmińsko-mazurskie	119.6	68.3	88.6	61.1	101.0	68.2
Wielkopolskie	127.1	66.2	90.4	59.8	109.9	66.6
Zachodniopomorskie	126.5	66.2	95.8	61.6	109.2	80.6

a) The minimum wage in 2008 was 1126.0 PLN (Rozporządzenie Rady Ministrów...).

b) Minimalna płaca w 2008 roku wynosiła 1126,0 zł (Rozporządzenie Rady Ministrów...).

Source: Own elaboration based on: Kwartalna informacja statystyczna 2009, Informacja o świadczeniach pieniężnych... 2009.

Źródło: Opracowanie własne na podstawie: Kwartalna informacja statystyczna 2009, Informacja o świadczeniach pieniężnych... 2009.

as well as employees' social insurance system, were lower than average remuneration in individual provinces in 2008.

Agricultural old-age pensions constituted from about 23% to about 26% of average salary in 2008. While occupational old-age pensions – from about 43% to about 62% of the remuneration. It was possible to state, in case of disability pensions paid from ASIF, that their level was shaped at 23% of average salary. The same benefits, but paid as a part of the employees' social insurance system were more diversified in provinces. Their amount fluctuated from 31% of average salary in Podkarpackie to 49% in Śląskie. The situation was similar in case of employees' survivors' pensions. Their average monthly level was about 37% of average salary in Podkarpackie and almost 57% in Śląskie. However agricultural survivor's pensions were lower than the average salary about 69–75% (table 7).

Table 7. Average monthly social security benefits paid from SII and ASIF according to the provinces in 2008 (in % of average salary)

Tabela 7. Przeciętne miesięczne świadczenia emerytalno-rentowe wypłacane przez ZUS i KRUS według województw w 2008 roku (w % przeciętnego wynagrodzenia<sup>b)</sup>)

Details Wyszczególnienie	Old-age pensions Emerytury		Disability pensions in case of inability to work /Renty z tytułu niezdolności do pracy		Survivor's pensions Renty rodzinne	
	SII/ZUS	ASIF/ KRUS	SII/ZUS	ASIF/ KRUS	SII/ZUS	ASIF/ KRUS
	in % of average salary/ w % przeciętnego wynagrodzenia					
Dolnośląskie	49.7	24.6	41.2	23.7	44.7	27.7
Kujawsko-pomorskie	46.9	26.0	32.5	23.2	40.1	27.9
Lubelskie	44.8	25.7	33.8	23.3	37.6	26.8
Lubuskie	45.7	23.8	35.2	23.6	39.3	27.5
Łódzkie	46.6	25.5	32.4	22.7	40.2	26.9
Małopolskie	48.3	24.7	37.5	22.5	42.5	25.2
Mazowieckie	51.3	25.9	35.4	22.4	42.4	25.5
Opolskie	47.9	25.1	37.9	23.9	42.0	26.4
Podkarpackie	43.2	24.9	31.2	23.1	37.1	25.6
Podlaskie	44.7	26.1	35.5	22.8	38.0	26.3
Pomorskie	49.6	25.4	38.1	22.7	43.5	26.4
Śląskie	61.5	22.6	49.0	22.9	56.8	25.2
Świętokrzyskie	44.9	25.1	33.0	22.6	38.4	25.8
Warmińsko-mazurskie	45.7	26.1	33.9	23.4	38.6	26.1
Wielkopolskie	48.6	25.3	34.6	22.9	42.0	25.5
Zachodniopomorskie	48.4	25.3	36.6	23.6	41.8	30.8

a) The amount of average monthly salary in 2008 was 2943.88 PLN (Przeciętne miesięczne wynagrodzenie w gospodarce narodowej...).

b) Przeciętne miesięczne wynagrodzenie w 2008 roku wynosiło 2943,88 zł (Przeciętne miesięczne wynagrodzenie w gospodarce narodowej...).

Source: Own elaboration based on: Kwartalna informacja statystyczna 2009, Informacja o świadczeniach pieniężnych... 2009.

Źródło: Opracowanie własne na podstawie: Kwartalna informacja statystyczna 2009, Informacja o świadczeniach pieniężnych... 2009.

Analyzing the share of pension benefits paid by SII, it can be concluded that the level of old-age pensions and survivors' pensions exceed the level of the average monthly per capita available income in employees household in all regions in 2008. The value of employees' old-age pensions was approximately higher by 35% in comparison to the average monthly available income, and in case of survivors' pensions – about 16%. However, the level of disability pensions exceeded the value of 1050 PLN per month only in such provinces as: Dolnośląskie, Małopolskie, Opolskie, Pomorskie, Śląskie and Zachodniopomorskie (Figure 2).

In turn, all pension benefits, paid by ASIF, have not exceeded the average monthly per capita available income in farmers household in many regions in 2008. The value of the all agricultural pensions accounted between 77–87% of the average monthly available income. The exception was observed only in Zachodniopomorskie. In this region, the level of survivor's pensions was higher than 887 PLN (about 2.2%) (Figure 3).

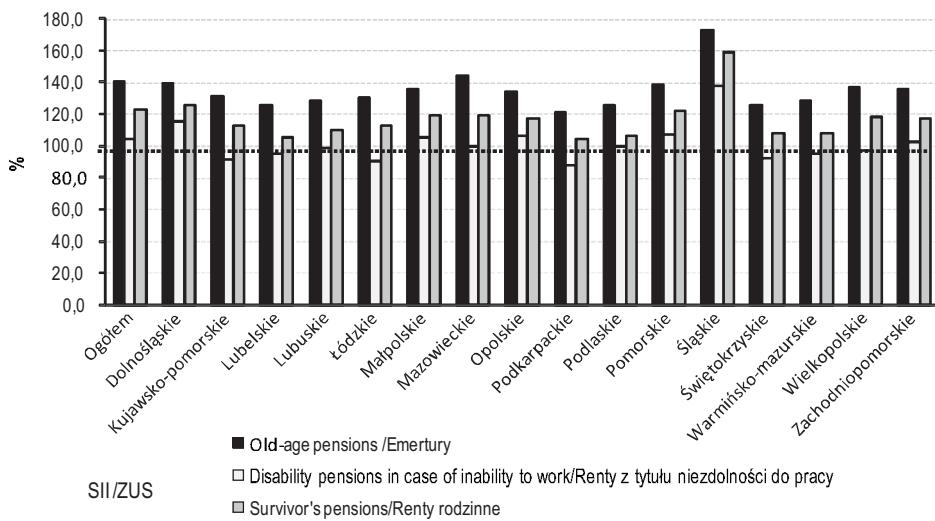


Fig. 2. The structure of social security benefits from SII in average monthly per capita available income in employees household in 2008

Rys. 2. Odsetek świadczeń emerytalno-rentowych wypłacanych przez ZUS w przeciętnym miesięcznym dochodzie rozporządzalnym na 1 osobę w gospodarstwie domowym pracowników w 2008 roku

- a)  $100\% = 1049.84 \text{ PLN}$  (the average monthly per capita available income in employees household in 2008)
- a)  $100\% = 1049,84 \text{ zł}$  (przeciętny miesięczny dochód rozporządzalny na 1 osobę w gospodarstwie domowym pracowników)

Source: Own elaboration based on: Sytuacja gospodarstw domowych... 2009.

Źródło: Opracowanie własne na podstawie: Sytuacja gospodarstw domowych... 2009.

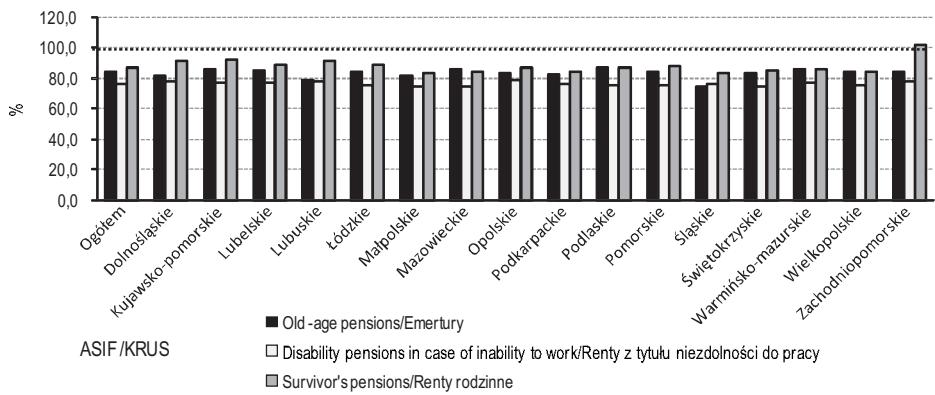


Fig. 3. The structure of social security benefits from ASIF in average monthly per capita available income in farmers household in 2008

Rys. 3. Odsetek świadczeń emerytalno-rentowych wypłacanych przez ZUS w przeciętnym miesięcznym dochodzie rozporządzalnym na 1 osobę w gospodarstwie domowym rolników w 2008 roku

- a)  $100\% = 887.35 \text{ PLN}$  (the average monthly per capita available income in farmers household in 2008)
- a)  $100\% = 887,35 \text{ zł}$  (przeciętny miesięczny dochód rozporządzalny na 1 osobę w gospodarstwie domowym rolników).

Source: Own elaboration based on: Sytuacja gospodarstw domowych... 2009.

Źródło: Opracowanie własne na podstawie: Sytuacja gospodarstw domowych... 2009.

## **CONCLUSIONS**

The study presents the analysis of the social security benefits level paid from agricultural and employees' social insurance system among regions of Poland in 2008. On the basis of conducted research it was possible to draw the following conclusions:

1. Agricultural pension scheme should be considered as a specific form. This system is directed to a specific socio-professional group and it is complementary to the general system.
2. In the agricultural social security system there is a serious imbalance of the relationship between the insured and the beneficiaries. This situation indicates the need to subsidize the system in the future.
3. The structure of benefits paid by ASIF can be considered as more correct than paid by SII due to the higher share of old-age pensions. However, in the payout structure in ASIF, survivors pensions have little relevance. This does not mean that the agricultural population is to a lesser extent a subject to the risk of income loss due to the death of the breadwinners. This risk occurs at a similar level as in other occupational groups, however, the income protection for this population is provided by the universal social security system.
4. Average monthly pensions paid by ASIF in 2008 was almost a half lower than the employee pension. The share of provinces with the lowest levels of agriculture benefits is much larger than that for the employees insurance system. Therefore the agricultural pensions are paid at the lowest amount in a substantial part of provinces.
5. All pensions paid by ASIF in 2008 were lower than the minimal wage in all provinces, while employees' old-age pensions and majority of survivor's pensions were higher. All pensions, both for employee's and farmer's, were lower than the average wage in provinces.
6. The level of employee's old-age pensions and survivors' pensions exceed the level of the average monthly per capita available income in employees household in all regions in 2008. In turn, all pension benefits, paid by ASIF, have not exceeded the average monthly per capita available income in farmers household in many regions in 2008 (the exception was observed only in Zachodniopomorskie).

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## **ROZKŁAD ŚWIADCZEŃ EMERYTALNO-RENTOWYCH W UKŁADZIE REGIONALNYM KRAJU – ANALIZA PORÓWNAWCZA**

**Streszczenie.** Celem opracowania było określenie i porównanie poziomu świadczeń emerytalno-rentowych dla rolniczego i pracowniczego systemu ubezpieczeń społecznych w układzie województw w 2008 roku. Materiał badawczy stanowiły dane Kasy Rolniczego Ubezpieczenia Społecznego oraz Zakładu Ubezpieczeń Społecznych oraz źródła ogólnodostępnej statystyki krajowej. W opracowaniu zastosowano podstawowe miary statystyki opisowej. W rolniczym systemie ubezpieczeń społecznych występuje zachwianie relacji między liczbą ubezpieczonych a liczbą świadczeniobiorców. Sytuacja taka wskazuje na konieczność dotowania tego systemu w przyszłości. Rolnicze świadczenia emerytalno-rentowe były wyplacane w najniższej wysokości w znacznej części województw. Przeciętna miesięczna emerytura i renta wyplacana przez KRUS w 2008 roku była prawie o połowę mniejsza niż emerytura pracownicza. Wszystkie świadczenia emerytalno-rentowe, rolnicze i pracownicze były niższe od przeciętnego wynagrodzenia w poszczególnych województwach.

**Słowa kluczowe:** świadczenia emerytalno-rentowe, Kasa Rolniczego Ubezpieczenia Społecznego, Zakład Ubezpieczeń Społecznych

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