

Public Spending on Public Cultural Service and Accumulation of Cultural Capital—Based on the Empirical Data of 31 Provinces in China

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Abstract

This article analyzes the role of public cultural spending on accumulation of cultural capital with theoretical logical deduction method, and uses the data of 31 provinces in China from 2000 to 2014 for empirical test. The research concludes that the elastic coefficient of public cultural spending to cultural capital stock is 0.297, and it is significant at the 1% significant level, which shows that when each unit of public cultural spending increases, 0.297 unit of cultural capital increases. Public cultural spending's contribution to cultural capital stock is 0.297. If public cultural spending increases, accumulation of cultural capital can be increased.

Key words: Public cultural spending; Accumulation of cultural capital; Culture system; China

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INTRODUCTION

Bourdieu (1985) put forward the concept of cultural capital for the first time, and defined it as the objective form of cultural products and economic capital formed by cultural heritage and accumulation. Throsby (1999) and other scholars introduced the concept of cultural

capital into the economic analysis, and regarded cultural capital as the value accumulation of a form of wealth. Such accumulation caused constant flow of goods and services, thus forming goods with cultural value and economic value. Since then, scholars generally realized that the accumulation of cultural capital could positively promote the economic growth from the existence form of cultural capital (Yuan & Chen, 2006), industrial value chain (Wang & Long, 2009), management innovation (Gao & Zhang, 2004) and other perspectives. Through resident education, residents' cultural consumption and other ways, the accumulation of cultural capital could be increase, thus promoting the economic growth to a certain extent. China attaches great importance to the public cultural service system, and has incorporated it into the 13th Five-Year Plan development planning of China, but the fiscal expenditure on public cultural service accounts for less than 0.2% in GDP and less than 5% in science-education-culture-health expenditure. Will such a small portion of fiscal expenditure on public cultural service affect the accumulation of cultural capital? What effect will it have? Should we further increase the fiscal expenditure on public cultural service? This article will construct the theoretical framework of the role of public cultural spending on the accumulation of cultural capital from the theoretical logic analysis on accumulation of cultural capital of fiscal expenditure on public cultural service, and use the relevant data for empirical test.

1. SCALE OF PUBLIC CULTURAL SPENDING AND ACCUMULATION OF CULTURAL CAPITAL

1.1 Accumulation of Cultural Capital

For individuals, the accumulation of cultural capital refers to the increase of ability, behavioral pattern, language style, education quality, taste, way of life and

other cultural capital obtained from cultural products and cultural services by individual spending time and energy after a long period of time. These cultural capitals or results of economic capital and social capital converted from cultural capital can give the owner a kind of conventional and constant value with legal guarantee in the form of system and others. The main performance is the expansion of the individual value system. Through the accumulation of cultural capital, individual obtains more cultural capital. The cultural production can be completed by cultural capital investment to get new inventions, new books and other cultural achievements. They are directly converted into economic capital in the form of intellectual property rights or cultural capital goods, so that the cultural capital holder can benefit and get added value. The individual with much cultural capital can be in a prominent position in the activities in a particular field, so as to get recognition and respect from others. The individual can get a kind of symbolic power, i.e. the cultural authority. And the power of cultural authority can produce obvious social effect and economic effect. In a field the individual with much cultural capital, i.e. the culture authority, will be imitated and learned from by other members in the field. The type of cultural capital owned by him/her has demonstration and reference effect on other members, so that in the process of accumulation of cultural capital other members rate the type of cultural capital owned by him/her as benchmark. For example, entrepreneur constantly accumulates cultural capital, owns more cultural capital, and forms symbolic right and demonstration effect in terms of new values, which can affect the behaviors of his/her enterprise or other members in the industry.

On the whole, the accumulation of cultural capital can be reflected as the extension of a kind of value system in the overall population from the perspective of embodied cultural capital. For example, the formation of beliefs, religion, ideology, customs, taboos and others can be reflected as the development of cultural industry from the perspective of objective cultural capital, and institutional change and institutional supply in the cultural field from the perspective of institutionalized cultural capital.

1.2 The Way of Accumulation of Cultural Capital

The process of accumulation of cultural capital is synchronous with the holder's life process. The accumulation must be paid by consumption of other forms of capital. So the investment is the essential condition of the accumulation of cultural capital. The accumulation of cultural capital cannot go without investment. From the perspective of capital input, the specialized cultural capital investment includes two aspects. One is the self-investment influenced by the inherent factors, and the other one is the investment in individual by external factors. The cultural capital investment influenced by these external factors includes three ways of accumulation

of cultural capital, which are early family education, institutional education (such as school education) and non-institutional education (such as social influence).

a) Self-investment of Accumulation of Cultural Capital

The accumulation of cultural capital needs huge investment of personal time, energy and others, as well as abandoning of economic capital opportunity cost. Time and energy are individual capital. These individual capitals are invested and economic capital is given up to get the maximum return. The investment in cultural capital is chosen. The specialized accumulation of cultural capital is different from other forms of capital accumulation. It relies on the holders themselves. The accumulation of cultural capital is his/her own activity. The holder changes different forms of capital into his/he own inner resources acquired through investment in the form of acquisition, cultivation and so on. This process needs time. Instant transmission is not possible, which means it cannot be obtained through market rules such as gift, purchasing or exchange. Therefore, personal effort plays an inestimable role in the accumulation of cultural capital. The holder of cultural capital can only continuously increase his/her cultural capital by constantly investing time and energy and accumulating. Such accumulation behavior will continue until the end of the holder's physical ability.

b) The Influence of Early Family Education on Accumulation of Cultural Capital

In the production, exchange, distribution and consumption activity, people always need a specific value system to help to judge and make decision. In fact, since babyhood people begin to acquire specific traditional cultural concept. Everybody establishes the value system consisting of statements such as "worth" and "not worth", "should" and "should not", "fair" and "reasonable" in the blank brain by accepting education and observing in the family, school and society. Access to specific value system provides great convenience to the future life of everyone. It reduces energy and resources consumed by people to make analysis and judgment on everything. A person obtains cultural capital first from the early family education. A person has to accept a lot of lectures about ethics, concept and faith from the family since the childhood. Family plays an important role on the accumulation of cultural capital. As children grow older, and accumulation of cultural capital of physical form converts into the accumulation of cultural capital of institutionalized form, family plays an increasingly important role. The former one is the internal mechanism of cultural capital, and the impact of cultural capital on cultural capital. The latter one is the impact of capital other than cultural capital on the accumulation of cultural capital. They have different characteristics. In the book *Segment*, Bourdieu explained accumulation of cultural capital from early family education: "It has begun from various aspects early when people have not formed the consciousness. It is mainly obtained from the family

experience in the childhood. There is no doubt that family is the original production place of cultural capital and the main reproduction place. It is often carried out through the way of inheritance.” In the family, the main form of accumulation of cultural capital is limited to the accumulation of cultural capital of physical form. The substantial intergenerational transmission of efforts of accumulation of cultural capital caused by early family education is finally realized through family cultural capital, and it can lay the foundation for the future education of successor of cultural capital. Parents play the dominant role of education in the early family education.

In addition, the economic capital of family has profound impact on the early family education and even cultural capital. More economic capital a family has, it is more beneficial to the early accumulation of cultural capital. Economic capital is internalized through the acquisition process of investee with investment method such as hiring of family teacher and purchasing of cultural capital goods, and becomes a kind of cultural resources which can be converted into economic capital in the form of labor service or cultural production. The intergenerational inheritance of economic capital is realized through the private method. In addition, the more economic capital a family has, the more time necessary for daily economic life can be reduced, the more time can be spent on education of the next generation to realize the intergenerational transmission of family cultural capital.

c) The Influence of Institutionalized Education on Accumulation of Cultural Capital

In addition to family, school is the most important place for the production of cultural capital. School provides children with designed collective education with unified content. Thus, the transfer of cultural capital in this aspect must “start from the late period in a systematic and intensive study way” (Bourdieu, 1999). In the current society, the roles of inheritance of family and school on cultural capital are different. In general, family is mainly the place for cultivating rules and basic values, while school is the place for teaching systematic professional knowledge and skills. An individual mainly obtains systemic knowledge, social skills and other cultural capital from school. Such cultural capital existing in the form of knowledge and skills is usually by formally recognized by the society in the form of exam, and fixed and institutionalized by issuing diplomas. Cultural capital of physical form is converted into a kind of cultural capital in the institutionalized form in this way.

Investment in institutionalized education such as school education is an effective way of accumulation of cultural capital. It is mainly embodied in the following aspects. On the one hand, through the school education relevant cultural resources in the society are gathered, so that the educatee converts it into a kind of available resource; on the other hand, school education allows the educatee to have special time and energy for accumulation

of cultural capital. Through the school education, the educatee realizes accumulation of cultural capital, which actually realizes the intergenerational transmission of social cultural capital, leading to the inheritance of social culture; and school education is the reproduction of social structure in the realization of structural differences in the accumulation of cultural capital.

School education can strengthen the acquired labor of cultural capital. The combination of education investment and practice of the educatee improves the efficiency and speed of accumulation of cultural capital. Cultural capital is shown in front of people in the form of ability, temperament, education quality, life style and so on. If an individual has much cultural capital and is fully recognized in the society, he/she can get more social and economic returns.

d) The Influence of Non-institutionalized Education on Accumulation of Cultural Capital

The non-institutionalized education mainly refers to the social influence other than family education and school education. The most important is the influence on community, businesses and other public communication spaces. Cultural capital investment is not only necessary for the individuals, but also indispensable for a society. For a long time, religion and various philosophies, doctrines and theories play the main role on the cultural capital investment. To promote economic growth, the specific method of cultural capital investment is education and obtaining of new ideas from the outside world. And the government’s investment and influence in this aspect of value and ideology is also very important, because the accumulation of cultural capital is closely related to free thinking and extensive exchange. If the citizens of a country lose the power of independent thinking and opportunity of idea exchange, cultural capital will only shrink without accumulation. If a country can provide policy support to the economic growth, the most important is to realize human rights, freedom of thought and expression and communication. Hayek said: “Unfortunately, many emerging countries lack a kind of enterprise spirit; of course, this is not the unchangeable nature of individual resident, but the consequences of many repressive measures imposed by the current practices and system on these individuals.” The system suppressing generation and transmission of ideas fundamentally constrains economic growth. For a nation’s economic growth, the government’s policy is more important than cultural quality. The government’s policy can promote or hinder the accumulation of cultural capital, but the determinant promoting the continuous economic growth is the cultural capital itself.

Multi-cultural communication is also an important way to promote the expansion of cultural capital. If cultural capital is only accumulated within a country or region, it will take a long time, and it is likely to stop. Multi-cultural communication is the quickest method to realize the accumulation of cultural capital. The history of

world economic development also proves that closed door policy is gradually replaced by opening to the outside world. Wang Dingding's research conclusion is the same. He said: "A possible way is as follows. Multi-cultural communication and competition will more easily promote the people's cultural change. In order to successfully transform the "concept" into "productivity", ideas must have some sort of "intersubjectivity". Social members involved in the production are willing to share and explain the idea.

1.3 Scale of Public Cultural Spending and Accumulation of Cultural Capital

Public cultural spending is fiscal expenditure on public cultural services. Finally it forms the public cultural services. According to the theory of public cultural services above, public cultural services include five categories. First, provision of public cultural facilities and products mainly includes the construction of museum, public library, cultural center, youth activity center and elderly activity center, planning and construction of cinema and theater, organization of public welfare performance, network infrastructure, etc.; second, the development and management of mass media includes standards for newspapers, television, Internet, audio and video products and other medias; third, the protection of cultural heritage includes the protection of material and non-material cultural heritage; fourth, the popularization of scientific knowledge includes knowledge spreading of natural science and social science; fifth, the advocating of civilized behavior and healthy fashion includes education of citizen quality, public code of conduct, ideological and moral education, etc. The provision of these aspects of public services is good for the accumulation of cultural capital. The larger the scale of public cultural spending is, the more accumulation of cultural capital is.

a) Cultural exchange in the public cultural space formed by the public culture spending, mutual penetration of value systems, and the influence on the value system of the subject of early family education (parents), subject of school education (teachers) and subject of self education (individual), thus influencing the accumulation of cultural capital of related individuals

The accumulation of specialized cultural capital is often formed in the exchange process, and such exchange needs a certain space. Through cultural spending, the government constructs public cultural space in the public culture service system, and creates the supply of a large number of cultural consumption, so that the national culture survives and continues, a specific carrier is provided to form positive value system, and every citizen can directly enjoy. The provision of public cultural facilities of public cultural services and mass media brings people space for public cultural study and cultural exchange, and ensures the basic cultural rights and interests of people, such as watching TV, listening to

the radio, reading books and newspapers, public cultural appreciation, and participation in mass cultural activities. In this process, scientific knowledge is popularizes for the subject of early family education (parents), subject of school education (teachers) and subject of self-education (individual), the citizen quality education is improved, and public code of conduct, ideological and moral education and understanding of value is increased. In addition, on the basis of public cultural facilities provided by the government, people participate in cultural activities, promote the cultural integration and identity in the process of cultural exchanges, and improve the spiritual satisfaction. "Discussion in the reading room, theatre, museum and concert hall" can gradually form a kind of public cultural consciousness. "As concert hall and theatre, the exhibition hall makes amateur judgment about art institutionalized. The discussion becomes a means to master art." (Habermas, 1999) At the same time, the positive value atmosphere formed by public cultural service can gradually establish the space and mechanism for cultural creation, and promote people to carry out cultural creation. More cultural products are produced, culture industry becomes more flourishing, and objective cultural capitals are further accumulated.

Though institutionalized education can explain the relationship between education time and wage income, it can't explain a phenomenon existing both in developed countries and developing countries. In reality most of the college graduates do not do what they have learned. Even if his/her major is consistent with the work content, only 20%-30% of professional knowledge can be used. Our explanation is that the enterprises value the cultural capital of graduates more, namely following and understanding of social rules through university study. This cultural capital not only makes them easier to accept management, but also is good for their competent development. Research on China's regional development difference suggests that knowledge and skills formed by institutionalized education embodied in education and health level is the important condition leading to the development gap. But the research ignores the fact that in Wenzhou, Shenzhen, Guangzhou and other economically developed areas education is not the most valued and developed. On the contrary, a large number of talents in the coastal developed areas come from inland. This is mainly because cultural capital in the coastal developed areas attracts human capital and material capital of inland. According to the statistics of scholars, in 1998 among 50 billionaires in China, 70% of them were peasants, and 70% only graduated from primary school. We can't say that they succeed because of their accumulation of institutional cultural capital or economic capital (They have little start-up capital). They have little accumulation of cultural capital formed by their early family education. Therefore, the non-institutionalized approach for accumulation of cultural capital is the reason. People communicate

in the formal or informal public cultural space, so that people's value systems are extended, cultural capital is accumulated, and the unique innovation concept is formed. So to a certain extent, the government's creation of space for public cultural exchange can lead to the accumulation of cultural capital.

b) The public cultural service system provides citizens with uninterrupted opportunities of social education and training, and can also be a part of national cultural capital development strategy.

Through the "consumption" of public cultural products, citizens have the opportunity of "lifelong learning", spiritual enjoyment and ability formed by cultivation of knowledge. Their positive externality promotes them to have appropriate behaviors good for the development of the society. Social harmony, economic progress and the development of civilization can benefit from people's improvement of cultural capital.

c) Public cultural spending's establishment and supervision of the culture system provides the innovative production of cultural product with institutional foundation and conditions, and brings accumulation of objective and institutionalized cultural capital.

Culture system is the system about the ownership, configuration and allocation of culture resources. It mainly refers to cultural inspection, cultural market and intellectual property rights system. The state and market decide production, allocation and distribution of cultural resources together. The culture system in the pure culture field is mainly reflected in official language, cultural examination, legal system, patent system, city custom, religion secularization and commercialization, network culture, cultural diversity, cultural industrialization, cultural heritage protection, cultural globalization and other aspects; the culture system in the field of cultural facilities is mainly reflected in radio, TV and movie facilities, telephone and communication facilities, publishing facilities, education and science and technology facilities, system of cultural facilities, network facilities, marketization and other aspects. The establishment and improvement of culture system provides institutional guarantee to the development of cultural industry, and is good for the accumulation of objective cultural capital. At the same time, the construction of the culture system itself is the accumulation of institutionalized cultural capital. So through government spending, the overall culture system and policy environment good for cultural innovation is constructed. The innovation is encouraged, and the risks are reduced or eliminated as many as possible. It is good for the accumulation of cultural capital.

2. EMPIRICAL ANALYSIS

2.1 Theoretical Model and Data Description

a) Theoretical Model

Seen from the formation method of accumulation of cultural capital discussed about above, cultural capital mainly comes from public cultural spending, public education spending, family education spending and family culture spending. Thus, these aspects are important input variables for the investigation of accumulation of cultural capital. The cultural capital stock formed through accumulation of cultural capital is the output variable. These factors and cultural capital stock have obvious relationship between input and output, so this model adopts CD production function for following settings.

$$K_c = A G_c^{\beta_1} C_{cm}^{\beta_2} M^{\beta_3} \quad (1)$$

In the above function, K_c is the cultural capital stock, G_c is value of public cultural spending, M is the fiscal expenditure on education, and C_{cm} is private culture education and entertainment consumption spending value (according to the operability of index, this is the agent index of family education expenditure and family cultural expenditure). Parameters $A > 0$ is a constant.

The model is subject to linear processing. The logarithm is taken on both sides of the equation. We can obtain:

$$\ln K_c = \alpha + \beta_1 \ln G_c + \beta_2 \ln C_{cm} + \beta_3 \ln M + \varepsilon \quad (2)$$

In which, α is the constant, and ε is the random disturbance term.

b) Data Description

The empirical analysis of the model adopts the balance panel data from 2000 to 2014 of 31 provinces (cities, districts) in China. Among them, the data of public cultural spending (G_c) is derived from index of expenses of public cultural undertakings in *Statistical Yearbook of Cultural Relics in China* (2001-2015) of different regions; data of financial education investment (M) and private culture education entertainment spending (C_{cm}) comes from relevant data under statistical indicators of finance and people's life of different provinces in China in *Statistical Yearbook of Cultural Relics in China* (2001-2015). Because cultural capital data (K_c) is actually data of cultural capital per capita. Therefore, G_c , M and C_{cm} are the original data divided by per capita data at the end of the year.

The data of cultural capital stock (K_c) is mainly based on calculation results of quantitative study of cultural capital of Throsby (1999) and Chinese cultural capital indexes of Jin Yu and other scholars (Jin & Wu, 2009). Cultural capital indicators include solid cultural capital (cultural heritage, culture collection, key cultural relic), cultural capital of product (cultural industry, cultural facilities, cultural employment), cultural capital of body (cultural education, cultural consumption, cultural exchange), and institutionalized cultural capital (cultural support, cultural management, cultural audit). The panel data from 2000 to 2014 of 31 provinces (municipalities

directly under the central government, national autonomous regions) in China is summarized. The factor analysis method is used to estimate the cultural capital value of different provinces in the 15 years.

2.2 Regression Analysis and Model Validation

This model adopts Pooled Data module of EVIEWS6.0 as the analysis tool. Through EVIEWS6.0 the section unit number $N=31$ and the balance panel object Pool of $T=15$ is established. The multiple regression equation is established.

$$1_n K_{cij} = \alpha_{ij} + \beta_1 \ell_n G_{cij} + \beta_2 \ell_n C_{cmij} + \beta_3 \ell_n M_{ij} + \varepsilon \quad (3)$$

K_{cij} is the cultural capital stock of the i^{th} year in the j^{th} province, G_{cij} is the public cultural spending of the i^{th} year in the j^{th} province, C_{cmij} is the private culture education entertainment spending of the i^{th} year in the j^{th} province, and M_{ij} is the public education expenditure of the i^{th} year in the j^{th} province. The above formula is a variable coefficient regression model. In which, $\ln G_{cij}$ and $\ln C_{cmij}$ are fixed coefficients, and $\ln M_{ij}$ is the variable coefficient. This model assumes that on the cross section members there is influence on individual and structural change. The individual influence can be described with the intercept term of change (α_{ij}) ($i=1, 2, \dots, 15$; $j=1, 2, \dots, 31$). $T \times n$ -dimension coefficient vector (β) is allowed to change according to section member, so as to show structural changes among cross section members.

The model estimation uses the least square method. The effect form of cross section is FIXED effect. The effect form used by the period does not include intercept (None). Weights in the model estimate are calculated with the Cross-section Weights (GLS) method. Because Cross-section Weights method makes the assumption of cross section heteroscedasticity, generalized least squares estimation is made for the model, so in the test section of the model whether there is any heteroscedasticity will not be considered.

Output results of EVIEWS consist of four parts. Part 1 is the basic state of basic information and sample of estimate setting, period and other information. Part 2 is the result of the interpreted variable parameter estimation. In which, the constant term α_{ij} and parameters before $\ln G_{cij}$ and $\ln C_{cmij}$ are constant coefficients of all sections. P value of t test is less than 0.001. Under the significant condition of 1%, t test is passed, which shows that parameter fitting is very good. $\ln M_{ij}$ is variable coefficient variable. Different cross sections have different estimate parameters and t test results. Part 3 is statistics of general estimated effect of the evaluation model. In which, the multiple correlation coefficient $R^2=0.933774$, and the revised multiple correlation coefficient $R^2=0.916814$, which shows that the overall goodness of fit of the model is high. D-W statistic is 1.769874. Under the significant condition of 1%, $dl < D-W < 4-d_u$. The model passes D-W

test, and there is no correlation. Part 4 is the statistic of overall estimate effect of unweighted evaluation model.

In addition, fixed effect test is conducted for the model. The null hypothesis of the test is fixed effect. F statistic of fixed effect of cross section is 6.084111, and accompanying probability $P=0.0000$. The null hypothesis is rejected under 1% significant condition. Therefore, it is reasonable to consider the fixed effect of the model.

CONCLUSION

Through parameter estimation and statistic test of the model, we can obtain the following results. The explained variable cultural capital stock (K_{cij}), explanatory variable of public cultural spending (G_{cij}), private culture education entertainment spending (C_{cmij}) and fiscal expenditure on education have strong multivariate correlation. For all the section units, the parameters of explanatory variable G_{cij} and C_{cmij} are positive. The positive influence of public cultural spending on cultural capital stock discussed about in this paper is also verified. The elastic coefficient of public cultural spending to cultural capital is 0.292 and it is significant at the 1% significant level, which shows that when each unit of public cultural spending increases, 0.297 unit of cultural capital increases. Public cultural spending's contribution to cultural capital stock is 0.297. So the government should further increase the fiscal expenditure on public cultural services.

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