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AVAILABLE FORMS OF MONEY IN PAYMENT TURNOVER VERSUS ECONOMIC GROWTH OF THE VISEGRAD GROUP COUNTRIES

Summary
The aim of the informal association of Central-Easter Europe countries known as the Visegrad Group functioning within the European Union is to develop and deepen collaboration based on their common cultural grounds and common turbulent past behind the Iron Curtain under the communist regime after WWII. One of the pillars of this association is cooperation in the economic sphere which is based on free market principles re-established in the region after the political transformation which took place at the end of the 1980s. The economic sphere is closely connected with the payment system whose basic constituent is money. Currently there are three available forms of money: cash money, non-cash money and electronic money. Out of all Visegrad countries, which at the same time happen to be a part of the European Union since 1 May 2004, only Slovakia adopted EURO as its currency, while other countries in the group i.e. Poland, Hungary and the Czech Republic retained their national currencies. The Visegrad countries display considerable differences with respect to the usage of available forms of money and to the pace of changes occurring in the payment areas of particular Visegrad countries. The differences just mentioned result from various social and economic conditions. The paper presents the distribution of different forms of money in the payment turnover in the relevant countries in the context of their economic growth.

Key words**:** *Visegrad countries, payment turnover, economic growth, GDP, cash and non-cash transactions*

Introduction

Traditional money as we know it today is currently transforming towards non-cash and electronic forms. Using different forms of money in an economy triggers different costs of payment turnover which, in turn, impacts the level of economic development and competitiveness of

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a given economy. The analysis of the above dependencies shall constitute material on the basis of which shaping future payment behaviour should be more focused on the forms bringing more benefits seen both from social and financial perspective.

1. Economic growth of the Visegrad countries

Economic growth is often equated with economic development despite visible differences between these two notions. Growth refers only to quantitative changes[1] while development refers to both quantitative and qualitative aspects and has much wider scope as compared to economic growth. The present paper emphasizes the quantitative criteria of economic growth in each particular country of the Visegrad Group such as: growth of GDP, increase in investments, deficit of government institutions and local government units, rate of unemployment as well as public debt with respect to GDP.

The Visegrad Group[2] was established on 15 February 1991 and following the dissolution of Czechoslovakia on 1 January 1993, it consists of four countries: the Czech Republic, Poland, Slovakia and Hungary; the joint population in the Visegrad Group area amounts to 64.3 million people. GDP generated by the countries at the end of 2014 was 989.37 billion USD, out of which 546 billion USD (55% of total GDP of the Group) was generated in Poland. The second biggest GDP was generated in the Czech Republic (205 billion USD which is 20% of total GDP of the Visegrad region). Hungarian GDP at the end of 2014 amounted to more than 137 billion USD, and in Slovakia only to 100 billion USD.

However, taking into account GDP per capita the situation of Visegrad countries looks quite different. The highest GDP per capita at the end of 2014 was observed in the Czech Republic (19.563 billion USD), next in Slovakia (18.454 billion USD), then Poland (14.378 billion USD) and Hungary (13.881 billion USD). Although the joint population of the four ECE countries is lower only by about 27% than the

[1]S. Marciniak, *Innowacje i rozwój gospodarczy*, the Centre of Social Sciences of Warsaw University of Technology, PWN, Warszawa 1997, p. 50, [after:] M. Warczak, *Endogeniczne i egzogeniczne czynniki rozwoju gospodarczego z perspektywy finansów gminy*, Contemporary Economy Electronic Scientific Journal, vol. 6, issue 4/2015.

[2]The name refers to a town in northern Hungary, which was the meeting point of kings of Hungary, Czechia and Poland in 1335 and 1338.

population of Germany (82.2 million people), the GDP generated in these countries is incomparably (almost four times) lower than GDP of Germany (3.885.440 million USD).

The differences in generated GDP and GDP per capita in particular Visegrad countries depend on a number of factors such as for example innovativeness and transfer of knowledge from academic centres to the business environment. The economic ratios for the period between 2011 and 2015 in respective Visegrad countries are presented in Table 1.

The economic growth between 2011 and 2015 in all analyzed EEC countries was characterized by periods of economic slowdown, and in case of Czech Republic and Hungary there was even a recession (period 2012-2013). Taking into account the accumulated economic growth in the period 2011-2015, the fastest growth could be observed in Poland (15.7%). The Slovak economy grew in the analyzed period by 12.4%, Hungarian by 8.8%, and Czech just by 7.2%

As far as the rate of unemployment is concerned in the years 2011-2015, all countries showed a falling tendency, the smallest reduction of unemployment rate was observed in Czech Republic (from 6.7% in 2011 to 6.5% in 2015), it should be added, however, that unemployment rate in Czech Republic in 2011 was more than 60% lower than the rate of unemployment in Germany.

The deficit of the government and local government sector in the analyzed period also shows a downwards trend, the highest deficit of the country in 2011 the stronger the downwards trend could be observed. The situation is very similar when it comes to public debt with respect to GDP, it should be highlighted that public debt in Hungary was especially high in the analyzed period (80.8% in 2011, falling down to 75.3% in 2015).

Economic development of the real zone is closely related to the monetary sphere and within monetary sphere to available forms of money and infrastructure of the payment system.

Table 1. Economic ratios between 2011 and 2015 in the Visegrad countries

RATIO		2011	2012	2013	2014	2015
GDP growth [%]	PL	5,0	1,7	1,2	3,36	3,6
	SK	2,8	1,5	1,4	2,5	3,6
	CZ	2	-0,8	-0,5	2	4,3
	HU	1,8	-1,7	1,9	3,7	2,9
Growth of investments [%]	PL	8,8	-1,8	-1,1	10	5,8
	SK	12,7	-9,2	-1,1	3,5	14
	CZ	1,1	-3,1	-2,8	2,1	7,7
	HU	-1,3	-3,4	7,3	11,2	1,9
Unemployment rate [%]	PL	12,5	13,4	13,4	11,4	9,8
	SK	13,7	14	14,2	13,2	11,5
	CZ	6,7	6,8	7,7	7,7	6,5
	HU	11,1	11,1	10,1	7,7	6,8
Deficit in government and local-government sector [%]	PL	-4,9	-3,7	-4	-3,3	-2,6
	SK	-4,1	-4,3	-2,7	-2,7	-3
	CZ	-2,7	-3,9	-1,3	-1,9	-0,4
	HU	-5,5	-2,3	-2,6	-2,3	-2
Public debt with respect to GDP [%]	PL	54,4	54	56	50,5	51,3
	SK	43,3	52,4	55	53,9	52,9
	CZ	39,9	44,7	45,1	42,7	41,1
	HU	80,8	78,3	76,8	76,2	75,3

Source: Own work based on data from central banks: the National Bank of Poland, Národná banka Slovenska, Česká národní banka, Magyar Nemzeti Bank.

2. Different forms of contemporary money

Money is a basic economic category[3] which evolved in the process of abandoning the natural economy and bartering system. In the history of

[3]In the works of Aristotle [Aristotle, *Etyka Nikomachejska*, PWN, Warszawa 2016] money was defined as a bundle of services which serves three basic functions: measurement of value (*offers possibility to compare prices of various products and resources*), means of exchange *(is commonly accepted equivalent of goods)* and a means of savings (*allocation, storing wealth or thesaurisation*). Aristotle also emphasized an opinion that money may fulfil its functions only thanks to the legislation in force and through commonly accepted social customs, thus already back in times of Aristotle it

mankind there has never been and probably will never be a highly developed culture without trade exchange which is inseparably related to money. People do not live in isolation, as social creatures they establish a network of interactions with others and results of their work (better or worse) are subject to exchange by means of money[4]. Historically, in agricultural countries the value of various goods, commodities and services, was calculated in accordance with highly desirable goods such as grain or other crops. Another, very popular payment commodity in Poland was salt[5], which was used in court disputes as a fine which the accused had to pay as reparation; the fine was 300 of the so called salt crumbles (Polish: krusz) i.e. pellets of salt. The Polish language has retained a saying for something very expensive: to pay salt for something. Trade which used desired commodities as a payment method was too complicated, due to the necessity to determine an appropriate exchange ratio. That is why, in the course of time, alternative payment methods evolved e.g. cash money and, with development of banking system, non-cash money and electronic money.

Nowadays, popularity of cash money as a payment method is decreasing in favour of electronic and non-cash payments. J. Górka rightly pointed out that payers while choosing the payment method use two criteria: convenience of hoarding and payment potential of the method. Deposits of credit institutions have this advantage over cash that the risk of theft or loss is considerably lower, moreover deposits may bring income in the form of interests rates. The second criterion i.e. payment potential is related to payment instruments. Competition between different forms of money in payment function takes place on the level of payment instruments[6].

Changes in the forms of money are a continuous process which will evolve along with social and economic development. D. S. Evans and R.

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was believed that money does not present a value in itself (later this idea was developed by the theory of monetary nominalism).

[4] More in: P. Mrowiec, J. Czerny, *Humanistyczny wymiar świata finansów*, Publishing House of Bielsko-Biała School of Finance and Law, Bielsko-Biała 2012.

[5] In Tibet and Ethiopia salt was used to make coins. In medieval Europe salt was so important that it determined the paths of international trade, the so called *salt roads*.

[6] J. Górka, *Konkurencyjność form pieniądza i instrumentów płatniczych*, CeDeWu, Warszawa 2009, p. 18.

Schmalensee enumerate the following breakthroughs in the long history of money[7]:

- birth of money in the form of coins made of metal,
- emergence of cheques, which are a *promise* of a monetary payment,
- emergence of paper money,
- emergence of electronic money together with payment cards and other payment methods.

J. Patla points to an important role of electronic payment services in shaping the modern history of money[8]. Contemporary financial system relies on three kinds of money used for payments (monetary settlements):

- cash settlements in which banknotes and coins emitted by central bank are transferred between parties (paper or token money),
- cashless settlements in which the settlement takes place through banks or payment institutions which are authorised to render payment services offering payment accounts (i.e. bank money),
- electronic money – through different instruments of electronic money.

Among contemporary features of money one may enumerate the following patterns:

- cash money has nothing to do with gold. Its physical form is a piece of paper which was given the monetary status through a legal obligation to use it as a payment means (legal tender) in force in a given country[9],
- cash money is a national currency which means that the state is a guarantor of its value. The state guarantees the authenticity of monetary tokens[10],
- money is guaranteed by goods and services (*substantial money*) which means that nominal value of money should be in line with the substantial value. Respecting this rule is difficult in practice due to the tendency to increase the volume of money with respect to the

[7]D.S. Evans, R. Schmalensee, *Paying with Plastic. The Digital Revolution in Buying and Borrowing*, The MIT Press, Cambridge (Mass.), London 2005, p. 27.
[8]J. Patla, *Rozwój nowych sieciowych form płatności przyczyną wirtualizacji pieniądza tradycyjnego*, Kraków University of Economics Publishing House, Scientific Journal No 754, Kraków 2007, pp. 137-149.
[9]See: P. Vilar, *A History of Gold and Money: 1450-1920*, Verso 1991.
[10]In 2015 the number of forgeries of exchange medium in the turnover was 10.099, out of which forgery of banknotes was 7.803 and coins 2.296.

manufactured goods and available services, which in turn, triggers inflation occurrences,

- with development of e-commerce new payment services emerged allowing payments through EDI systems (Electronic Data Interchange) for purchases made in online stores and on online auctions (e.g. Allegro, eBay, Amazon). Online payments involve electronic money transfers from bank accounts which the customer can access via the Internet, as well as payment cards and other innovative methods (e.g. pre-paid Internet accounts with services providers, pre-paid cards, short text messages)[11].

Within SEPA project one of the fundamental assumptions is continuous strive for development of electronic and automated forms of payments. Nevertheless, still a lot of cash remains in the turnover and the volume of cash is still growing year after year so cash may not be overlooked in the implementation of SEPA project. Financial integration and harmonisation of rules for payments in the 32 countries which implement the project calls for sorting out the non-cash turnover which costs the European economy between 50 and 75 billion Euro per year[12]. In turn, the *European Policy Centre* expressed an opinion that cash turnover in the euro zone needs to be sorted out because only systemic actions may reduce the costs of *cash processing* which involves calculating, sorting, storing money values and preparing statistics and reports from conducted operations as well as complex service and management of cash volumes in self-service teller machines.

Implementation of SEPA project leads to the increase of importance of electronic and non-cash transactions, and at the same time emergence of new, previously unknown bank products and services for the European market and specifically defined segments of customers[13]. Involvement of countries in assuring the success of the project is on different levels, which is also visible in the ECE region countries.

[11]According to a poll conducted by Gemius, as many as 83% of the Internet users in Poland would buy more products online if there were possible to return the goods for free and 24% do not return unwanted or faulty goods because of shipping costs, http://www.spidersweb.pl/2014/11 of 25 January 2017.

[12]Estimates based on data from EPC Cash WorkingGroup and EBC, analysed by PSE Consulting.

[13]See: EPC, SEPA Cards Standardisation (SCS) Volume. Book of Requirements, http://www.europeanpaymentscouncil.eu/knowledge_bank_detail.cfm?documents_id=560 of 7 January 2017.

3. Payment infrastructure and its presence in Visegrad Group countries

One of the most important factors conditioning development of payment infrastructure is the number of financial institutions present on the market which render payment services. While in urban areas the availability of payment services is rather wide, in rural areas there are not enough payment institutions what may lead to financial exclusion of residents of these areas including exclusion with respect to non-cash and electronic payments. The number of financial outlets offering payment services per 1 million inhabitants in Visegrad countries is presented in Table 2.

Table 2. Number of institutions offering payment services per 1 million people

No.	Country	Outlets per 1 million people
1	Czech Republic	543
2	Poland	1.436
3	Slovakia	569
4	Hungary	642

Source: Own work based on ECB Statistical Data Warehouse http://sdw.ecb.europa.eu

With respect to outlets of institutions offering payment services per 1 million inhabitants, Poland is the leader on the CEE arena. High banking penetration ratio in Poland is the result of including in the ratio such outlets which process cash transactions (e.g. the Polish Post outlets) but which do not process non-cash payments. However, the results of a report prepared by PRNews.pl show that banks reduce their sales network by cutting the number of their partner facilities[14].

Despite diversified access to outlets offering payment services in Poland and in other three Visegrad countries, the number of bank accounts per one inhabitant is very similar, with one exception - Hungary where the level is lower, only 1,1 (Table 3).

Table 3. Number of bank accounts per 1 person

[14]http://prnews.pl/raporty/raport-prnewspl-liczba-placowek-bankowych -i-kw-2016-6552746 of 5 December 2016.

No.	Country	Number of bank accounts per 1 person
1	Czech Republic	1,69
2	Poland	1,6
3	Slovakia	1,57
4	Hungary	1,11

Source: Own work based on ECB Statistical Data Warehouse http://sdw.ecb.europa.eu

The above data prove that not only the number of outlets offering payment services assures their availability but also the level of development of Internet banking, which in turn relies on the availability of Internet connection. Although in Poland the number of payment institutions per 1 million inhabitants is definitely the highest, 4% more citizens of Czech Republic above 15 years of age are in the possession of a bank account as compared to Poland. Also Slovakia with only 569 payment institutions per 1 million of inhabitants as compared with 1436 institutions in Poland has the ratio of bank account holders above 15 years of age only 1% lower than Poland. The number of bank account holders above 15 years of age (in %) is shown in Table 4.

Table 4. Bank account holders above 15 years of age (in %)

No.	Country	Number of bank account holders among citizens above 15 years of age
1	Czech Republic	82
2	Poland	78
3	Slovakia	77
4	Hungary	72

Source: Own work based on ECB Statistical Data Warehouse http://sdw.ecb.europa.eu

The smallest percentage of bank account holders in Visegrad countries could be observed in Hungary (72% of the population above 15 years of age). In Poland the score of 78% could be achieved thanks to a very popular system of cooperative banks, which at the end of June 2016 concentrated almost 2 million Poles. From the point of view of utilization of available forms of money, one should not ignore the significance of the infrastructure of the payment system including the

network of cash dispensers and cash deposit machines, the number of facilities accepting electronic payment instruments etc. The number of cash machines per 1 million inhabitants is presented in Table 5.

Table 5. Number of cash machines per 1 million inhabitants

No.	Country	Number of cash machines per1 million inhabitants
1	Czech Republic	422
2	Poland	533
3	Slovakia	500
4	Hungary	495

Source: Own work based on ECB Statistical Data Warehouse http://sdw.ecb.europa.eu

The number of cash machines per 1 million people seems to be the smallest in the Czech Republic (at least 422), at the same time in the same country the biggest number of physical persons above 15 years of age has an account in a bank (82%), the Czech Republic consequently boasts the highest number of bank accounts per one citizen. However, taking into account all EU countries, ECE countries have the smallest number of cash machines per 1 million inhabitants. The number of cash machines per 100 km^2 is presented in Table 6.

Table 6. Number of cash machines per 100 km^2

No.	Country	Number of cash machines per 100 km2
1	Czech Republic	5,6
2	Poland	6,6
3	Slovakia	4,4
4	Hungary	5,2

Source: Own work based on ECB Statistical Data Warehouse http://sdw.ecb.europa.eu

As far as the number of cash machines per 100 km^2 is concerned, Poland is in the leading position, also with respect to the number of cash machines per 1 million inhabitants, what in fact was caused by the pressure of Polish payment institutions on the development of electronic

distribution channels. Development of cash machines network facilitates increased utilization of cash in payment turnover, but as compared to the EU average of the number of cash machines per 1 million inhabitants and the number of cash machines per 100 km^2, Visegrad countries show much lower ratios. Development of non-cash turnover is, in turn, related to the availability of facilities accepting electronic payment instruments (Table 7).

Table 7. Number of POS facilities accepting electronic payment instruments per 1 million inhabitants

No.	Country	Number of POS termini per 1 million inhabitants
1	Czech Republic	9.605
2	Poland	10.347
3	Slovakia	8.425
4	Hungary	10.631

Source: Own work based on ECB Statistical Data Warehouse http://sdw.ecb.europa.eu

Among countries of Central Eastern Europe with the biggest number of facilities accepting electronic payment instruments the best ratio can be found in Hungary (10.631) and Poland (10.347).

The range of services offered through POS terminals includes also *cash back* service. M. Rabong points to the following benefits of *cash back*[15] service:

- time saving –withdrawal of cash is possible even during everyday shopping,
- availability – number of retail outlets or petrol stations offering *cash back* service is higher than the number of cash machines especially in small or touristic towns and villages,
- simplicity – transaction is executed on POS terminal by the assistant, and the customer only signs the printout or authorises the transaction with PIN code.

Number of facilities accepting electronic payment instruments per 100 km^2 is presented in Table 8.

[15]NBP, DSP, M. Rabong, *Raport na temat usługi cash back na polskim rynku*, Warszawa 2014.

Table 8. Number of facilities accepting electronic payment instruments (POS termini) per 100 km^2

Lp.	Country	Number of POS termini per 100 km2
1	Czech Republic	128
2	Poland	127
3	Slovakia	93
4	Hungary	113

Source: Own work based on ECB Statistical Data Warehouse http://sdw.ecb.europa.eu

Number of facilities accepting electronic payment services shows the ability of service providers to capitalize on new technologies and the ability to unlock hidden (potential) values which the new technologies bring. Electronic payment instruments are innovative as they involve new solutions, technologies or standards which qualitatively change the existing payment methods. As far as innovativeness is concerned, three areas of innovation in retail payments can be differentiated: innovative payment instruments, innovative channels and innovative forms of money[16]. Saturation with facilities accepting electronic payment instruments per 100 km^2 and with cash machines per 100 km^2 in the analyzed countries is very comparable – the Czech Republic and Poland have slightly better ratios than Slovakia and Hungary.

Table 9. Number of payment cards per 1 person

No.	Country	Number of payment cards per 1 person
1	Czech Republic	1,04
2	Poland	0,94
3	Slovakia	0,97
4	Hungary	0,9

Source: Own work based on ECB Statistical Data Warehouse http://sdw.ecb.europa.eu

The analysis with respect to the number of payment cards per one person also shows similar results for the analyzed countries and all of

[16] W. Szpringer, *Elektroniczne instrumenty płatnicze –tendencje rozwojowe*, E-mentor No 3 (50)/2013, http://www.e-mentor.edu.pl/artykul/index/numer/50/id/1031 of 5 December 2016.

these countries occupy bottom positions in the ranking of all EU countries. In the Visegrad countries there are about four times fewer cards per 1 person than in Luxemburg, almost three times fewer than in Great Britain and more than two times fewer than in Sweden, Croatia, Belgium, Malta or Holland.

Table 10. Number of non-cash transactions made with payment cards per 1 person

No.	Country	Number of non-cash transactions made with payment cards per 1 person
1	Czech Republic	46
2	Poland	49
3	Slovakia	50
4	Hungary	36

Source: Own work based on ECB Statistical Data Warehouse http://sdw.ecb.europa.eu

The biggest number of non-cash transactions per 1 person was observed in Slovakia, which is on average one card more per one person than in Poland; the smallest number of payment card transactions was made in Hungary. In spite of the fact that the number of payment cards in Visegrad countries is at a similar level, the number of non-cash transactions made with these cards differs from country to country. In all countries in question, the dynamics of growth of the number of payment transactions is high what is presented in Table 11.

Table 11. Growth rate of the number of payment cards transactions (annual percentage change)

No.	Country	Growth rate of the number of payment cards transactions (annual percentage change)
1	Czech Republic	25,7
2	Poland	29,3
3	Slovakia	26,1
4	Hungary	15,3

Source: Own work based on ECB Statistical Data Warehouse http://sdw.ecb.europa.eu

Table 11 shows that growth in the number of transactions made with payment cards in Poland is progressing with double speed when compared with Hungary. The process of development of non-cash turnover should involve different entities such as e.g. central bank, banks, especially commercial banks as well as state and local government units. The number of non-cash transactions made with a single payment card is presented in Table 12.

Table 12. Number of non-cash transactions made with a single payment card

No.	Country	Number of non-cash transactions made with a single payment card
1	Czech Republic	41
2	Poland	50
3	Slovakia	38
4	Hungary	35

Source: Own work based on ECB Statistical Data Warehouse http://sdw.ecb.europa.eu

The biggest number of non-cash transactions made by a single payment card was observed in Poland (50 transactions), second was the Czech Republic where the number of similar transactions was about 20% lower than in Poland. In Slovakia and Hungary the number of non-cash transactions made with a single payment card is on yet lower level.

Table 13. Percentage of non-cash transactions in the total number of payment cards transactions

No.	Country	Percentage of non-cash transactions in the total number of payment cards transactions
1	Czech Republic	71,2
2	Poland	70,5
3	Slovakia	69,4
4	Hungary	74,6

Source: Own work based on ECB Statistical Data Warehouse http://sdw.ecb.europa.eu

Percentage of non-cash transactions in the total number of payment cards transactions is at similar level in the four CEE countries. It can be observed that in Hungary the percentage of non-cash transactions in the total number of transactions is the highest, but the number of non-cash transactions made with a single payment card is the lowest among the Visegrad countries.

Conclusions

The expansion of non-cash turnover together with fast development of electronic banking brings a number of important benefits and progress chances for the economy as well as for the state, business entities and households. However, the diagnosis of the present state of monetary settlements in countries of Central-Eastern Europe still shows high proportion of cash in the turnover and considerably low level of usage of banking infrastructure and non-cash instruments as compared to other countries of the Western Europe. The above ratios constitute a real obstacle for the development of national economies also at local and regional level which hinders their competitiveness and ability to adapt to the standards of better developed countries. Therefore, undertaking of a joint initiative within the Visegrad Group to promote non-cash solutions seems justified.

Utilisation of similar forms of money in the payment turnover may also facilitate faster economic growth. The analysis of the four countries from the Visegrad Group shows that there is a network of relationships between using particular forms of money and economic growth. In this field financial institutions should be backed by government and local government bodies.

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INTELLECTUAL CAPITAL OF SOCIOECONOMIC AREA: MEASURE AND STRUCTURE

part II. Intellectual capital of a company and intellectual capital value of a given socioeconomic area

Summary
This paper is the second in the series of three papers devoted to the estimated value of intellectual capital belonging to any socioeconomic area: province, municipality, country, region etc. An idea of the estimated value is based on the assumption that the value of a given socioeconomic area for its residents is determined by income generated due to the presence of a business activity in a given area. The structure of the presented method allows for covering all components of intellectual capital within estimated value regardless whether their existence is realized or not. The paper presents the valuation method of intellectual capital to be found in a given socioeconomic area for the purpose of using this method in the third part of the series in which estimates will be conducted for each individual voivodeship (province) in Poland.

Key words*: intellectual capital, region, province, estimated value*

Introduction

This paper constitutes the second part of the series entitled: *Intellectual capital of a socioeconomic area: measure and structure.* In the first part, after providing definitions, the author presented a method enabling an estimation of amount representing a substitute of a market value of a region. The completeness principle of value was preserved, expressing itself in a completeness of all factors determining a region's value, regardless whether one realizes their existence or not. The argument was conducted assuming the absence of state or self-government activity, hence resulting in zero flows of public or self-

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