

DIVERSITY OF ENTERPRISES' FINANCIAL SOURCES AMONG THE EUROPEAN UNION MEMBER STATES

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Abstract: The main purpose of the paper is the analysis of enterprises' financial sources between the European Union Member States. At first, it was made the consideration about the importance of financial sources in achieving enterprises aims. Therefore, using measures of position was made the diagnosis of the significance and acquisition by the EU enterprises financial sources in the past months (in relation to 2015). Next, it was examined the diversity of enterprises' financial sources among the European Union Member States. In that area was applied cluster analysis on the base which was isolated space groups. The studies were based on data from Survey on the Access to Finance of Enterprises for 2015 year. The results of research provide to the conclusion about relatively similar differentiation between the European Union countries in the area of enterprises' financial sources significance and their acquisition in the past six months (in relation to 2015 year).

Keywords: enterprise, financial sources, the European Union, region development.

1 Introduction

Functioning of enterprises in the turbulent environment require taking actions that enable adaptation to changes. In this regard, the essential attention should be put on proper financial sources selection. In its issue financial sources might be regarded as the significant determinant of the aims realisation that provide to increase of enterprises' competitive position.

The main aim of this article is the analysis of enterprises' financial sources between the European Union Member States. The special regard was put on such enterprises' financial sources as: retained earnings or sale of assets, grants or subsidised bank loan, credit line, bank overdraft or credit cards overdraft, other bank loan, trade credit, other loan, debt securities, equity capital, leasing or hire-purchase, other sources. As the research tool was implemented measures of position and cluster analysis which was used for create matrix clusters distances. The studies used data from Survey on the Access to Finance of Enterprises for 2015 year.

2 Financial sources as the essential component of enterprises' decisions

Among human resources capital and real capital the financial capital constitutes the principal part of enterprises' aims realization because the implementation of the various business activities depends on the availability of financial sources. In consequences, financial sources might affect on the enterprises value. In its issue gathering adequate financial capital might provide to enterprises growth¹. Noticeable significance of financial sources is especially seen in proper investment activity, which improve enterprises' adaptability to environment changes².

Simultaneously, the issues connected with enterprises' financial sources impact on regions development. In this respect financial capital constitutes an important determinant of regional growth³ and its investment climate⁴. In this context, the availability of proper financial sources for enterprises might improve regions value.

3 The methodology of undertaken research

The studies were concentrated on the analysis of enterprises' financial sources in the European Union Member States scope. The examinations were covered two aspects: the relevance of particular financial source for enterprises and the acquisition selected financial sources by enterprises in the past six months (in relation to 2015).

The research were consisted of two parts. Firstly, it was made the diagnosis of the financial sources' significance for enterprises from the EU as well as their level of financial sources acquisition in the past six months (in relation to 2015). In this regard the examinations were based on measures of position. Secondly, it was made the comparison of enterprises' financial sources between the European Union Member States. In that area was applied cluster analysis which was used for the identification the space groups characterizing enterprises' financial sources in the EU Member State perspective.

To the examinations were chosen the following variables:

- x_1 – the significance of retained earnings or sale of assets for enterprises from particular Member State of the European Union,
- x_2 – the significance of grants or subsidised bank loan for enterprises from particular Member State of the European Union,
- x_3 – the significance of credit line, bank overdraft or credit cards overdraft for enterprises from particular Member State of the European Union,
- x_4 – the significance of bank loan (excluding subsidised bank loans, overdrafts and credit lines) for enterprises from particular Member State of the European Union,
- x_5 – the significance of trade credit for enterprises from particular Member State of the European Union,
- x_6 – the significance of other loan for enterprises from particular Member State of the European Union,
- x_7 – the significance of debt securities for enterprises from particular Member State of the European Union,
- x_8 – the significance of equity capital for enterprises from particular European Union Member State,
- x_9 – the significance of leasing or hire-purchase for enterprises from particular Member State of the European Union,
- x_{10} – the significance of factoring for enterprises from particular Member State of the European Union,
- x_{11} – the significance of other sources of financing for enterprises from particular Member State of the European Union,
- x_{12} – the acquisition of retained earnings or sale of assets as a financial source in the past six months (in relation to 2015) by enterprises from particular Member State of the EU,
- x_{13} – the acquisition of grants or subsidised bank loan as a financial source in the past six months (in relation to 2015) by enterprises from particular Member State of the EU,
- x_{14} – the acquisition of credit line, bank overdraft or credit cards overdraft as a financial source in the past six months (in relation to 2015) by enterprises from particular Member State of the EU,
- x_{15} – the acquisition of bank loan as a financial source in the past six months (in relation to 2015) by enterprises from particular Member State of the EU,
- x_{16} – the acquisition of trade credit as a financial source in the past six months (in relation to 2015) by enterprises from particular Member State of the EU,
- x_{17} – the acquisition of other loan as a financial source in the past six months (in relation to 2015) by enterprises from particular Member State of the EU,
- x_{18} – the acquisition of debt securities as a financial source in the past six months (in relation to 2015) by enterprises from particular Member State of the EU,
- x_{19} – the acquisition of equity capital as a financial source in the past six months (in relation to 2015) by enterprises from particular Member State of the EU,
- x_{20} – acquisition of leasing or hire-purchase as a financial source in the past six months (in relation to 2015) by enterprises from particular European Union Member State,

¹ Sierpińska, M., Jachna, T.: *Ocena przedsiębiorstwa według standardów światowych*. Warszawa: Wydawnictwo Naukowe PWN, 2004. ISBN 83-01-14206-5. pp. 286.

² Zygmunt, A.: *The financial sources of investment activity – a case of Polish enterprises*. AD ALTA Journal of Interdisciplinary Research. Volume 5, Issue 2, 2015, ISSN 1804-7890. pp.89; Zygmunt, J.: *Analiza wpływu finansowania zewnętrznego na działalność inwestycyjną przedsiębiorstw*, [in:] Forlicz, S.: *Metody ilościowe w ekonomii i zarządzaniu*. Wrocław: Zeszyty Naukowe Wyższej Szkoły Bankowej we Wrocławiu nr 20/2011, 2001. ISSN 1643-7772. pp. 476.

³ Makiela, Z.: *Przedsiębiorczość i innowacyjność terytorialna. Region w warunkach konkurencji*, Warszawa: Wydawnictwo C.H. Beck, 2013. ISBN 9788325555368. pp. 16.

⁴ Kogut-Jaworska, M.: *Instrumenty interwencjonizmu lokalnego w stymulowaniu rozwoju gospodarczego*, Warszawa: CeDeWu, 2008. 978-83-7556-108-1. pp. 28.

x_{21} – the acquisition of factoring as a financial source in the past six months (in relation to 2015) by enterprises from particular Member State of the EU,

x_{22} – the acquisition of other sources as a financial source in the past six months (in relation to 2015) by enterprises from particular Member State of the EU.

Between variables used for the research is the correct correlation dependence.

Variables in question were employed to creation the matrix ($X=[x_{ij}]$), which constitute the basis for the comparison of enterprises' financial sources in the EU Member State perspective. Next, it was made the standardization of the define matrix under to the following formula⁵:

$$z_{ij} = \frac{x_{ij} - \bar{x}_j}{S_j}, \text{ when } x_j \text{ is stimulant} \quad (1)$$

or

$$z_{ij} = \frac{\bar{x}_j - x_{ij}}{S_j}, \text{ when } x_j \text{ jest destimulant} \quad (2)$$

where:

z_{ij} – standardized diagnostic attribute x_{ij} ,

$$\bar{x}_j = \frac{1}{n} \sum_{i=1}^n x_{ij} \quad (3)$$

$$S_j = \sqrt{\frac{1}{n} \sum_{i=1}^n (x_{ij} - \bar{x}_j)^2} \quad (4)$$

Therefore, it was selected the probability measure⁶:

$$d_{ij} = \sqrt{\sum_{k=1}^m (z_{ik} - z_{jk})^2} \quad (5)$$

where:

d_{ij} – taxonomic distance defined as the Euclidean distance in n -dimensional space between two test objects; m - the number of attributes (variables); $i = 1, \dots, n$; $n = 1, \dots, n$; n - the number of objects, z_{ik} , z_{jk} – standardized size of diagnostic attributes.

The probability measure enabled to isolate space groups (the clusters of the first order)⁷, which allowed the comparison of enterprises' financial sources between the EU Member State.

The research were based on the data from Survey on the Access to Finance of Enterprises for 2015 year⁸.

4 The diagnosis of the relevance and acquisition of particular financial source by enterprises from the European Union

The effects of the analysis indicate diversity in the significance of particular finance source for the EU enterprises in 2015 (table 1).

The obtained results emphasised the importance of credit line, bank overdraft or credit cards overdraft (x_3) as relatively the most important financial source for enterprises from the Member State of the European Union. The calculations show that for the three quarters of enterprises from the EU the relevance of the financial source in question was higher on average than 50%. This occurrence might resulted from relatively high accessibility of credit for enterprises. Among countries with the highest significance of credit line, bank overdraft or credit cards was noticeable Cyprus, Finland, Ireland, Portugal and Slovenia.

Table 1. The relevance of the particular financial source for enterprises from the European Union in 2015 (according to the measures of position)

Quartile	x_1	x_2	x_3	x_4	x_5	x_6	x_7	x_8	x_9	x_{10}	x_{11}
First	23%	22%	50%	39%	18%	18%	1%	5%	38%	7%	3%
Median	27%	29%	55%	48%	29%	25%	2%	17%	47%	9%	5%
Third	32%	38%	61%	56%	51%	27%	6%	26%	54%	15%	8%

Legend: $x_1 - x_{11}$ – research variables.

Source: Own calculations based on data from Survey on the Access to Finance of Enterprises: http://ec.europa.eu/growth/access-to-finance/data-surveys/index_en.htm [access: 07.03.2016].

The conducted research indicate also relatively high relevance for the EU enterprises such financial sources as leasing or hire-purchase (x_9) and other bank loan (x_4). In 2015 in more than the half of enterprises the usage of them in the past or consideration about their usage in the future was higher on average than 47%. This situation might result from the relatively high availability of considered enterprises' financial sources. According to the effects of examinations the relatively high significance of leasing or hire-purchase was established in relation to such countries as Belgium, Finland, France, Spain and Portugal while the relatively high importance of other bank loan for enterprises was identified in Finland, Germany, Portugal and Poland.

Simultaneously, the studies highlighted the relatively medium importance for the EU enterprises the following financial sources: retained earnings or sale of assets (x_1), grants or subsidised bank loan (x_2), trade credit (x_5) and other loan (x_6) (table 1). That occurrence is seen in the most Member States of the European Union. Additionally, the obtained results allow to the conclusion about relatively low significance of other sources of financing (x_{11}) and debt securities (x_7) as the EU enterprises' financial source.

Taking into account the acquisition of selected financial sources by the EU enterprises in the past six months (in relation to 2015) the effects of examinations allow to indicate the dominant participation of credit line, bank overdraft or credit cards overdraft (x_{14}) (table 2). This occurrence is consistent with observations concerning the high importance of the financial sources in question for enterprises from Member States of the European Union.

Table 2. The acquisition selected financial sources in the past six months (in relation to 2015) by enterprises from particular Member State of the European Union in 2015 (according to the measures of position)

Quartile	x_{12}	x_{13}	x_{14}	x_{15}	x_{16}	x_{17}	x_{18}	x_{19}	x_{20}	x_{21}	x_{22}
First	11%	3%	29%	13%	10%	8%	0%	1%	14%	4%	0%
Median	14%	6%	38%	16%	15%	10%	0%	1%	20%	5%	1%
Third	17%	8%	41%	22%	23%	12%	1%	3%	28%	8%	2%

Legend: $x_{12} - x_{22}$ – research variables.

Source: Own calculations based on data from Survey on the Access to Finance of Enterprises: http://ec.europa.eu/growth/access-to-finance/data-surveys/index_en.htm [access: 07.03.2016].

According to the results of studies for half of the EU enterprises in the past six months (in relation to 2015) the acquisition of credit line, bank overdraft or credit cards overdraft was higher on average than 38%. The conducted research indicate that the highest acquisition of the financial source in question characterized enterprises from Denmark, Finland, Ireland, Italy and Malta.

Moreover, the calculations show that the three quarters of the EU enterprises in the past six months (in relation to 2015) distinguished relatively high acquisition of retained earnings or sale of assets (x_{12}), bank loan (x_{15}), trade credit (x_{16}) and leasing or hire-purchase (x_{20}). This occurrence was registered for the majority of Member State of the European Union.

⁵ Kukuła, K.: *Metody unitaryzacji zerowanej* Warszawa: PWN, 2000. ISBN 83-01-13097-0, pp. 82.

⁶ Młodak, A.: *Analiza taksonomiczna w statystyce regionalnej*. Warszawa: Difin, 2006. ISBN 8372516057, pp. 48.

⁷ Heffner, K., Gibas, P.: *Analiza ekonomiczno-przestrzenna*, Katowice: Wydawnictwo Akademii Ekonomicznej w Katowicach, 2007. ISBN 9788372468451, pp. 69-72.

⁸ http://ec.europa.eu/growth/access-to-finance/data-surveys/index_en.htm [access: 07.03.2016].

Furthermore, the results of research emphasised that from the analysed enterprises' financial sources the slightest acquisition in the past six months (in relation to 2015) was related to debt securities (x_{18}) and other sources (x_{22}). In this respect the effects of studies indicate that the acquisition of financial sources in question by the three quarters of the EU enterprises was lower on average than 1% (x_{18}) and 2% (x_{22}).

5 The examinations results of the enterprises' financial sources diversity among the European Union Member States

The effects of the research enable to isolate the four clusters of the first order, which are differential in respect of the EU enterprises' financial sources significance and their acquisition in the past six months in relation to 2015 (table 3–table 7).

According to the obtained results the most numerous was the group I, which comprise of the fourteen European Union Member States (table 3–table 4). In comparison to the other space groups enterprises from the countries in question distinguish relatively high significance of equity capital, debt securities and factoring as a financial sources. Moreover the isolated countries characterise relatively high acquisition of leasing or hire-purchase and debt securities by enterprises in the past six months (in relation to 2015).

Within the group I the highest similarity in enterprises' financial sources significance and their acquisition in the past six months (in relation to 2015) occurred between Austria (2) and Germany (12) (table 3).

Table 3. The presentation of the first order clusters (the group I – part 1)

		I group											
Country symbol		1	2	3	5	8	10	11	12				
Variables	x_1	27%	26%	20%	34%	20%	29%	32%	24%				
	x_2	34%	32%	22%	41%	12%	28%	31%	33%				
	x_3	55%	58%	51%	46%	54%	65%	53%	55%				
	x_4	50%	50%	61%	45%	30%	60%	65%	49%				
	x_5	36%	21%	35%	17%	17%	34%	26%	15%				
	x_6	22%	22%	21%	21%	17%	32%	14%	25%				
	x_7	4%	1%	2%	11%	2%	2%	7%	1%				
	x_8	14%	10%	20%	30%	51%	16%	21%	14%				
	x_9	47%	49%	32%	46%	48%	63%	48%	59%				
	x_{10}	10%	6%	8%	17%	7%	21%	15%	6%				
	x_{11}	5%	5%	8%	6%	5%	3%	6%	4%				
	x_{12}	15%	17%	12%	16%	10%	16%	18%	15%				
	x_{13}	8%	7%	5%	6%	3%	6%	8%	8%				
	x_{14}	37%	41%	36%	26%	43%	49%	33%	38%				
	x_{15}	19%	23%	25%	15%	11%	18%	25%	20%				
	x_{16}	20%	13%	14%	7%	10%	22%	8%	10%				
	x_{17}	10%	11%	8%	9%	6%	13%	5%	12%				
	x_{18}	1%	0%	0%	3%	1%	0%	2%	0%				
	x_{19}	2%	1%	2%	4%	4%	1%	2%	2%				
	x_{20}	23%	25%	14%	18%	30%	28%	23%	36%				
	x_{21}	6%	4%	4%	6%	4%	10%	10%	4%				
	x_{22}	1%	1%	1%	1%	0,2%	0,2%	1%	1%				
Summary of the closest elements		1-2	2-12	1-3	1-11	1-19	1-27	1-22	1-5				
Minimal taxonomic distance		2.16	2.20	3.50	3.93	3.15	3.04	3.40	3.93				

Legend: 1 – EU-28, 2 – Austria, 3 – Belgium, 5 – Croatia, 8 – Denmark, 10 – Finland, 11 – France, 12 – Germany.

Source: Own calculations based on data from Survey on the Access to Finance of Enterprises for 2015 year: http://ec.europa.eu/growth/access-to-finance/data-surveys/index_en.htm [access: 07.03.2016]

The study shows that enterprises from mentioned countries financed their activity mostly embracing credit line, bank loan, bank overdraft or credit cards overdraft and leasing or hire-purchase. The importance of above financial sources for enterprises from Austria and Germany was relatively higher on average than 49% and was also followed by the high level of their acquisition in the past six months (in relation to 2015).

Table 4. The presentation of the first order clusters (the group I – part 2)

		I group							
Country symbol		13	19	22	23	26	27	28	
Variables	x_1	17%	29%	23%	23%	25%	27%	40%	
	x_2	49%	30%	39%	53%	49%	41%	16%	
	x_3	31%	51%	55%	67%	66%	51%	51%	
	x_4	53%	47%	43%	58%	57%	59%	37%	
	x_5	63%	28%	49%	53%	36%	51%	16%	
	x_6	17%	15%	17%	25%	23%	24%	26%	
	x_7	36%	2%	1%	3%	5%	2%	8%	
	x_8	27%	24%	8%	2%	30%	4%	56%	
	x_9	31%	35%	57%	61%	53%	41%	55%	
	x_{10}	15%	8%	12%	18%	19%	14%	10%	
	x_{11}	3%	3%	2%	4%	7%	8%	3%	
	x_{12}	7%	15%	13%	6%	12%	13%	18%	
	x_{13}	5%	8%	11%	7%	7%	9%	4%	
	x_{14}	15%	41%	42%	41%	36%	32%	37%	
	x_{15}	14%	22%	21%	17%	18%	23%	14%	
	x_{16}	38%	16%	38%	23%	6%	23%	10%	
	x_{17}	9%	7%	8%	7%	10%	10%	11%	
	x_{18}	21%	0%	0%	0%	1%	0%	2%	
	x_{19}	2%	5%	2%	0%	1%	1%	6%	
	x_{20}	11%	24%	34%	15%	24%	12%	29%	
	x_{21}	5%	6%	7%	8%	10%	8%	7%	
	x_{22}	0,2%	0,8%	0,3%	0%	0,5%	1%	1%	
Summary of the closest elements		5-13	1-11	5-28	1-26	10-26	23-26	8-19	
Minimal taxonomic distance		8.51	3.93	4.69	3.65	4.10	3.78	4.83	

Legend: 13 – Greece, 19 – Luxembourg, 22 – Poland, 23 – Portugal, 26 – Slovenia, 27 – Spain, 28 – Sweden.

Source: See table 3.

Moreover, in the framework of the group I should be emphasised the relatively high similarity in the range of financial sources significance and their acquisition by enterprises between EU-28 (1) as a general and such countries as: Austria (2), Belgium (3), Croatia (5), France (11), Luxembourg (19), Poland (22) and Spain (27). Apart from the relatively high significance and acquisition in the past six months (in relation to 2015) of credit line, bank loan, bank overdraft or credit cards overdraft and leasing or hire-purchase the highest similarity between enterprises from the countries in question and EU-28 (1) as a general was noticeable especially in the relatively high importance of retained earnings or sale of assets and grants or subsidised bank loan.

Furthermore, the results of research allow to indicate the slightest similarity (in the range of the graph I) in enterprises' financial sources importance and acquisition scope between Croatia (5) and Greece (13). This occurrence is mainly seen in the differential significance of trade credit and acquisition of retained earnings or sale of assets and trade credit in enterprises from mentioned countries.

The conducted examinations allow to underline the group II as the second the most numerous group of countries distinguished in the enterprises' financial sources and their acquisition in the past six months (in relation to 2015) scope (table 5). The group II consists of the seven European Union Member States, which characterise relatively low significance of grants or subsidised bank loan as enterprises' financial sources and simultaneously relatively high importance of other loan and other financial sources (table 5). It should be also highlighted that in respect to the other space groups, enterprises from the countries belonged to the group II distinguish relatively high acquisition (in the past six months) of retained earnings or sale of assets, other loans and leasing or hire-purchase as a financial source.

Table 5. The presentation of the first order clusters (group II)

		IV group						
Country symbol		9	15	17	18	21	24	29
Variables	x_1	29%	39%	22%	35%	15%	27%	33%
	x_2	14%	29%	14%	16%	10%	27%	23%
	x_3	23%	69%	43%	45%	59%	61%	56%
	x_4	32%	53%	32%	33%	44%	38%	40%

x ₅	26%	68%	16%	27%	33%	29%	58%
x ₆	26%	25%	35%	31%	32%	34%	28%
x ₇	2%	6%	2%	0%	1%	2%	7%
x ₈	9%	21%	33%	16%	25%	11%	17%
x ₉	54%	43%	56%	45%	43%	44%	50%
x ₁₀	15%	9%	5%	14%	7%	11%	13%
x ₁₁	7%	6%	12%	9%	13%	9%	7%
x ₁₂	16%	27%	11%	17%	9%	14%	20%
x ₁₃	2%	8%	2%	2%	1%	2%	7%
x ₁₄	15%	50%	23%	27%	41%	36%	39%
x ₁₅	6%	17%	13%	11%	12%	13%	15%
x ₁₆	13%	51%	9%	20%	22%	16%	44%
x ₁₇	13%	10%	17%	13%	10%	18%	12%
x ₁₈	0%	1%	0%	0%	0%	0%	1%
x ₁₉	1%	2%	9%	1%	3%	1%	3%
x ₂₀	23%	22%	35%	18%	21%	17%	31%
x ₂₁	10%	5%	3%	7%	4%	5%	9%
x ₂₂	1,5%	1,8%	1,9%	2%	2,6%	2%	2%
Summary of the closest elements	9-18	18-24	21-24	17-21	18-29	15-29	
Miminal taxonomic distance	3.68	3.35	4.52	5.71	4.51	3.89	

Legend: 9 – Estonia, 15 – Ireland, 17 – Latvia, 18 – Lithuania, 21 – Netherlands, 24 – Romania, 29 – United Kingdom.
Source: See table 3.

On the basis of the undertaken studies the highest similarity on the range of group II was indicated between Lithuania (18) and Romania (24). Enterprises from mentioned countries characterize mostly the very similar significance of other financial sources and enterprises' acquisition retained earnings or sale of assets and debt securities in the past six months (with respect to 2015).

According to the achieved results the third cluster of the first order include the fourth of the EU countries (table 6).

Table 6. The presentation of the first order clusters (group III)

II group					
Country symbol	4	7	14	25	
Variables	x ₁	35%	31%	23%	27%
	x ₂	29%	33%	29%	25%
	x ₃	57%	49%	44%	59%
	x ₄	48%	42%	24%	39%
	x ₅	25%	17%	13%	29%
	x ₆	26%	28%	17%	26%
	x ₇	1%	1%	2%	1%
	x ₈	2%	3%	1%	3%
	x ₉	44%	50%	38%	53%
	x ₁₀	7%	8%	5%	7%
	x ₁₁	5%	2%	9%	3%
	x ₁₂	11%	15%	8%	9%
	x ₁₃	4%	10%	9%	3%
	x ₁₄	34%	28%	22%	38%
	x ₁₅	14%	16%	7%	12%
	x ₁₆	10%	7%	4%	13%
	x ₁₇	10%	12%	8%	9%
	x ₁₈	0%	0%	0%	0%
	x ₁₉	0%	0%	0%	0%
	x ₂₀	16%	17%	14%	18%
	x ₂₁	2%	4%	1%	3%
	x ₂₂	0,6%	1,0%	3,1%	1%
Summary of the closest elements	4-7	4-25	7-14		
Miminal taxonomic distance	3.11	2.37	5.74		

Legend: 4 – Bulgaria, 7 – Czech Republik, 14 – Hungary, 25 – Slovakia.
Source: See table 3.

The space group in question distinguish countries with relatively high significance for enterprises of retained earnings or sale of assets and other loan. On the other hand, the group III characterise the relatively low importance of trade credit and debt securities as enterprises' financial sources as well as the relatively low acquisition of factoring and retained earnings or sale of assets in the past six months (in relation to 2015).

Moreover, the study shows the highest similarity (in the group III premises) between Bulgaria (4) and Slovakia (25). Mentioned countries have particular close importance of such enterprises'

financial sources as: other loan, debt securities and factoring. Furthermore, above countries characterize the very similar enterprises' acquisition of other sources. Additionally, the slightest similarity occurred between Czech Republik (7) and Hungary (14), especially in leasing or hire-purchase significance for enterprises.

The results of examinations allow to conclude that the fourth cluster of the first order contains the three countries similar in terms of the EU enterprises' financial sources significance and their acquisition in the past six months (in relation to 2015) (table 7).

Table 7. The presentation of the first order clusters (group IV)

III group				
Country symbol	6	16	20	
Variables	x ₁	29%	25%	30%
	x ₂	29%	56%	37%
	x ₃	64%	61%	76%
	x ₄	56%	56%	54%
	x ₅	71%	51%	67%
	x ₆	21%	15%	19%
	x ₇	2%	3%	9%
	x ₈	29%	2%	20%
	x ₉	25%	27%	31%
	x ₁₀	19%	7%	9%
	x ₁₁	4%	3%	2%
	x ₁₂	12%	16%	17%
	x ₁₃	3%	15%	9%
	x ₁₄	39%	47%	52%
	x ₁₅	16%	25%	22%
	x ₁₆	41%	22%	45%
	x ₁₇	7%	7%	8%
	x ₁₈	0%	1%	1%
	x ₁₉	1%	0%	4%
	x ₂₀	7%	8%	11%
	x ₂₁	11%	5%	5%
	x ₂₂	0%	0,2%	0%
Summary of the closest elements	6-20	16-20		
Miminal taxonomic distance	4.92	4.52		

Legend: 6 – Cyprus, 16 – Italy, 20 – Malta
Source: See table 3.

Apart from the other space groups the mentioned cluster of the first order is characterized by the relatively high significance for enterprises of grants or subsidised bank loan, credit line, bank overdraft or credit cards overdraft, bank loan and trade credit while the relatively low importance of other sources as enterprises' financial sources. Moreover, the countries belonged to the fourth group distinguish the relatively low acquisition by enterprises of other loan, leasing or hire-purchase and other sources (in the past six months).

6 Conclusions

The conducted studies connected with the EU enterprises' financial sources significance and their acquisition provide to several conclusion. First of all, the results of research emphasise the relatively high significance of credit line, bank overdraft or credit cards overdraft, other bank loan and leasing or hire-purchase as the enterprises' financial source. Simultaneously, this occurrence is expressed in relatively high acquisition of sources in question by enterprises from Member States of the European Union in the past six months (in relation to 2015). The relatively high acquisition and relevance for enterprises was stated in relation to retained earnings or sale of assets and trade credit, while the usage of factoring and other financial sources was identified as relatively slight.

Moreover, the conducted research indicate the similar differentiation in term of enterprises' financial sources significance and their acquisition in the past six months (in relation to 2015 year) between the EU countries.

The genesis of above appearances might result from the similar enterprises' functioning conditions within the European Union.

Furthermore, the occurrences in question might arise due to the similar impact of the factors affecting the enterprises' financial sources selections.

The complexity of enterprises' financial sources issues requires undertaking further research. They should focused especially on the identification of particular determinants, which impact on the EU enterprises' relevance and acquisition of particular financial sources. Furthermore, it is advisable to recognise the determinants typical for particular the European Union regions which might affected on enterprises' financial sources and, in consequences, on the value of enterprises and regions.

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