

# **Social enterprises in Poland - comparative analysis**

Conference

**SOCIAL ECONOMY 2020.**

**SOCIAL ENTREPRENEURSHIP IN  
THE FACE OF THE 21st CENTURY  
CHALLENGES - POLISH AND  
INTERNATIONAL EXPERIENCES.**

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# Definition of social enterprises

**Social enterprises** - entities that conduct economic activity in order to achieve social goals.

They are **private economic organizations of a commercial nature**, not necessarily profit-oriented, which produce or distribute goods or services that are particularly **beneficial to local communities**.

(Herbst, 2012; Defourny & Nyssens, 2010; Kachlami *et al.*, 2018)

# Research assumptions

The subject literature most often refer to:

- the types of social enterprises,
- issues related to their financing,
- less frequently - to their effectiveness.

**Research questions:**

- Which external factors could have an impact on setting up the social enterprises?
- Whether the key factors are different for different types of entities?
- Whether the socioeconomic situation of the territory is important in the process of creating and running social enterprises?

**Research gap:** the identification of factors influence on setting up and development of social enterprises.

References: Addae, 2018; Bassi & Fabbri, 2020; Goleński, 2017; Prouteau & Tchernonog, 2015; Herbst, 2012; López-Arceiz *et. al.*, 2016; Asmalovskij *et. al.*, 2019; Beckmann, 2018; Głowacki *et al.*, 2012; Czyżewska, 2018; Teague, 2007; Karwińska & Sułkowska, 2008; Płonka, 2008

# Research assumptions

**The main aim of the research:** to identify the diversity of voivodships in terms of the activity of social enterprises and the features that may affect their number.

**$H_1$ :** The setting up of social enterprises depends on social condition of examined area (if the social problems are more important, the number of social enterprises increase).

**$H_2$ :** The number of social enterprises is higher on the East part of Poland (poorer voivodeships).

**$H_3$ :** The spatial distribution of social enterprises depends on their legal form.

**$H_4$ :** The social enterprises which legal form requires the higher level of assets (foundations) are setting up in richer voivodeships.

# Research assumptions

**The area covered by the analysis:** the Republic of Poland, divided into 16 voivodships (divided into 380 poviats)

**Data source:** Statistics Poland - Local Data Bank (LDB) from 2017

**Step 1<sup>st</sup>:** Operation of social enterprises in each of 16 Polish voivodeship (use taxonomical methods and conduct the cluster analysis)

**Step 2<sup>nd</sup>:** Key factors influencing on setting up of three type of social enterprises (use econometric models)

# Research assumptions

$y_1$  - Cooperatives for 10,000 entities in the private sector

$y_2$  - Foundations for 10,000 entities in the private sector

$y_3$  - Associations and similar social organizations for 10,000 entities in the private sector

$x_1$  - Beneficiaries of social assistance per 10 thousand population

$x_2$  - Average monthly available income *per capita*

$x_3$  - Compensation of employees total *per capita*

$x_4$  - Number of eliminated workplaces per 10 thousand population

$x_5$  - Entities entered in the REGON register for 10 thousand population

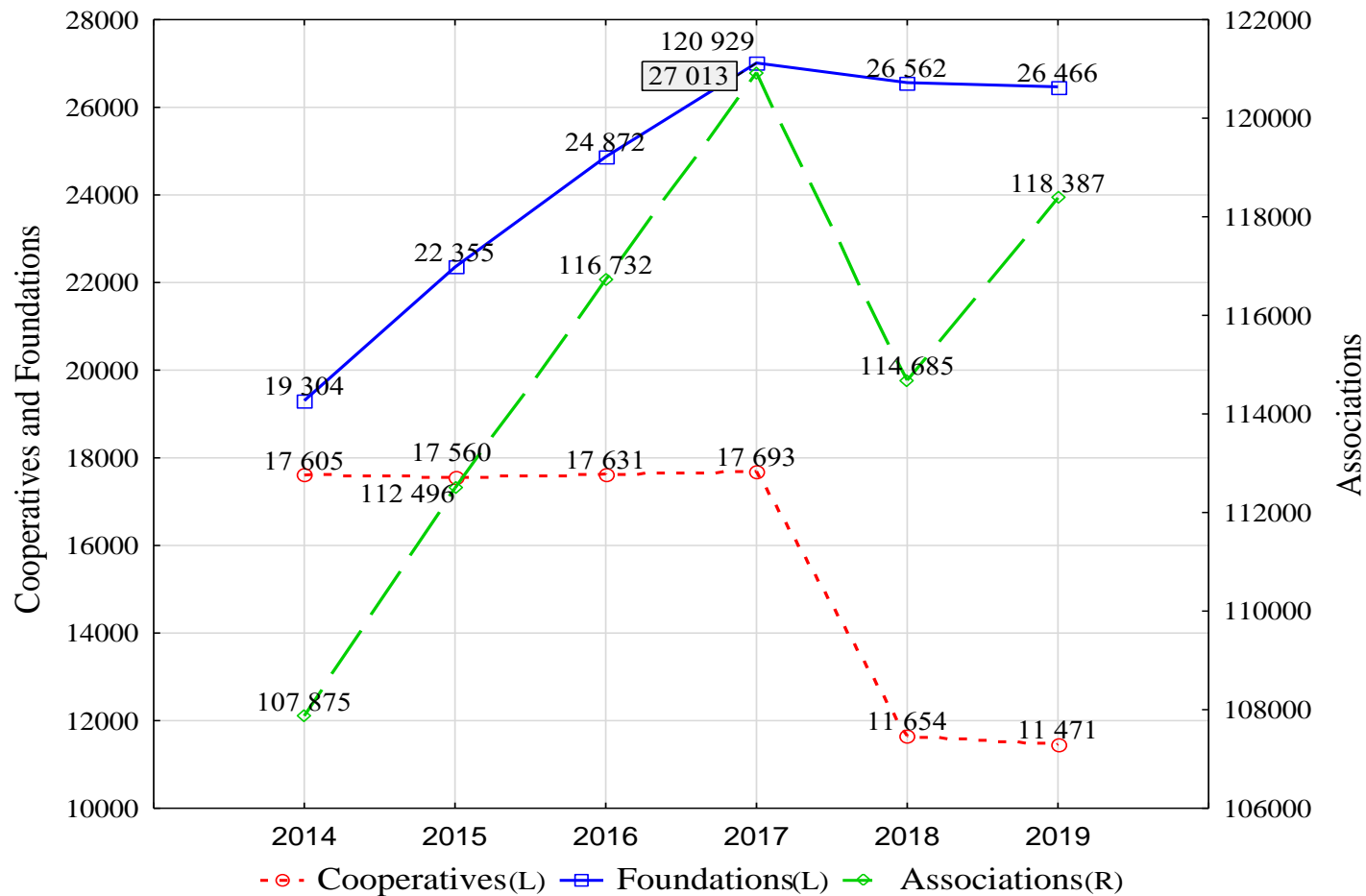
$x_6$  - Natural persons conducting economic activity per 10 thousand population

$x_7$  - Business environment institutions per 10 thousand entities of the national economy

$x_8$  - Value of finished projects (eligible expenditures) for young people on the labour market from Operational Programme Knowledge Education Development *per capita*

$x_9$  - Registered unemployment rate

# Spatial analysis of social enterprises operating in Poland



**Figure 1.** Number of cooperatives, foundations and associations operating in Poland in 2014-2019

# The econometric model

1 <sup>st</sup> Model	Beta*	Std. err. of Beta	B	Std. err. of B	t(377)	p
Intercept			<b>50.55</b>	<b>6.92</b>	<b>7.30</b>	<b>0.0000***</b>
(x <sub>1</sub> )	<b>0.40</b>	<b>0.05</b>	<b>0.04</b>	<b>0.00</b>	<b>7.83</b>	<b>0.0000***</b>
(x <sub>5</sub> )	<b>-0.23</b>	<b>0.05</b>	<b>-0.02</b>	<b>0.00</b>	<b>-4.50</b>	<b>0.0000***</b>
Normal distribution $p > \alpha$ ( $p = 0.1461$ )						

(a) cooperatives

(b) foundations

2 <sup>nd</sup> Model	Beta*	Std. err. of Beta	B	Std. err. of B	t(377)	p
Intercept			<b>55.83</b>	<b>7.30</b>	<b>7.65</b>	<b>0.0000***</b>
(x <sub>1</sub> )	<b>0.38</b>	<b>0.05</b>	<b>0.04</b>	<b>0.00</b>	<b>7.44</b>	<b>0.0000***</b>
(x <sub>5</sub> )	<b>-0.26</b>	<b>0.05</b>	<b>-0.03</b>	<b>0.01</b>	<b>-5.03</b>	<b>0.0000***</b>
Normal distribution $p > \alpha$ ( $p = 0.0518$ )						

(c) associations

3 <sup>rd</sup> Model	Beta*	Std. err. of Beta	B	Std. err. of B	t(377)	p
Intercept			<b>439.42</b>	<b>25.13</b>	<b>17.48</b>	<b>0.0000***</b>
(x <sub>1</sub> )	<b>0.36</b>	<b>0.04</b>	<b>0.15</b>	<b>0.02</b>	<b>8.28</b>	<b>0.0000***</b>
(x <sub>5</sub> )	<b>-0.45</b>	<b>0.04</b>	<b>-0.18</b>	<b>0.02</b>	<b>-10.46</b>	<b>0.0000***</b>
Normal distribution $p > \alpha$ ( $p = 0.2240$ )						

**Tables 1a-c.** The results of the construction of the econometric model for the number of **cooperatives (a)**; **foundations (b)**; **associations (c)** as dependent variables



# The econometric model

$$y_1 = 0.04x_1 - 0.02x_5 + 50.55$$

(0.00) (0.00) (6.92) (a) cooperatives

$$y_2 = 0.04x_1 - 0.03x_5 + 55.83$$

(0.00) (0.01) (7.30) (b) foundations

$$y_3 = 0.15x_1 - 0.18x_5 + 439.42$$

(0.02) (0.02) (25.13) (c) associations

$x_1$  - Beneficiaries of social assistance per 10 thousand population

$x_5$  - Entities entered in the REGON register for 10 thousand population

# **$H_1$ : The setting up of social enterprises depends on social condition of examined area**

## **The Spearman's rank correlation analysis**

Variable	$y_1$		$y_2$		$y_3$	
	$r$	$p$ -value	$r$	$p$ -value	$r$	$p$ -value
$x_1$	<b>0.62*</b>	<b>0.011*</b>	-0.30	0.253	<b>0.77*</b>	<b>0.000*</b>
$x_2$	-0.35	0.170	<b>0.69*</b>	<b>0.003*</b>	<b>-0.81*</b>	<b>0.000*</b>
$x_3$	<b>-0.57*</b>	<b>0.023*</b>	<b>0.74*</b>	<b>0.001*</b>	<b>-0.79*</b>	<b>0.000*</b>
$x_4$	-0.43	0.095	<b>0.75*</b>	<b>0.001*</b>	<b>-0.62*</b>	<b>0.011*</b>
$x_5$	-0.44	0.090	<b>0.57*</b>	<b>0.021*</b>	<b>-0.85*</b>	<b>0.000*</b>
$x_6$	-0.44	0.088	0.46	0.070	<b>-0.86*</b>	<b>0.000*</b>
$x_7$	-0.02	0.950	-0.016	0.953	-0.23	0.388
$x_8$	0.28	0.291	-0.40	0.127	<b>0.72*</b>	<b>0.002*</b>
$x_9$	<b>0.64*</b>	<b>0.007*</b>	-0.33	0.218	<b>0.79*</b>	<b>0.000*</b>

**Table 2.** The correlation coefficient between the number of cooperatives, foundations and associations per 10 thousand entities operating in the private sector with regard to the characteristics adopted for research

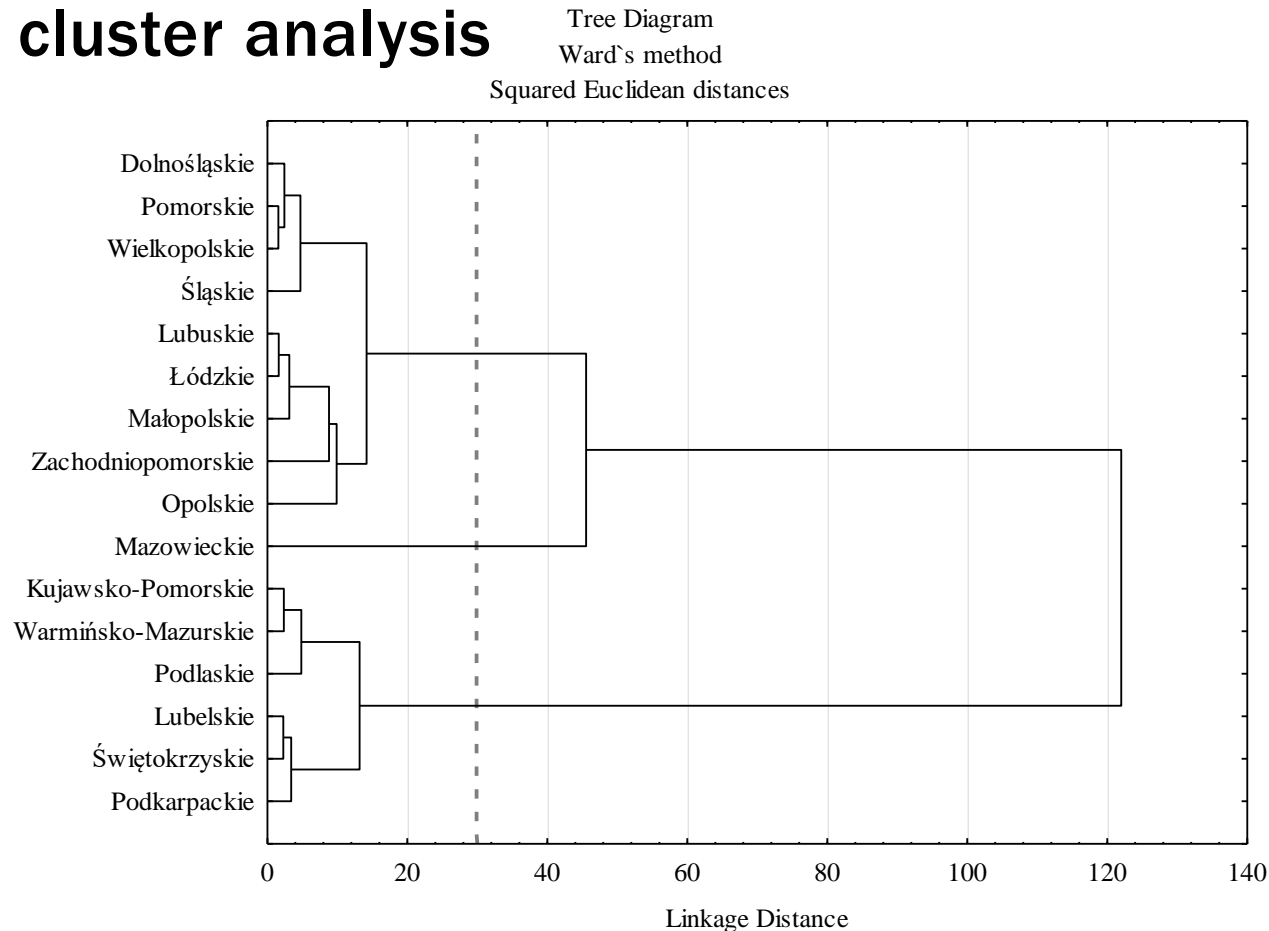
# $H_1$ : The setting up of social enterprises depends on social condition of examined area

Variable	<i>Cooperatives</i>	<i>Foundations</i>	<i>Associations</i>
Beneficiaries of social assistance	+*	-	+*
Average monthly available income	-	+*	-*
Compensation of employees	-*	+*	-*
Number of eliminated workplaces	-	+*	-*
Entities entered in the REGON register	-	+*	-*
Natural persons conducting economic activity	-	+	-*
Business environment institutions	-	-	-
Value of finished projects	+	-	+*
Registered unemployment rate	+*	-	+*

**Table 3.** The correlation character between the number of cooperatives, foundations and associations per 10 thousand entities operating in the private sector with regard to the characteristics adopted for research

# $H_2$ : The number of social enterprises is higher on the East part of Poland (poorer voivodeships)

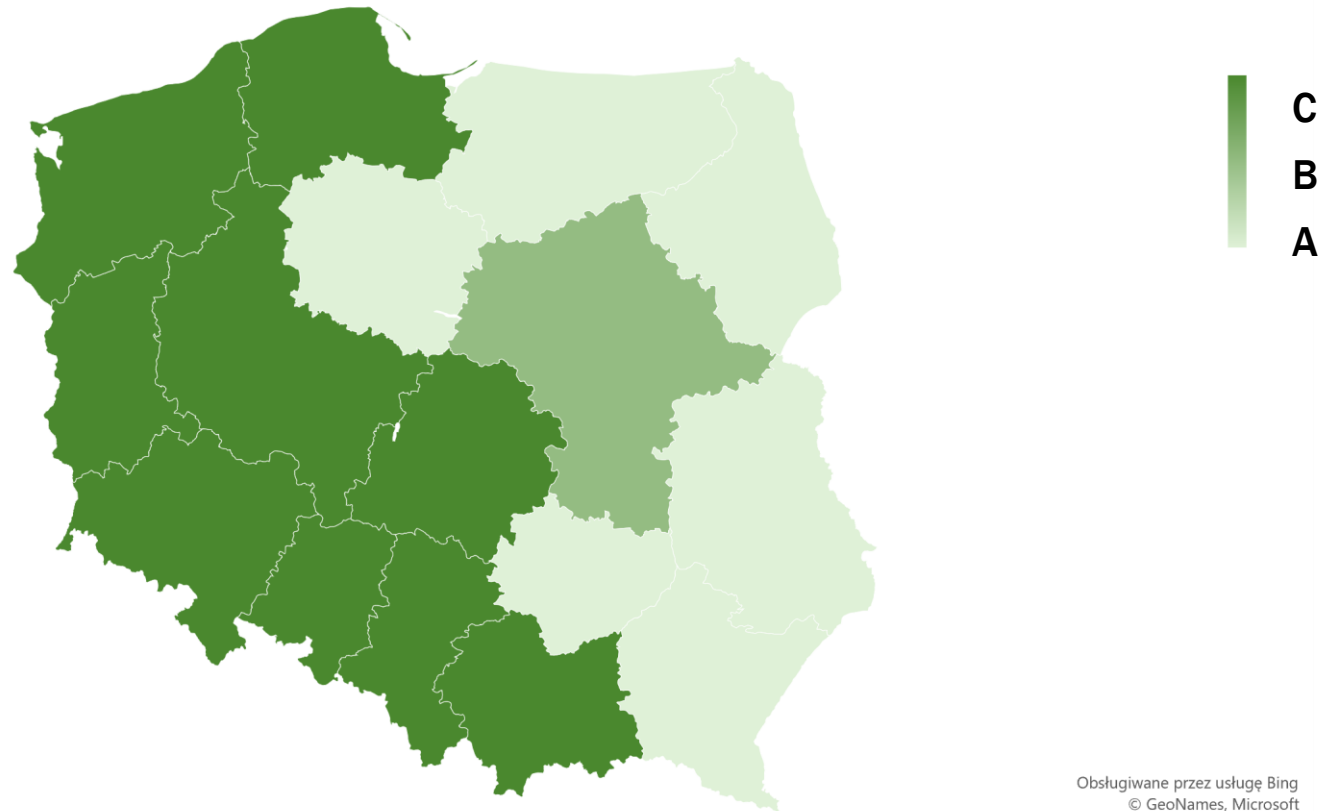
## The cluster analysis



**Figure 3.** Tree diagram – Ward's Method for clusters in 2017

**$H_2$ : The number of social enterprises is higher on the East part of Poland (poorer voivodeships)**

**The cluster analysis**



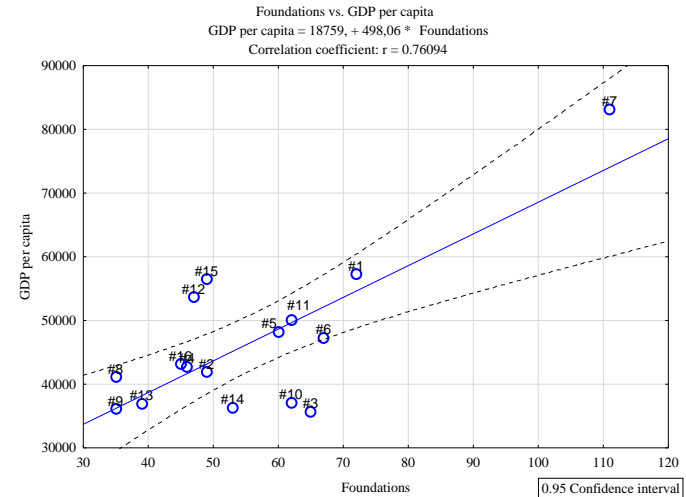
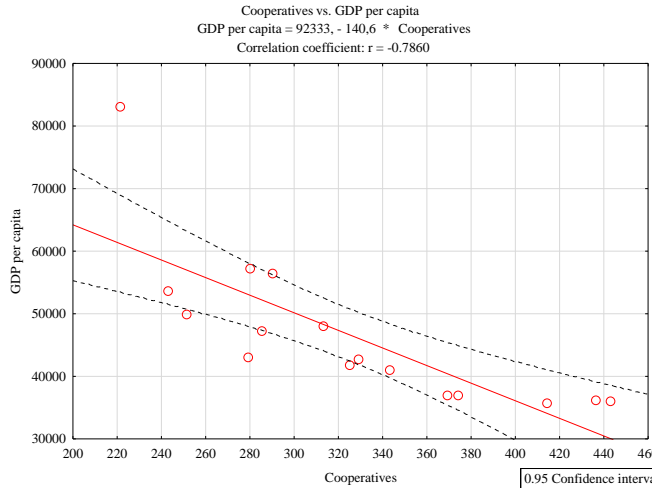
**Figure 4.** The map of spatial distribution of the clusters

## $H_2$ : The number of social enterprises is higher on the East part of Poland (poorer voivodeships)

Voivodeship	<i>The <b>lowest</b> level of the average monthly available income per capita</i>	<i>The <b>lowest</b> level of the GDP per capita</i>
Dolnośląskie	C	C
Kujawsko-pomorskie	A	A
Lubelskie	A	A
Lubuskie	C	C
Łódzkie	C	C
Małopolskie	C	C
Mazowieckie	B	B
Opolskie	C	C
Podkarpackie	A	A
Podlaskie	A	A
Pomorskie	C	C
Śląskie	C	C
Świętokrzyskie	A	A
Warmińsko-mazurskie	A	A
Wielkopolskie	C	C
Zachodniopomorskie	C	C

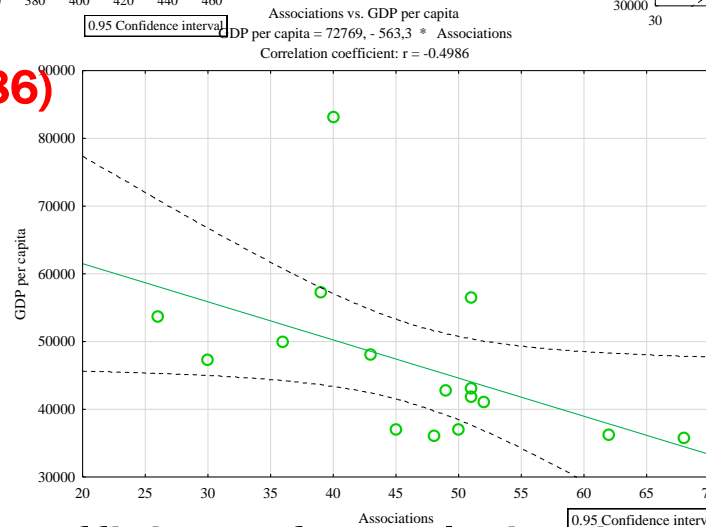
**Table 4.** The lowest level of the average monthly available income and GDP *per capita*

# $H_2$ : The number of social enterprises is higher on the East part of Poland (poorer voivodeships)



**Cooperatives ( $r=-0.786$ )**

**Foundations ( $r=0.7609$ )**



**Associations ( $r=-0.499$ )**

**Figures 5a-c.** The coefficient of correlation between the number of social entities and GDP *per capita*

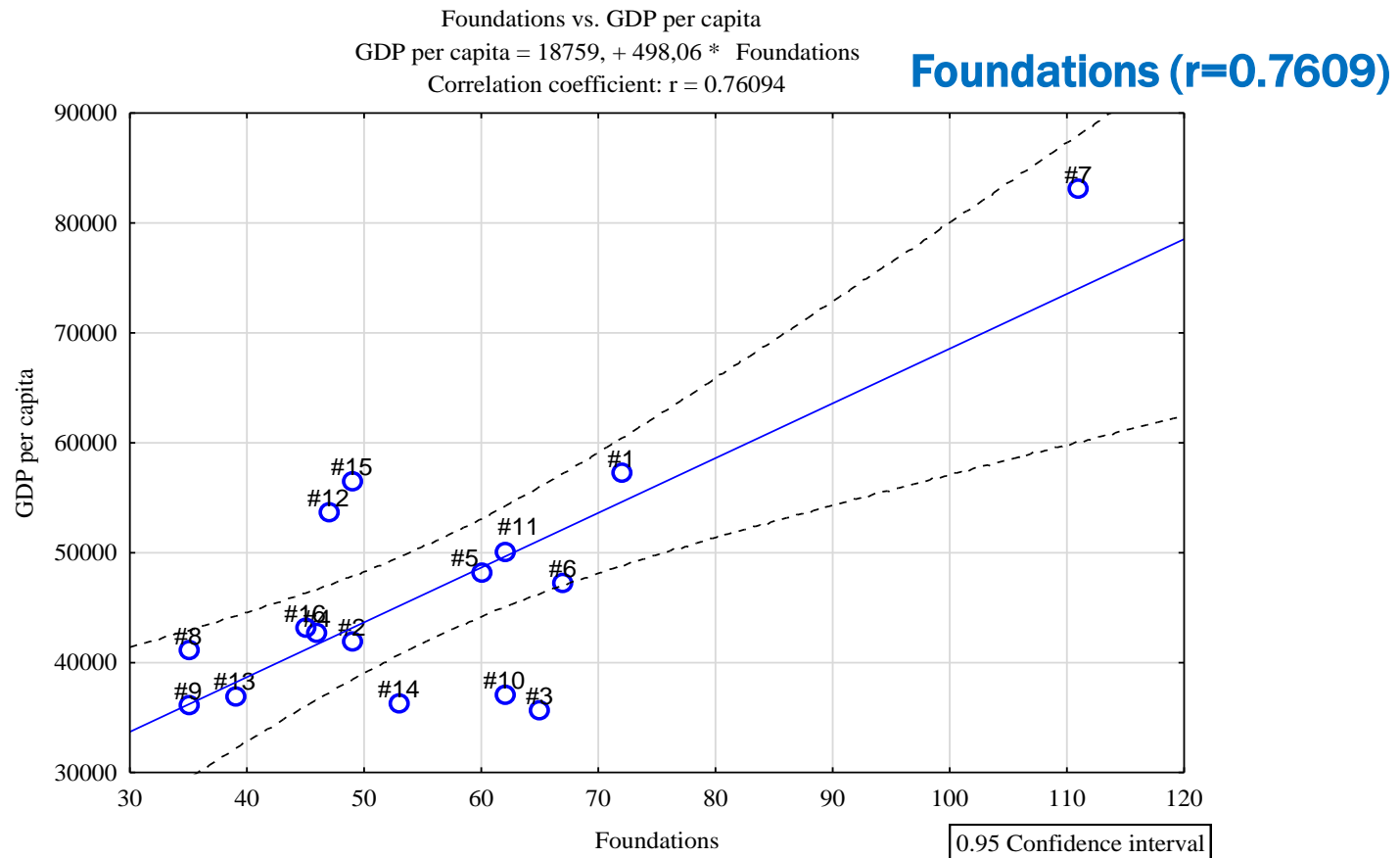
## **$H_3$ : The spatial distribution of social enterprises depends on their legal form**

Variable	$\bar{x}$	$Me$	$Min$	$Max$	$\sigma$	$V_z$
<i>Cooperatives</i>	46	48	26	68	10.6	22.8
<i>Foundations</i>	56	51	35	111	18.6	33.2
<i>Associations</i>	325	319	221	443	67.9	20.9

**Table 5.** The variance coefficient for analysed dependent variables



# $H_4$ : The legal form of social enterprises which requires the higher level of assets (foundations) are setting up in richer voivodeships



**Figure 6.** The coefficient of correlation between the number of Foundations and GDP *per capita*

# **$H_4$ : The legal form of social enterprises which requires the higher level of assets (foundations) are setting up in richer voivodeships**

Voivodeship	<i>The <b>highest</b> level of the average monthly available income per capita</i>	<i>The <b>highest</b> level of the GDP per capita</i>	<i>The <b>highest</b> number of foundations</i>
Dolnośląskie	C	C	+
Kujawsko-pomorskie	A	A	
Lubelskie	A	A	
Lubuskie	C	C	
Łódzkie	C	C	+
Małopolskie	C	C	+
Mazowieckie	B	B	+
Opolskie	C	C	
Podkarpackie	A	A	
Podlaskie	A	A	
Pomorskie	C	C	+
Śląskie	C	C	
Świętokrzyskie	A	A	
Warmińsko-mazurskie	A	A	
Wielkopolskie	C	C	
Zachodniopomorskie	C	C	

**Table 6.** The highest valu of income and GDP *per capita* and the numer of Foundations

# Discussion & Conclusions

- The analysis of the determinants of social enterprise development should take into consideration both external and internal factors, as well as – political, social and economical ones.
- Proper data are needed (concern many features which describe social economy sector and aggregated at the lowest level of territorial division).
- There are the differences between the impact of the setting up factors on different legal form of social enterprises.
- The entities traditionally related with the social economy sector (cooperatives and associations) are located more often on the poorer part of the country.
- There is still a research and an empirical gap in this field, concerned both the in-depth analysis conducted on the small area.

# Thank you!

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