



Impact Of Changes In Standard Output Coefficients On The Structure Of Farms

Monika Bocian

Institute of Agricultural and Food Economics - National
Research Institute
Agricultural Accountancy Department

27th PACIOLI-workshop
Prague, Czech Republic, 6th of October – 9th of October 2019

SO calculation in Poland

- in Liaison Agency
- for 4 SO/FADN regions
- using data from Statistical Office mostly
- in cooperation with external experts



Instytut Uprawy
Nawożenia i Gleboznawstwa



Changes of SO coefficients SO2010/SO2007

- Value:
 - ➡ higher for 235 coefficients (max 89%)
 - ➡ lower for 25 coefficients (max 50%)
- Prices increased much more than quantity

Changes of SO coefficients SO2013/SO2010

- Value:
 - ➡ higher for 235 coefficients (max 55%)
 - ➡ lower for 45 coefficients (max 19%)
- Prices increased much more than quantity

Scope of analysis

- Polish FADN data
- Accountancy year: 2017
- SO sets: 2007, 2010, 2013
- Classification: TF8 and ES6



Migration of farms

TF8_SO2007↔TF8_SO2010

		TF8_SO2010							Total
		1	2	4	5	6	7	8	
TF8_SO2007	1	4 059	5	7				8	4 079
	2	1	303						304
	4	6		441					447
	5				2 594	2		63	2 659
	6				30	648		64	742
	7						674	71	745
	8	122			4	9		3 225	3 360
	Total	4 188	308	448	2628	659	674	3 431	12 336

1 Fieldcrops
5 Milk
8 Mixed

2 Horticulture
6 Other grazing livestock

4 Other permanent crops
7 Granivores

Migration of farms

TF8_SO2010↔TF8_SO2013

		TF8_SO2013							Total
		1	2	4	5	6	7	8	
TF8_SO2010	1	4 153		2				33	4 188
	2	1	307						308
	4	2		446					448
	5				2 601	10		17	2 628
	6				8	610		41	659
	7						630	44	674
	8	56			18	6	2	3 349	3 431
	Total	4 212	307	448	2 627	626	632	3 484	12 336

1 Fieldcrops
5 Milk
8 Mixed

2 Horticulture
6 Other grazing livestock

4 Other permanent crops
7 Granivores

Number and % holdings which changed TF8

	SO2010 / SO2007		SO2013 / SO2010	
TF8	number	%	number	%
1	20	0,5	35	1
2	1	0,3	1	0,3
4	6	1	2	0,4
5	65	2	27	1
6	94	13	49	7
7	71	10	44	7
8	135	4	82	2
Total	392	3	240	2

1 Fieldcrops

2 Horticulture

4 Other permanent crops

5 Milk

6 Other grazing livestock

7 Granivores

8 Mixed

Migration of farms

ES6_SO2007 ↔ ES6_SO2010

		ES6_SO2010							Total
		1	2	3	4	5	6	PP	
ES6_SO2007	1	393	426						819
	2		3 133	1 058					4 191
	3			3 2 633	1 057				3 693
	4				1 1 979	496			2 476
	5					1 029	26		1 055
	6						99		99
		1						2	3
Total		394	3 562	3 692	3 036	1 525	125	2	12 336

1: 2 - < 8

2: 8 - < 25

3: 25 - < 50

4: 50 - < 100

5: 100 - < 500

6: >= 500

PP: below threshold

Migration of farms

ES6_SO2010 ↔ ES6_SO2013

		ES6_SO2013							Total
		1	2	3	4	5	6	PP	
ES6_SO2010	1	285	109						394
	2	1 3 129	432						3 562
	3		5 3 122	565					3 692
	4			4 2 723	309				3 036
	5				1 1 500	24			1 525
	6						125		125
		1							1 2
Total		287	3 243	3 558	3 289	1 809	149	1	12 336

1: 2 - < 8

2: 8 - < 25

3: 25 - < 50

4: 50 - < 100

5: 100 - < 500

6: >= 500

PP: below threshold

Number and % holdings which changed ES6

	SO2010 / SO2007		SO2013 / SO2010	
ES6	number	%	number	%
1	426	52	109	28
2	1 058	25	433	12
3	1 060	29	570	15
4	497	20	313	10
5	26	2	25	2
6	0	0	0	0
PP	1	33	1	50
Total	3 068	25	1 451	12

1: 2 - < 8

2: 8 - < 25

3: 25 - < 50

4: 50 - < 100

5: 100 - < 500

6: >= 500

PP: below threshold

Average economic size (SE005) in the sample according TF8

TF8	SO2007	SO2010	SO2013
1	50 122	63 972	70 988
2	80 157	100 159	112 978
4	24 158	32 536	34 597
5	51 036	60 672	68 169
6	30 224	35 045	39 498
7	140 474	177 415	194 460
8	49 385	61 188	67 856
Total	54 177	66 910	73 954

1 Fieldcrops
5 Milk
8 Mixed

2 Horticulture
6 Other grazing livestock

4 Other permanent crops
7 Granivores

Average economic size (SE005) in the sample according ES6

ES6	SO2007	SO2010	SO2013
1	6 207	6 542	6 621
2	15 975	16 321	16 485
3	35 917	36 402	36 642
4	68 371	69 412	70 197
5	175 727	176 862	175 103
6	1 100 746	1 198 686	1 200 865
PP	1 325	1 334	627
Total	54 177	66 910	73 954

1: 2 - < 8

4: 50 - <100

PP: below threshold

2: 8 - <25

5: 100 - <500

3: 25 - <50

6: >= 500

Polish field of observation

Description	unit	SO2007 / FSS 2010		SO2010 / FSS 2013		SO2013 / FSS 2016	
		Precise threshold	Field of observation	Precise threshold	Field of observation	Precise threshold	Field of observation
Threshold	€	5 411	4 000	6 648	4 000	7 554	4 000
Percentage of total standard output represented	%	90	93,03	90	94,66	90	95,07
Number of holdings of the population represented	No.	605 485	730 879	600 295	810 990	515 892	749 606
Percentage of number of holdings of the population represented	%	40,19	48,51	39,92	53,94	36,56	53,14



Thank you

Monika Bocian

Institute of Agricultural and Food Economics - National Research Institute
Agricultural Accountancy Department