Vol. 17-2 (2017)

REGIONAL DIFFERENTIATION IN RUSSIAN CULTURAL INDUSTRIES: THE STATISTICAL MEASUREMENT AND THE RESULTS FOR THE STATE GOVERNMENT KOZLOVA, Maria*

Abstract

In this article there is an attempt to analyze the present system of cultural industries' monitoring for the purpose of using for evaluation of cultural industries' influence on economic relation, economic growth. The framework of our research method is defined the present statistical indicators accessible for all users. On this base indices of descriptive statistics were calculated. It has made possible to construct the composite index numbers which indicate the level of cultural industries' development, level of cultural goods and services' accessibility for customer on the regional level.

Keywords: cultural industry, regional differentiation, statistical methods, statistical analysis, composite index number

JEL Classification: O11, O18, C43

1. Introduction

Cultural economics plays increasingly such a significant role that its influence in the national and regional economy requires a scientific interpretation on the one hand and the development of specific tools for the state regulation and support on the other hand. Since the 1960s the cultural economics has developed as a branch of knowledge (Baumol & Bowen, 1966). Today it consists of some parts, one of which is a study of cultural industries. There are currently a lot of articles, monographs covered the problems of cultural economics (Hesmondhalgh, 2007; Scott, 2000; Throsby, 2001, 2010; Towse, 2010). The international research organization (Association for cultural economics international) and the science journal (*Journal of cultural economics*) have been established as well.

The research of spacial factors in economic systems, including the cultural economics, aren't popular and clear because of the complexity for its numerical accounting (for mathematical models) and for economic describing (because of the interdisciplinary approach to the notion of space). As far as the cultural economics is concerned, there is the same situation. The researchers prefer to study the other problems. The research questions about cointegration of economics and culture have a fundamental problem relating to the essence of its union and opposition (Beugelsdijk & Maseland, 2011) so as a result the spatial development agenda takes place in the periphery of studies of cultural industries.

We know a little numbers of studies in cultural economics connected with a spacial development. At the end of 1970s there were published two articles about spacial development of cultural industries in the *Journal of cultural economics*. Both

KOZLOVA Maria, Academic department of statistics, econometrics and computer science, Ural State University of Economics (Ural'skij gosudarstvennyj ekonomiceskij universitet), Russia, Yekaterinburg

articles concern the question of culture and cultural industries' influence on the level of life only in the city without mention about the regional development (Booker, 1978; Perloff, 1979). There studies have discovered the spacial agenda for cultural economics by the means of methods of other branch of economics, including non-mainstream, economic geography, sociology. Due to this fact that cultural industries' development takes place mainly in cities, at the present time there are a number of articles about activities of cultural institutions in urban space, especially in context of cluster theory and other compact spacial units (Kelly & O'Hagan, 2007; Kong & O'Connor, 2009; McManus & Carruthers, 2014; van Loon, Gosens & Rouwendal, 2014).

In general, at present time the research of cultural industries' development has a lot of conceptions that are classified some groups on the different grounds such as the contribution to the national and regional economy, the specificity of goods and services produced by cultural industries, its value etc. The regional components of cultural industries' development were not thereby the centre of attention for economists until the 2000s: this situation is considered as normal for economic science dynamics. On the one hand the economics mainstream did not include the geographical agenda. In the 1990s there was a spatial revolution in economics because of analytical basis formed by research P. Krugman, M. Porter, A. Scott and other technological and institutional changes in economic relations (McCann, 2008). On the other hand the initial development of cultural economics was firstly the formulation of basic definitions and points of views on the cultural goods and services, secondly the attempt at including cultural economics mainstream.

There is one more reason for the insufficient attention on regionalization trends in cultural economics and correspondingly cultural industries' development. It is the point of view on the culture as a means affecting the economic relations (Throsby, 2001; Potts & Cunningham, 2008) on the macroeconomic (national) level. This needed and needs today in the light of the discussion about the state support for cultural industries (Muzychuk, 2012; Pratt, 2005). The agenda about dependence the economic relation on the culture and the level of development of cultural institutions is characteristic for the international organization such as UNESCO and UNCTAD. Its reports summarize the statistical data and theoretical, methodological principles of cultural economy's analysis, including the conception about role of culture in economic and social changes (UNESCO, 2009, 2014; UNCTAD, 2008; der Auwera, 2014).

Today the more perspective ways of spacial studies in cultural economics and cultural industries particularly are the cultural policy researches. Firstly, this fashionable trend was to develop a discussion about cultural and creative industries because it is very complex question and there are the countless points of view. The generalization of many conceptions about the interrelation of cultural and creative industries (classification model) is presented in report "Creative economy report" (UNCTAD, 2008).

The classification of Kern European Affairs (KEA) (2006) is more transparent to use in our research than classification presented by UNCTAD. Visual and performing arts, heritage, film and video, television and radio, video games, music, books and press compose the culture sector. We do not consider the video games as a cultural industry, it is more exactly a creative industry as design, architecture and advertising.

Secondly, one more fashionable trend is connected with the description of cultural policy as a set of universal administrative methods of regulation in the cultural economy (Flew, 2012; Vestheim, 2015; Doyle, 2016) and the analysis of cultural policy in the cities (Sarikakis, 2012; Lysgård, 2016).

The main topics and main problems in cultural economics as a branch of economic science were considered for the purpose of the defining of recent research's place and emphasizing of the lack in the spacial development questions.

The very big problem concerns the incompatibility of government target of the set of measurements and the scientific results of studies in the cultural industries management. On the one hand, the state government needs the simplest and clearest methods of recent situation analysis in cultural industries and methods of measurements of government regulation effectiveness. These methods must be applied on the different government levels (national, regional, local). On the other hand, the researches present the other topic and results: about the essence of the notions "culture", "creativity", opposition "cultural-creative", the pricing in cultural economics (the contingent valuation and the choice model), the common trends in cultural policy, mainly in government financing on the national level and in sustainable development of cities places.

This article aims to, firstly, present the historical cultural industries' dynamics and the results of its development as a standard ration for replacement of cultural institutions and, secondly, analyze the regional differentiation on the base of cultural activity indicators. These indicators are simple and very informative statistical method for analytical aims. In the first place, it enables to make the differences on the base of the natural indicators (absolute and mean) and to determine the different financing. In the second place, it shows the spacial proportion of cultural institutions' replacement and as a result the level of cultural institutions' accessibility.

The base model for these indicators' construction is the geometric mean which is used for analyzing of life quality and human innovation (creative) development. The most trustworthy source of adequate method of regional differentiation research is Human Development Index (HDI) (UNDP, 2014). There are some reasons to choose HDI as pattern for the construction of statistical index in our research. Firstly, HDI is destined for estimation of such value which is inconvenient and difficult for economic theory mainstream. Secondly, this value is similar to cultural value because of human abilities and possibility to change the environment. Thirdly, HDI is appropriate to estimate by means of regular statistical data collected by state statistical institutions. As a result, HDI is estimated not only for countries, also for regions.

2. Historical background for regional differentiation of cultural industries' development

The modern system of cultural institution in regions is based on structures which were being formed during the 20th century. It concerns the majority of cultural activities. At the beginning of the 20th century there was not a specified approach to the organization of the regulation and support of cultural institutions. In addition, there were different problems - in Russian economy and policy that it did not allow to pay attention to culture's support. After the 1917th there was need to form the new culture and new ideology. For this reason, the new government took into account the special significance of culture:

Decrees and laws approving immediately after the revolution and also other steps concerning newspapers, libraries, publishing houses, school indicates that the Bolshevik Party aimed to controlling all institutions which participated in forming of public mentality; moreover it realized task-oriented policy in the sphere of culture. Their purpose was to raise educational level of worker and peasants (Eimermacher, 1998, p. 26).

Since the 1920s and 1930s there was a huge growth of all statistical indicators. There was the aim to make the cultural institutions more accessible for population living in the territory with different levels of urbanization.

In historical dynamics of the basic statistical indicators there are three time periods different by the level of growth rate. The first period is the 1920s and 1930s, when the number of cultural institutions had grown very quickly and it concerned the corresponding indicators. The second period is the 1940s (Second World War time and after-war time) and 1950s, when the growth rate of cultural statistics was reduced gradually, but it had remain high. The third period is the last three ten years of USSR functioning when there was a minimum growth or stagnation of statistical indicators in cultural industries. As a result we consider first two periods of cultural industries development as whole. It needs to estimate the integrative index of soviet cultural industries development in 1980 as the base, the standard of spacial and specific indicators for the modern situation in Russia.

In first two periods number of cultural institutions increased manyfold for the three ten years from 1926 to 1955.

Firstly, we consider the heritage services. In the case of libraries there was situation that its number increased in all regions: the maximum growth rate was 7273% (from 15 libraries in 1927 to 1042 items in 1956) for the republic of Dagestan and the minimum value was in the Arkhangelsk region and amounted 164% (from 582 libraries in 1927 to 955 items in 1956) (Central statistical department of RSFSR, 1958). Also there is need to consider the dynamics in Moscow and St. Petersburg as capitals and places with well-developed cultural infrastructure. Number of libraries in whole and per capita increased insignificantly - 247% and 195%, respectively. Moreover, the absolute indexes are not high too.

As far as the museum is concerned, this cultural institution has such a feature that its initiation requires the long-term initiatives and objects which have cultural, historical and other significance. In spite of fact that the museum is phenomenon of city and rural life, its even distribution is impossible. 68% of regions had in six museums or less in 1955. Moscow and St. Petersburg was leaders in number of museums.

Secondly, the same situation has emerged for performing arts (theatres). 16% of regions had only one theatre, usually in its capitals. Four theatres or less placed in 71% of regions in aggregate.

Thirdly, the film industry saw as «an arsenal of cultural revolution» (Lebedev, 1965). On the side of film production there was the system of film studios which took place thereby that one was surely in each union republic. So this fact ensured and maintained the basic principle of soviet cultural policy – the simplicity of cultural goods and services for soviet society. On the side of film distribution (in the period 1926-1955) the number of film projector units increased manyfold: the maximum growth rate was 11400% in Belgorod region and the minimum rate was in Moscow and St. Petersburg – 224% and 151% respectively. The huge growth was observed in different regions which are located both in European, Siberian and Far Eastern parts of country. These tendencies were linked both to technological development in film industry and use of portable film projectors for territories with low population density and large area.

The similar cultural institution for soviet society was the «house of culture», that is the institution for cultural and leisure-time activities. It had a special significance for rural area because this institution included the different cultural industries in one place. The dynamics of absolute indicator is striking. The average growth rate of its number is about 402% in the period 1926-1955. Moscow and St. Petersburg are at the end of regions' list with 127% and 87% of growth respectively. At the beginning of rating there are territories of Far Eastern part of country. The growth rates in these regions are more 1000%.

Fourthly, the publishing industry had a special significance in soviet cultural policy. If the 1920s was time for many experiments and unsystematical realization of controlling measures in the sphere of culture, the 1930s became the purposeful cultural construction and formation of soviet cultural policy. Periodical press (especially the newspapers) considered as a very important component of propaganda and education:

Three periodical presses had to be produced in each province: mass workers' and peasants' newspaper reporting the political and production themes, party weekly or biweekly newspaper and «News of Provincial Executive Committee» for publication of official materials. There was a proposition to edit the popular political newspaper destined for peasants (*Printing production*, 1967, p. 134)

The common dynamics for country in the period 1926-1955 was not huge as for other cultural industries. The number of books' and magazines' title increased by 61,9% and 3,3% respectively in 1928-1956, at that time the growth rate for newspapers was 589,2%. Numbers of copies increased in a large measure: growth was 405,1% for books, 127,9% for magazines and 650% (one issue) for newspapers (Central statistical department of RSFSR, 1958, p. 440-441).

More significant moment for description of historical background is the 1980s which are considered as a result of cultural industries' development. For this purpose, we consider the different statistical indicators per capita on the data of each region.

We select the 1980 as a year for the calculation of indicator per unit. There is need to consider the publishing industry in the first place because of the powerful centralization and differentiation between regions (Table 1).

N₂	Title of statistical indicator	Differentiation coefficient	Differentiation coefficient (excluding Moscow and St. Petersburg)
1	Number of books' title per capita	4129,03	292,05
2	Number of books' copies per capita	133234,85	5079,43
3	Number of magazines' issue per capita	569,4	19,15
4	Number of magazines' copies per capita	13567,62	286,73
5	Number of newspapers' issue per capita	5,63	3,96
6	Number of newspapers' copies per capita	140,90	14,66

Table 1. Differentiation coefficients for publishing industry in 1980

The differentiation coefficient is a ratio between the maximum value of statistical indicator and its minimum value. As see in Table 1, differentiation coefficients including and excluding indicators of Moscow and St. Petersburg differ each other. Moreover, there are not indices (in third and fourth columns) which are equal each other. It means that the maximum value of each indicator characterizes Moscow or St. Petersburg. The most uneven development was observed in publishing industry. Also it is concern of the difference between non-capital regions.

The huge gap for differentiation coefficients calculated for number of books' copies per capita is explained by the fact that 89% of books' copies were produced in Moscow. Less differentiation is presented in newspapers' production. Above we considered factors influenced the even development. Tendencies for the rest of cultural industries are less distinguished. The differentiation coefficients are presented in Table 2.

Nº	Title of statistical indicator	Differentiation coefficient	Differentiation coefficient (excluding Moscow and St. Petersburg)				
Physical indices							
1	Number of film projector units per capita	22,14	6,61				
2	Number of institutions for cultural and leisure- time activities per capita	42,44	11,19				
3	Number of libraries per capita	5,05	3,26				
4	Number of copies from libraries' funds per capita	2,62	2,62				
5	Number of museums per capita 12,01		11,76				
Spatial indices							
6	Number of film projector units per 1000 sq. km	293,28					
7	Number of institutions for cultural and leisure- time activities per 1000 sq. km	264,02					
8	Number of libraries per 1000 sq. km	227,51					

Table 2. Differentiation coefficients for heritage services, film industry and institutions for cultural and leisure-time activities in 1980

Regional Differentiation In Russian Cultural Industries

The film industry in the area of distribution and institutions for cultural and leisure-time activities are characterized by more accessibility in Moscow and St. Petersburg. As a result the large gap between the differentiation coefficients – including and excluding the indicators for two capitals. As far as the heritage services are concerned, regional differentiation is less significant that considers as the decision of tasks set by soviet government oneself. But the large area of some regions and low population density did not allow to minimize this differentiation as a spatial conception.

The television and radio statistics was presented only for country, so there is not a possibility to analyze the regional development.

The historical background of the cultural industries' development in USSR's regions is the benchmarks for analyzing of modern situation because today the physical capital (as a buildings, the part of libraries' fund and skilled personnel) is used for production of cultural and creative goods and services. This physical capital has formed the spacial standard for the cultural institutions' placement in spite of the strong differentiation between Moscow, St. Petersburg and non-capital regions. It was very important to take the step-type availability of cultural institutions in rural place especially. Today the step-type availability is replaced by policemen for the transport-type availability that it influences strongly to the traditional way of cultural goods' using with the bad results for cultural capital of people.

3. Estimation of regional differentiation in Russian cultural industries

On the national level the statistical databases including the main aggregate indicators have formed and the problems have minimized. On the regional level some statistical indicators which are presented for the country in whole are not offered in the statistical handbooks and databases in the Internet. There is need to note that this situation has formed for other branches of statistics as well. In Russian cultural statistics there is situation when the data about cultural industries collect by different government statistical institutions. As a result the systems of this data for different cultural industries consist of heterogeneous sets of statistical indicators.

The first of the government statistical institutions is the Ministry of Culture, which regulates the activities in the sphere of heritage services (museum, library), performing arts (theatre, concert institution), film industry and the institutions for cultural and leisure-time activities.

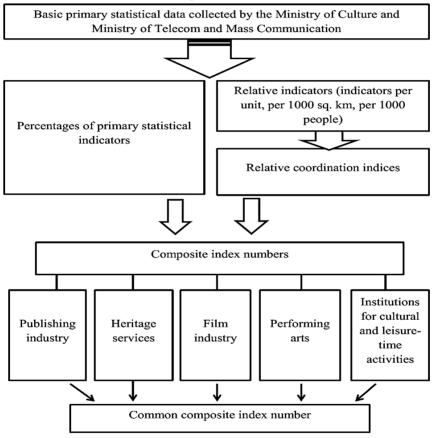
The complete sets of statistical indictors are published in special statistical handbooks such as «Public libraries of Russian Federation in figures», «Museums and zoological gardens of Russian Federation in figures», «Theatres of Russian Federation in figures», «Concert institutions and groups, circuses of Russian Federation in figures». The level of its accessibility is very low: the number of printed copies reaches only 300. In on-line databases the complete sets of statistical indicators are absent. The value indicators are presented only in printed copies.

There is one more statistical problem concerning the coverage of observation units. Data about activity of concert institution are collected only for organizations which are under the jurisdiction of the Ministry of Culture. The second institution is the Ministry of Telecom and Mass Communication which collects and then presents statistical information of publishing industry and television and radio industry. It collects and publishes the following statistical indicators:

1) For the publishing industry (separately books, periodical press, newspapers) there are number of title, number of copies;

2) For television and radio industry there are coverage of households by services, technological possibility to receive one, two and more TV-channels, radio-channels (for households as well).

Figure 1. Calculation of common composite index number



Although the Ministry of Telecom and Mass Communication collects the value indicators such as price of book, periodical press and newspaper and also revenue from the communication services including television and radio, this data are not published.

There is little information about the value indicator of government support of cultural industries. It is the expenditure of consolidated budgets on the different level of governance for each region.

Analysis of available statistic data is realized by means of composite index numbers constructed as HDI and similar index number. This method allows to make Kozlova, M.

the rating on the base of various features, including qualitative indicators. Estimation is organized by three or four steps. The procedure of estimation is presented in Figure 1.

On the first step, it depends on the specification of data. In this case there are two options. First, the data of cultural institutions' number is transformed in relative spatial indicators such as number of libraries, museums or institutions for cultural and leisure-time activities per 1000 sq. km, number of film projector units per 1000 sq. km. Also it needs to construction of relative indicators per unit (that is per 1 cultural institution).

Second, the statistical data about the results of its activities is transformed in indicators per capita (for our research per 1000 people) such as number of books' title per 1000 people, number of books' copies per 1000 people and similar. In addition, we constructed relative indicators with using of data about customer of cultural goods and services such as number of libraries' or museums' guests per 1000 people, number of viewer per 1000 people for film industry and performing arts. All relative indicators used in estimation are presented in Table 3.

Table 5. Relative indicators of cultural industries						
Cultural industry	ý 1					
	Percentage of (1) books' title, (2) magazines and (3) newspapers' issue					
	published in region in sample					
Publishing	(4) Number of books' title per 1000 people					
industry	Number of (5) books, (6) magazines, (7) newspapers' copies per 1000					
	people					
	Number of (8) magazines, (9) newspapers' issue per 1000 people					
	(1) Number of copies from libraries' funds per capita					
Heritage services	Number of (2) libraries and (3) museums per 1000 sq. km					
	Number of (4) libraries and (5) museums' guests per 1000 people					
	(1) Percentage of film projector units of region in sample					
Film industry	(2) Number of film projector units per 1000 people					
Filli ilidusu y	(3) Number of film projector units per 1000 sq. km					
	(4) Number of viewer per 1000 people					
	(1) Number of theatres' viewer per 1000 people					
Performing arts	(2) Number of concert institutions' viewer per 1000 people					
Ferforming arts	(3) Number of events per 1 theatre					
	(4) Number of events per 1 concert institution					
Institutions for (1) Number of institutions for cultural and leisure-time activities						
cultural and km						
leisure-time	(2) Number of events per 1 institution					
activities	(3) Number of institutions' guests paid for participation per 1000 people					

Table 3. Relative indicators of cultural industries

On the second step, these relative indicators calculated for all Russian regions (except percentages for publishing and film industries) are used to construct the relative coordination indices (RCI) by means of formula:

$$RCI = \frac{relative \ indicator \ of \ region \ t}{relative \ indicator \ of \ region \ with \ maximum \ value}$$
(3.1)

There calculated relative coordination indices are the base for composite index numbers both individual cultural industry and cultural industries of region. There are five composite index numbers – for each cultural industry, except television and radio industry. For the latter there is no possibility to construct the index number because of statistical data lack for this purpose.

On the third step, composite index numbers for each cultural industry are calculated by means of the relative coordination indices and in several cases the percentages as share in statistical population. The addition step of calculation concerns the publishing industry: firstly, the composite indices are estimated separately for publishing books, magazines and newspapers; secondly, the common composite index for publishing industry is the geometrical unweighted mean of three indices calculated firstly. The common formula evaluation for other composite indices is geometrical unweighted mean as well. These indices indicate the relative accessibility of cultural goods and services in regions (each other) and also level of individual cultural industry's development.

The geometrical unweighted mean is informative and empty index simultaneously. On the one hand, this index is very adaptable because it may include a number of statistical relative indicators. On the other hand, the choice of significant indictors from statistical base is very difficult, because cause-and-effect relations may be forced. As a result it may be non-meaningful study. Our approach of measurement of regional differentiation is based on the cultural goods' accessibility by the means of the indicator per capita (per 1000 people) as physical indices and the indicator per 1000 sq. km as special indices. As far as the cultural statistics is concerned, the choice between the primary indicators is limited, especially for the description of historical background. As a result, some of the basic relative indicators were changed and added for analyzing the modern situation. These sets of statistical indicators grouped by the concrete cultural industry allow to use the composite indices instead of isolated relative indicators.

On the fourth step, there is evaluation of common composite index number which indicates the level of cultural industries' development in region. It is realized by geometrical unweighted mean as well. The using of common composite index number, which includes the all list of cultural industries, has a great significance to mark the general level of cultural industries availability and demand for people, who live in region. It reflects both the level of development of cultural industries as a social infrastructure element as whole and the degree of market development (commercial and non-commercial goods and services). The both features of this common index number contribute to policymakers in decision making for government support of cultural economics as whole. So the common index number constructed on the base the physical and spacial indices (not the financial items) is a very representative mark to change the financing or to keep the recent situation. The single physical or spacial indices are used for evaluate the result of cultural industries financing in the specialpurpose federal and regional financing project.

For evaluation of regional differentiation in Russian cultural industries we calculate the differentiation coefficient as ratio between the maximum and minimum values of this index. The results are presented in Table 4 (Unified Interdepartmental Statistical Information System, 2015).

Cultural industry	The minimum value of composite index number,%	The maximum value of composite index number,%	Differentiation coefficient	Differentiation coefficient (excluding Moscow and St. Petersburg)
Publishing industry	0,007	53,919 (5,379)	7702,7	768,4
Heritage services	1,460	55,530 (23,640)	38,0	16,2
Film industry	0,066	32,619	494,2	-
Performing arts	8,690	47,270	5,4	-
Institutions for cultural and leisure-time activities	2,500	33,160	13,3	-
All cultural industries:	0,921	20,857 (16,507)	22,6	17,9

Table 4. Differentiation coefficient in Russian cultural industries in 2014

In Table 4 the maximum value of composite index number is presented in two variants: in parentheses it is value of index which concerns non-capital regions, if Moscow or St. Petersburg is in the first place of the rating. The huge differentiation in publishing industry's development is maintained due to the historical conditions, that is generated publishing infrastructure, accumulated human resources. The capital cities, including in sample and being the independent regions due to Russian legislation, accumulate the human resources and develop the infrastructure that the major part of production in the publishing industry takes place in these territories. The gravity movement to the capital cities is very powerful that the differentiation in the level of publishing industry's development between Moscow and Moscow region is 38 times, between St. Petersburg and Leningrad region is 44 times.

The features of performing arts, institutions for cultural and leisure-time activities and heritage services are its step-type placement and the most accessible to consumers living in territories with the different levels of urbanization. So the differentiation is minimum, firstly, and, secondly, the capital cities are not in the lead of rating. For example, Moscow is on the 15th place for heritage services, the 26th place for institutions for cultural and leisure-time activities and the 48th place for performing arts and cinema. Due to using the spacial indicators the value of composite indices has corrected. As far as institutions for cultural and leisure-time activities are concerned, it is phenomenon which was characterized initially low-urbanized spaces with a lot of cultural goods and services. At present time the historical factor is of importance because of the availability of buildings for these institutions. On the level of region there is no principle of substitution for cultural and leisure-time activities and performing arts (or heritage services). For this purpose it needs to describe differentiation with division capital of region and other centers of population.

The common index number reflecting the general degree of cultural industries availability and people demand on cultural goods and services, has a minimum

differentiation between regions due to a regular activities in development and support of each cultural industries. The result of the list of regions on the base of common index number is the clear difference of the list number between the national republics (and autonomous area) and the regions named oblast (that is non-national name). In the first half of this list there are mainly non-national name regions and only five national republics (all are 26). The three last number of this list are the three autonomous area (Chukchi Autonomous area, Nenets Autonomous area and Yamal-Nenets Autonomous area with 0.921% of common index number). So the main explanations of the difference between the type of regions on the base of cultural industries availability and demand on its goods and services are two. First, there is a great significance of historical factors that are the historical development of cultural industries in the regions and the presence of cultural institutions as teams and buildings. The majority of non-national regions (oblasts) have a longer cultural history with the government regulation than the national republics. But there are the exceptions that are Chuvash republic (№5 in list), Bashkortostan republic (№8 in list), Tatarstan republic (№19 in list), Mari-El republic (№21 in list) and Mordovia republic (№40 in list). These regions have a great and successful national cultural policy with the production and distribution of two-language cultural goods and services. Second, there is Russian-languages domination in the cultural economics of other national republics that influence on the point of view of local consumers who prefer the non-Russian-language goods and services.

6. Conclusion

Defined above method of regional differentiation's research is to analyze the regional development of cultural industries, the level of cultural goods and services' accessibility. We calculated the composite index numbers for 2014, but it is possible to evaluate the change in cultural industries of regional by means of its calculation for serial periods. Simplicity of this composite index number method is defined, firstly, by the used statistical data easy to access, secondly, the flexibility of statistical indicators' sets depending on the aim of research.

The government realizing the special-purpose projects of cultural industries' supporting has several instruments for the estimation of results. In reports of these projects there is a little information about the statistical monitoring of results. It consists of the simplest indices and coefficients. So using composite index numbers including qualitative indicators enriches and simplifies the estimation of cultural industries' support.

The main results for the state government consist of the flexibility of statistical indicators choosing for the concrete purposes, which may be changed depending of the cultural policy tasks. The composite index is a set of relative indicators, which are the mark to evaluate the cultural policy results, the state financing results, the effectiveness of investment in cultural industries. These assessments are realized in comparison with regions to each other. In the situation of the restriction of cultural industries financing, there is need to redistribution of state expenditure between regions that the cultural goods and services' availability in according to specific indicators (per capita, per 1 sq. km) tends to less differentiation.

References

der Auwera, S.V. (2014). "Culture for development" and the UNESCO policy on the protection of cultural property during armed conflict. *International Journal of Cultural Policy*, volume 20, issue 3, 245-260.

Baumol, W.J., & Bowen, W.G. (1966). *Performing arts – the economic dilemma: A study of problems common to theatre, opera, music and dance.* New York: Twentieth Century Fund.

Benjamin, W. (2002). *Selected Writings. Vol. 3. 1935-1938.* Cambridge, Massachusetts, London: The Belknap Press of Harvard University Press.

Beugelsdijk, S., & Maseland, R. (2011). *Culture in economics: history, methodological reflections, and contemporary application.* Cambridge: The Press Syndicate of the University of Cambridge.

Booker, G.M. (1978). Museums – the heart of the town – aesthetic pulse of the people of epitome of economic inefficiency. *Journal of Cultural Economics*, 2, 65-71.

Central statistical department of RSFSR. (1958). Cultural construction of Russian Soviet Federative Socialist Republic. The statistical handbook. Moscow: State statistical publishing house.

Doyle, G. (2016). Creative economy and policy. *European Journal of Communication*, 31(1), 31-45.

Eimermacher, K. (1998). *Policy and culture under Lenin and Stalin. 1917-1932.* Moscow: «AIRO-XX».

Flew, T. (2012). Creative industries: culture and policy. London: Sage.

Galloway, S., & Dunlop, S. (2007). A critique of definitions of the cultural and creative industries in public policy. *International Journal of Cultural Policy*, volume 13, issue 1, 17-31.

Hartley, J., Potts, J., Cunningham, S., Flew, T., Keane, M.,& Banks, J. (2013). *Key concepts in creative industries*. London: Sage.

Hesmondhalgh, D. (2007). The cultural industries (2nd ed.). London: Sage.

Horkheimer, M., & Adorno T.W. (2002) *Dialectic of Enlightenment: Philosophical Fragments*. Stanford: Stanford University Press.

KEA. (2006). The economy of culture in Europe. Retrieved from http://www.keanet.eu/ecoculture/executive_summary_en.pdf

Kong, L., & O'Connor, J. (2009). *Creative economies, creative cities: Asian-European Perspective*. New York: Springer.

Lebedev, N.A. (1965). Essay of cinema history. Silent: 1918-1934. Moscow: «Art».

Lysgård, H. (2016). The "actually existing" cultural policy and culture-led strategies of rural places and small towns. *Journal of Rural Studies*, 44, 1-11.

McCann, P. (2008). Agglomeration economics. In C. Carlsson (Ed.), *Handbook of research on cluster theory* (pp. 23-38). Cheltenham: Edward Elgar Publishing.

Muzychuk, V.Y. (2012). *Should the state finance culture?* Moscow: Institute of Economics RAS.

Noonan, D.S. (2003). Contingent valuation and cultural resources: A meta-analytic review of the literature. *Journal of Cultural Economics*, 27, 159-176.

Perloff, H.S. (1979) Using the arts to improve life in the city. *Journal of Cultural Economics*, 3, 1-20.

Potts, J., & Cunningham, S. (2008). Four models of the creative industries. *International Journal of Cultural Policy*, volume 14, issue 3, 233-247.

Pratt, A. (2005). Cultural industries and public policy. *International Journal of Cultural Policy*, volume 11, issue 1, 31-44.

Printing production of USSR for 50 years. Statistical essays. (1967). Moscow: «Kniga».

Scott, A. S. (2000). The cultural economy of cities. London: Sage.

Throsby, D. (2003). Determining the value of cultural goods: how much (or how little) does contingent valuation tell us? *Journal of Cultural Economics*, 27, 275-285.

Throsby, D. (2001). Economics and culture. Cambridge: Cambridge University Press.

Throsby, D. (2010). *The economics of cultural policy*. New York: Cambridge University Press.

Towse, R. (2010). A textbook of cultural economics. New York: Cambridge University Press.

UNCTAD. (2008). Creative economy report. Retrieved from http://unctad.org/en/docs/ditc20082cer_en.pdf

UNDP. (2014). Human Development Report 2014. Sustaining Human Progress: Reducing Vulnerabilities and Buildings Resilience. Retrieved from http://hdr.undp.org/sites/default/files/hdr14-report-en-1.pdf

UNESCO. (2009). The 2009 UNESCO frameworks for cultural statistics (FCS). Montreal: UNESCO-UIS. Retrieved from http://unstats.un.org/unsd/statcom/doc10/BG-FCS-E.pdf

UNESCO. (2014). The UNESCO culture for development indicators: Methodology Manual. Paris: UNESCO. Retrieved from http://en.unesco.org/creativity/sites/creativity/files/cdis_methodology_manual_0.pdf

Unified Interdepartmental Statistical Information System, (2015). Retrieved from http://fedstat.ru/indicators/start.do

Vestheim, G. (2015). Cultural Policy and Democracy: an Introduction. In G. Vestheim (Ed.), Cultural Policy and Democracy (1-12). London, New York: Routledge.