

A Qualitative Study on the Value of Governmental Economic Service

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Abstract—The function and role of government in economic development always attract our attentions. This paper mainly tries to establish GM(1, N) model with the insufficient index system for economic development to define the economic service value of government, which gets ready for the next stage of measuring it. We find that the government scale of China is proportionate under the assumption targeting on economic development, and it improve the economic development in China. However there is a problem on the governmental consumption and it retards the economic development in China. Eventually we propose Chinese government should first dig out the Service Value from itself and see government as a node while the market functions.

Index Terms—GM(1, n) model, governmental function, governmental service value

I. INTRODUCTION

The role of government has been at the center of numerous controversies arising from the fact that it is always changing during different periods of time and historical background. In terms of dialectical thinking, government is a key node in the process of a dynamic system. Academia has tried to describe the government's role in economic development from a variety of degree. Theories regarding the government (Feng Tao, Yuan Wei 2008) can be summarized as three factions; one theory is the classical governmental theory of contract, including Locke's theory of limited government, Montesquieu's theory of separation of powers. The other theory is the theory of all-round government of which the representative is Rousseau. The third theory is the theory of modern government, of which main contents include a series of theories about the function of the government and the governmental act doctrine proposed by a number of scholars on the basis of the classical theory of contract after the Great Depression. The essence of Locke's theory, the author considers, lies in The Second Treatise of Government. In The Second Treatise of Government,

Locke put forward that all the sovereignty is not based on the authority of God, but on the people's consent, and further pointed out that "All nature is freedom, in addition to his own will, any thing can not subject him to any secular rights." It was this brilliant exposition that called the cornerstone of modern political liberalism. Moreover, Locke introduced the social contract theory to demonstrate this viewpoint. He called the history of mankind before the emergence of government as the natural state, after which the periods are called as the social state. Locke believes that if there is no elder to appeal to help, two people can easily enter a state of war in the natural state. With the development of society and the high frequency of wars, people conclude leases, establish governments and transfer part of their rights to the government in order to solve the various problems arising in the state of wars. Then the emergence of government represented that people have stepped into the social state. However, people in the social state enjoy liberal rights within the boundary of national legal restraints that established through people's consent. And this is necessarily lead to a government with limited right. Montesquieu maintained the separation of powers. He advocated that administrative power, legislative power and judicial powers should be held respectively by independent authority so as to limit the unlimited expansion of the governmental capacity and to protect civil liberties simultaneously in this process. Compared to the Rousseau's thinking, Locke only emphasized the need to transfer people's own part of right to the state and the state can not go beyond the scope of the right that people transferred. However, Rousseau believes that each individual must be allowed to transfer all the rights to the collective, which means everyone will be entirely put himself under the general will after this dedication. Although Rousseau maintains that personal freedom would not be violated in this mode, his idea can only deduced to a theory of all-round government. In the theory of modern government, the classical liberalism economist Hayek's theory of knowledge has made

outstanding contributions to the relationship between the modern government and the market, and the theory of knowledge is built on the two following negative propositions: first, no one can fully grasp all knowledge that dispersed in other actors and used by the spontaneous order; secondly, no one can fully know the knowledge he used to direct his action. Just based on this, it is bound to conclude that the decentralized decision-making by the public, in other words, the market mechanism, is necessarily more efficient than a planned economic system that all decision-making power concentrated in the hands of the government. Hayek maintains that the government liking other communities in society, is simply a kind of social organization, rather than the dominator of society. And government's primary responsibility is to provide fundamental protection to the self-growth of the society. The only difference between the government and general organization is that the government has compulsory rights while other organization in general should not have mandatory rights.

In recent years, more and more debates have focused on the function orientation of government. Through analyzing the evolution of domestic and international governmental functions, Liu Zhisheng (2008) holds that the scope of governmental economic function and orientation is not a simple positive or negative choice between the government and the market, but rather a choice on certain degree, and the key of the choice lies in how to make government and the market to help overcome the disadvantages of the other side, and then to find a balance point and continually approach it. Based on this, he puts forward nine items of contents of Chinese government's economic functions and located them in the management of state-owned asset, market supervision, macro regulation and control and the provision of public goods. Zhu Guanglei, Xue Liqiang (2008) propose to establish a service-oriented government and put forward a number of recommendations in this regard. Tong Wei (2007), Zhang Wan-ming (2008) respectively express the concept of service-oriented government. The former advocated market test will increase the governmental supply of public services and improve its efficiency. The latter emphasized the boundary of the governmental responsibility and the corresponding institutional arrangements. Feng Tao, Yuan Wei (2008) in terms of the structure of the modern market economic system, built a theory paradigm on the "governmental property right" and put forward that the reform of property rights can help to address the problems of dislocation, offside and the absence of governmental functions. Other economists also study the government's actions but doing more research on the theories of controlled economy, such as Zhi Caoyi (1992), Shi Pubo(1999), Yu Hui (1997)and Wang Junhao (1999,2001).

Summing up the above, we can see that most scholars have focused their study on the function and orientation of government and confronted a lack of adequate quantitative support. In fact, we can try to quantify the

government's actions, defined them as the value of government services. And this definition is undoubtedly based on two bases: 1) service-oriented government; 2) value generated by the government's actions can be accounted for and measured. It is probably that these two criteria are controversial; we will elaborate it in another article. The accounting and definition of the government value can generate a new evaluation system of government, which is different from the existing governmental performance appraisal. The new one is not only evaluation of efficiency, but measuring more actual quantitative effect of governmental factors in the course of economic development. It is essential make the qualitative analysis clear before the realization of the quantitative measurement come, so we will clearly see the emergence of "the government's actions border" in different national conditions. Within the border, therefore, we can make policy recommendations for the improvement of efficiency of government economic action, and provide specific targets for guidance. Moreover, the definition and measurement of governmental services value can help us know the exact influences of the government actions upon the increase of GDP. While GDP is an important indicator for measuring the economic development, it is still an open question that how much increase of a country's GDP each year is directly created by government and how much is indirectly promoted by it. In addition, the definition and measurement of governmental services value can help to find out the links within a country's economic development, identify the proportional contribution of government's actions to the GDP, and simultaneously complement the system of GDP, namely to measure the "red GDP". This article is just based on this aim and making the initial attempt to conduct a qualitative measure on the value of government services, to find out which governmental economic action is positive or negative.

II. RESEARCH THOUGHT AND ECONOMETRIC METHODS

This article focused on the role of governmental factors played in economic development under the guidance of concept of scientific development, and then dialysis the intrinsic value of governmental services. First of all, we use quantitative methods to calculate the first round of the impact on economic development arising from the different efficiency of government's actions and take it as a variable. This variable will naturally join other variables and form a system that influences the developmental behavior variable. This is a multi-factor system, and there is an essential requirement for the synergy of its multi-factor to achieve the overall development of the situation. However, as part of its internal dynamic process, other variables will be subject to the potential impact of governmental factors. For example, when a country's political system is imperfect, the production factor of political system will continuously improve. If technological progress and human capital increase at a relative slow growth rate, the more the political system developed, the faster the capital

accumulation and economic growth increased, and at this time economic growth will largely depend on the development of the political system (Li Fu-Qiang, Dong Zhiqing, Wang Linhui 2008). During a country's operation of the economy, especially in the process of reform and development, a country's output of political system is one of the key nodes and an important guarantee for the government's matching with the market.

Considering the non-precision in the data processing of previous methods of classical mathematical statistics, this article has avoided using the usual mathematical methods in the course of the study, instead, used GM (1, N) model in gray system to process the data.

The gray system 1) can make quantitative measurement on the uncertain issues which may be a lack of experience, information and complete data and indicators; 2) can easily do the non-dimensional processing and the generation along with the processing for data of different dimension; 3) can consider and evaluate things from multi-angle, therefore, this study can use the system to make quantitative analysis on the overall non-measurement data and indicators that affect the economic development with a view to arrive at a relatively more objective conclusion, and thus find a quantitative method to measure the value of government services.

Further considering the fact that the economic development is a dynamic process, and that there are always many interactions between economic variables, thus we must notice the possible existence of multicollinearity among each index when we apply the GM (1, N) model of gray theory. Additionally, in the factor space of GM (1, N) model, when $n > N + 1$ (the data number of all variables is larger than the total number of variables plus 1), the identification of parameter is carried out under the least-squares rules. Therefore, the multicollinearity (although weak) may have an impact on the calculation results. Thus, when making residual analysis on the modeling results, we will also use the SPSS statistical analysis software for data analysis so as to assist verifying the accuracy and reliability of modeling results. And in correlation analysis of SPSS, we use the most commonly used spearman rank correlation analysis, which is a kind of non-parametric analysis.

III. INDICATORS SELECTED

First of all, building the indicator system reflected China's economic development under the guidance of the concept of scientific development; the system should include the first round of governmental factors that have an impact on economy. Since the academic community has made a relative mature elaboration about the connotation of economic development under the concept of scientific development, we will not repeat here. Following the principles of completeness, comparability, representativeness and weak relevance, we measure China's economic development from five respects and select relevant indicators of 30 provinces and

autonomous regions of mainland China (excluding Tibet) in 2007 of landscape orientation. The reason for choosing the various provinces and cities as study object is decided by the top-down characteristics of government, in other words, as local governments is a true and insurmountable main body that implements the specific governmental action, the choice, at a certain extent, can eliminate the impairment of behavior efficiency from the central government to local government. However, the deficiency is its narrowness of choosing one year as the entire period of study, which has a certain degree of one-sidedness. We try to use GDP per capita as a behavior variable x_1 so as to study the contribution of each factor made to it.

A. *The economic structure*

Economic structure can be measured in industrial structure, urban and rural structure, which can better reflect the economic realities of China. (1) Sub-indicators for industrial structure: the proportion of tertiary industry output in the GDP; (2) sub-indicators for urban and rural structure: the ratio of urban and rural consumption levels. At present, the internal consumption structure of China still exists the problem of not fully developed rural consumption, especially in the current background of global financial crisis, the ratio of urban and rural consumption to which should be paid more attention.

B. *The environment of economic development*

Here refers to the basic conditions for economic development. Sub-indicators include: government efficiency, scientific and technological situation. The corresponding reaction indicators are: (1) government efficiency: the rule violation in the audit of each province, the proportion of governmental consumption in the share of GDP, the ratio of the employment in public administration in the total employment population; (2) science and technology situation: the admissibility of the number of patent applications per capita. Here the proportion of governmental consumption in the share of GDP refers to the proportion of net expenditure created by government departments in providing public services for the whole community and free and low price goods and services to the residents and households in the share of GDP. Here the definition of employment in public administration is broad as it includes the employment of social organization.

C. *Environmental conditions of resources*

Here we selected each region's energy consumption and the situation of environmental pollution and accidents as the sub-indicators. Corresponding sub-indicator is: (1) energy consumption: regional unit energy consumption in the regional total output value; (2) the situation of environmental pollution and accidents: the number of environmental pollution and accidents. The selection of indicators here takes greater account of the current and future development direction of China under the guidance of the concept of scientific development, and

adherence to the sustainable development which means developing economy while minimizing the impairment to the welfare of future generations.

D. The level of social development

We establish this indicator system from two relatively broad perspectives: the people's living standards and social security. Corresponding sub-indicators are: (1) people's living standards: cities and towns per capita disposable income, rural per capita purely income; (2) social security: the ratio of people participated in basic endowment insurance. However, there is a great deal of indicators of the social security number. Due to the fact that the ratio of people participated in basic endowment insurance has relatively great impact on economic development we only choose it as a substituted factor. The criteria of our selection are better measurement on the role of reservoir of economic development.

The rule violation in the audit of each province, the proportion of governmental consumption in the share of GDP, the ratio of the employment in public administration in the total employment population, the admissibility of the number of patent applications per million people, and the ratio of people participated in basic endowment insurance have no direct data, we obtain it after the calculation of available data. For example, the rule violation in the audit of each province

is the sum of the cases that transferred to the judicial organizations, the discipline inspection and supervision commission and relevant departments.

Most of the data come from "China Statistical Yearbook 2008", part of them come from the Web site of government, a case in point is the rule violation in the audit of each province comes from the web site of National Audit Office.

IV. POSITIVE ANALYSES

A. Modeling of GM (1, N)

GM (1, N), a sign of multidimensional grey model, includes a behavior variable x_1 , N-1 factor variable x_i . The 1 in the round bracket represents 1 order and the N represents N Variable. Compared to GM(1, 1), GM(1, N) is an analysis model which can make systematic, global and dynamic analysis on multifactor system. The key of modeling lies in the structure of data matrix B. If the numerical difference of some rows (or some lines) of B is too large or too close, the over large condition number will appear in the matrix, and leads to the solution drift. Hence we usually do a data preprocessing in advance that initialized the sequence space of original GM (1, N), and then do an AGO-1, its results are as follows.

TABLE I. INITIALIZATION RESULTS

Date Sequence	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
$x_1^{(1)}(k)$	1	1.7924	2.1339	2.425	2.8613	3.3033	3.6363	3.9538	5.094	5.6769	6.3197	6.5266	6.9717	7.1887	7.6665
$x_2^{(1)}(k)$	1	1.5617	2.0333	2.5229	3.018	3.5256	4.0568	4.5381	5.2676	5.7863	6.3508	6.8917	7.4465	7.8889	8.3521
$x_3^{(1)}(k)$	1	2.1739	3.5652	4.913	6.3478	7.6521	8.8695	10.0869	11.0869	12.0869	13.1739	14.5652	15.7391	17.0434	18.3912
$x_4^{(1)}(k)$	1	2.25	3.25	26.75	31	33.75	35.5	46.25	46.5	62.5	76	80.75	87.25	102	124.75
$x_5^{(1)}(k)$	1	1.6842	2.34	2.9125	3.6168	4.0983	4.7637	5.5578	6.1441	6.7642	7.3349	7.804	8.3674	8.9885	9.6402
$x_6^{(1)}(k)$	1	1.595	2.12	2.79	3.445	4	4.54	5.065	5.55	5.93	6.43	6.79	7.19	7.63	8.16
$x_7^{(1)}(k)$	1	1.7278	1.786	1.8365	1.8798	2.1138	2.2128	2.3102	3.62	4.2215	4.9236	4.9746	5.138	5.1798	5.4375
$x_8^{(1)}(k)$	1	2.423	5.0042	8.8655	12.0938	14.4804	16.6093	18.5057	19.6724	20.8671	22.0268	23.6038	24.8293	26.2047	27.8504
$x_9^{(1)}(k)$	1	1	10	12	13	39	42	44	80	98	157	178	190	225	239
$x_{10}^{(1)}(k)$	1	1.7439	2.2755	2.8014	3.3643	3.9237	4.437	4.9029	5.9772	6.722	7.6576	8.1794	8.8846	9.4054	10.0541
$x_{11}^{(1)}(k)$	1	1.7426	2.1974	2.5857	3.0045	3.5101	3.9541	4.3918	5.4665	6.1615	7.037	7.4137	7.9928	8.4213	8.9494
$x_{12}^{(1)}(k)$	1	1.7561	2.0244	2.3903	2.7562	3.4879	3.9269	4.4635	5.683	6.1952	6.7562	6.9757	7.3172	7.5855	7.9757
Date Sequence	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
$x_1^{(1)}(k)$	7.9416	8.22	8.469	9.0386	9.2543	9.5044	9.7563	9.9778	10.0966	10.2777	10.5698	10.8208	10.9986	11.2435	11.4952
$x_2^{(1)}(k)$	8.7696	9.3535	9.9055	10.5061	11.0387	11.6032	12.1913	12.6975	13.2773	13.8196	14.3036	14.8362	15.3355	15.8653	16.3563
$x_3^{(1)}(k)$	19.8695	21.2608	22.6086	24.3043	25.7391	26.9565	28.6087	30	32.2174	33.7391	35.3478	37.3043	38.8695	40.4347	42.1304
$x_4^{(1)}(k)$	129.75	133.5	141	144.25	149	149.5	164.25	178	181.25	192.25	194.25	194.75	195.25	199.75	209
$x_5^{(1)}(k)$	10.2535	10.8929	11.5757	12.0608	12.7661	13.4659	14.1542	14.7583	15.6356	16.4653	16.8827	17.728	19.1051	20.0053	21.1971
$x_6^{(1)}(k)$	8.675	9.135	9.65	10.115	10.495	11.005	11.39	11.795	12.255	12.72	13.295	13.955	14.645	15.26	16.005
$x_7^{(1)}(k)$	5.5195	5.6767	5.7679	6.3267	6.3643	6.403	6.5257	6.6473	6.6849	6.7205	6.8375	6.8689	6.905	6.9756	7.0313

$x_8^{(1)}(k)$	29.6501	31.6151	33.454	34.5002	36.1136	37.3713	39.2382	41.2438	45.5323	47.8306	49.7368	52.6906	56.9805	62.5183	65.3572
$x_9^{(1)}(k)$	246	327	472	492	581	584	594	601	624	725	767	839	840	840	842
$x_{10}^{(1)}(k)$	10.576	11.0984	11.6575	12.4624	13.0172	13.5173	14.0899	14.5946	15.0802	15.603	16.0925	16.5478	17.0151	17.5089	17.9779
$x_{11}^{(1)}(k)$	9.3575	9.7809	10.1945	10.7903	11.1318	11.5334	11.9051	12.2808	12.5323	12.8113	13.0915	13.3382	13.6225	13.9595	14.2967
$x_{12}^{(1)}(k)$	8.2196	8.6098	8.9025	9.4879	9.6586	10.0732	10.3659	10.6342	10.7562	10.9025	11.1708	11.3659	11.6586	11.9757	12.3659

Observing that the irregular sequence in the table has become a regular sequence, we begin to construct matrix B.

$$B = \begin{bmatrix} -z_1^{(1)}(2) & x_2^{(1)}(2) & \dots & x_{20}^{(1)}(2) \\ -z_1^{(1)}(3) & x_2^{(1)}(3) & \dots & x_{20}^{(1)}(3) \\ \dots & \dots & \dots & \dots \\ -z_1^{(1)}(20) & x_2^{(1)}(20) & \dots & x_{20}^{(1)}(20) \end{bmatrix}$$

The mean of $x^{(1)}$ is:

$$z_1^{(1)}(k) = \frac{1}{2}(x_1^{(1)}(k) + x_1^{(1)}(k-1))$$

$$(k \in K = 2, 3, \dots, 30)$$

$z_1^{(1)}(k) = (1.3962, 1.96315, 2.2795, 2.64315, 3.0823, 3.4698, 3.79505, 4.5239, 5.38545, 5.9983, 6.42315, 6.74915, 7.0802, 7.4276, 7.80405, 8.0808, 8.3445, 8.7538, 9.14645, 9.37935, 9.63035, 9.86705, 10.0372, 10.18715, 10.42375, 10.6953, 10.9097, 11.12105, 11.36935)$

Here the identified parameter $\hat{a} = (a, b_2, b_3, \dots, b_{20})^T = (B^T B)^{-1} B^T Y_N$

of which, $Y_N = [x_1^{(0)}(2), x_1^{(0)}(3), \dots, x_1^{(0)}(30)]^T$

$Y_N = (0.7924, 0.3415, 0.2911, 0.4363, 0.442, 0.333, 0.3175, 1.1402, 0.5829, 0.6428, 0.2069, 0.4451, 0.217, 0.4778, 0.2751, 0.2784, 0.249, 0.5696, 0.2157, 0.2501, 0.2519, 0.2215, 0.1188, 0.1811, 0.2921, 0.251, 0.1778, 0.2449, 0.2517) T$

After calculation, $\hat{a} = (a, b_2, b_3, \dots, b_{20})^T = (B^T B)^{-1} B^T Y_N = (1.941168, 0.28505, -0.03675, -0.00172, -0.32422, 0.879043, 0.665898, -0.01672, -0.00086, 0.672344, 0.173983, 0.348143)$

Then the grey differential equation of GM(1, N) is:

$$\hat{x}_1^{(0)}(k) = 0.28505 x_2^{(1)}(k) - 0.03675 x_3^{(1)}(k) - 0.00172 x_4^{(1)}(k) - 0.32422 x_5^{(1)}(k) + 0.879043 x_6^{(1)}(k) + 0.665898 x_7^{(1)}(k) - 0.01672 x_8^{(1)}(k) - 0.00086 x_9^{(1)}(k) - 0.672344 x_{10}^{(1)}(k) + 0.173983 x_{11}^{(1)}(k) + 0.348143 x_{12}^{(1)}(k) - 1.941168 z_1^{(1)}(k)$$

Then we verify the exactitude of model. We make

residual analysis first. We put the value of $x_i^{(1)}(k)$ ($i=2,3,\dots,12; k=2, 3,\dots,30$) into the grey differential equation of GM(1, N), then we get the analog value (see table 2). Using the actual value of initialized data subtract the analog value, we can get the absolute residual. Then the actual value of initialized data divided by the absolute value of the absolute residual, we get relative residual. Finally, we calculated the mean of relative residuals, that is, an average relative residual, further using 1 subtract the average relative residual, we get the exactitude of model.

TABLE II. RESIDUAL ANALYSIS

No.	Analogue Value $\hat{x}_i^{(0)}(k)$	Initialized Data $x_i^{(0)}(k)$	Absolute Residual $\varepsilon(k) = x_i^{(0)}(k) - \hat{x}_i^{(0)}(k)$	Relative Residual $\Delta_k = \frac{ \varepsilon(k) }{x_i^{(0)}(k)}$
2	0.8131			2.61%
3	0.2919	0.7924	0.0207	14.52%
4	0.3677	0.3415	0.0496	26.31%
5	0.3607	0.2911	-0.0766	17.33%
6	0.4549	0.4363	0.0756	2.92%
7	0.3654	0.4420	-0.0129	9.73%
8	0.3454	0.3330	-0.0324	8.79%
9	1.0772	0.3175	-0.0279	5.53%
10	0.4907	1.1402	0.063	15.82%
11	0.7055	0.5829	0.0922	9.75%
12	0.314	0.6428	-0.0627	51.76%
13	0.4094	0.2069	-0.1071	8.02%
14	0.2456	0.4451	0.0357	13.18%
15	0.4011	0.2170	-0.0286	16.05%
16	0.2676	0.4778	0.0767	2.73%
17	0.2662	0.2751	0.0075	4.38%
18	0.2207	0.2784	0.0122	11.37%
19	0.6246	0.2490	0.0283	9.66%
20	0.1683	0.5696	-0.055	21.97%
21	0.2837	0.2157	0.0474	13.43%
22	0.2515	0.2501	-0.0336	0.16%

23	0.2726	0.2519	0.0004	23.07%
24	0.1562	0.2215	-0.0511	31.48%
25	0.1247	0.1188	-0.0374	31.14%
26	0.3161	0.1811	0.0564	8.22%
27	0.1969	0.2921	-0.024	21.55%
28	0.1571	0.2510	0.0541	11.64%
29	0.2348	0.1778	0.0207	4.12%
30	0.3008	0.2449	0.0101	19.51%
Average Relative Residual			$\bar{\Delta}_k = \frac{1}{29} \sum_{k=2}^{30} \Delta_k = 14.37\%$	

Accordingly, the exactitude of model is $1-14.37\% = 85.63\%$, the exactitude of this model is sufficient to describe the problem.

B. Spearman rank correlation analysis

We use Spearman rank correlation analysis as an assisted contrast. Spearman correlation coefficient, also known as rank correlation coefficient, is a kind of non-parametric statistical methods that using two variables for linear correlation analysis, without requirement for the distribution of original variables, and thus can be applied more widely. We calculate the spearman correlation coefficient of behavior variables of each factor, and then contrast it with the degree of contribution measured by GM (1, N) mode. If precipitating factor and inhibiting factor can basically match with the spearman analysis, we can make further analysis on the conclusions.

After contrasting, the spearman correlation coefficient of the proportion of tertiary industry output value in the GDP, the ratio of the employment in public administration in the total employment population, the admissibility of the number of patent applications per capita, per capita disposable income of urban, rural per capita income, the number of participants in basic

old-age insurance in the GDP per capita in spearman rank correlation analysis of GDP are positive, the spearman correlation coefficient of the contrast of consumption levels in urban and rural areas, the provincial audit of the number of rule violation, government consumption expenditures accounted for the proportion of GDP, unit energy consumption in the GDP, the number of environmental pollution and accidents are negative. The precipitating factor for the degree of contribution by calculation under GM (1, N) is basically the same as the inhibiting factor (see table 3).

From the point of view of the relevance level, each indicator's spearman correlation coefficient through the SPSS test is slightly different with the results of GM (1, N) model, especially in the contrast of consumption levels in urban and rural areas, government consumption expenditures accounted for the proportion of GDP, per capita income in rural areas and the ratio of the employment in public administration in the total employment population. Part of the reason for the existence of differences is the necessarily error to some extent when using different methods, and the other part of the reason is that the use of SPSS test doesn't exclude the relativity among independent variables.

TABLE III.
SPEARMAN RANK CORRELATION TEST AND THE DRIVING COEFFICIENT OF GM (1, N) MODEL

Indicators	Number Correlation Coefficient	Sig. (2-tailed)	N.	Driving coefficient
Tertiary Industry Output Value in GDP	0.179	0.343	30	0.285
Contrast of Consumption Levels in Urban and Rural Areas	-.603(**)	0	30	-0.037
Provincial Audit of Rule Violation Number	-0.109	0.566	30	-0.002
Government Consumption Expenditures Accounted for GDP	-.362(*)	0.049	30	-0.324
Ratio of Employment in Public Administration in the Total Employment	0.201	0.286	30	0.879
Admissibility of Number of Patent Applications Per Capita	.833(**)	0	30	0.666
Unit Energy Consumption in GDP	-.520(**)	0.003	30	-0.017
Number of Environmental Pollution and Accidents	-0.175	0.355	30	-0.001
Per Capita Disposable Income of Urban	.719(**)	0	30	0.672
Rural Per Capita Income	.859(**)	0	30	0.174
Ratio of Participants in Basic Old-age Insurance in Total	.809(**)	0	30	0.348

V. MEASUREMENT ON GOVERNMENTAL SERVICES VALUE AND CONCLUSION

We can see that the impacts of the economic structure had on the level of economic development are now experiencing a profound transformation. Mainly because

the unreasonable consumption structure, one of the troika of China's economic development, consumption levels in urban and rural areas has played as the inhibitory factor in economic development. In 2007, household consumption accounts for 72.7% of China's total consumption expenditure, of which urban residents accounted for 74.4% and farmers only 25.6%. Significantly, the over low level of rural consumption has inhibited China's economic development. In the current context of the global financial crisis, the Central Government has issued a series of plans to boost consumer spending, especially emphasized the importance of exploitation of rural market.

From the result of the model, people's living standards and social security are promoting the economic development. But from the point of view of specific quantity, China's per capita income in rural areas contributed only 0.174 to economic development, while the urban per capita disposable income contributed 0.672. This shows the problem that rural incomes are relatively low at this stage, and slow down the economic development. We take it as an example to analyze the embodiment of government services value. There are a great deal of explanations for the slow growth of rural income, which, on the whole, can be divided into external economic causes (as opposed to farmers), the institutional causes and the reasons of farmers themselves. The external economic causes refer to the imperfect economic restructuring of China, of which the objective laws of economic development accounted for the problem. However, the institutional causes and the reasons of farmers themselves are closely related to the government's actions and are fully able to reflect the value of government services. Government's policy output system can promote rural development, but the instability of the relevant rural policies along with the inconsistency behavior arising from the non-zero-sum game between central government and local governments are leading to the inefficiency of the local policies.

"In recent years, the wavering policies for cotton prices can not be carried out good in the actual implementation. High-quality without reasonable prices protection, leading farmers lost confidence in these policies." Another example is the lack of rural financial support. The quality of the farmers themselves is the performance of another kind of lost of the value of government services. Government expenditure for education increased every year, but there are problems in the structure of education spending, in particular, the proportion of expenditure on basic education in rural areas in the total education expenditure is very low, and this situation is more obvious in the western region, where the local finance is most limited. The low scientific and cultural quality of China's farmers has seriously affected the popularization and application of agricultural science and technology, and further lead to the unscientific and inaccurate judgment of the market for agricultural products. Part of this situation is caused

objective reality, but a considerable reason is the lack of the value of government services.

The driving coefficient of the ratio of employment in Public administration in total employment is 0.88, to some extent, reflects the impact of the degree of public administration has on China's economic development. In 2005, this ratio on broad definition is 1:122 (seems very low when compared to the international data and close to some African countries), but the ratio supported by finance of the government is 1:26, which is similar to many developed countries. Wang Jian (2006) considers that the advisable indicator for judging the reasonable scale of civil servants should be the proportion of the number of civil servants in the GDP. On this indicator, the ratio of financial support civil servants of China in GDP is 39 people per million U.S. dollars, while the United States is 2.31 people per million U.S. dollars and Japan is 1.38 people per million U.S. dollars. From this indicator, China's civil servants scale has completely beyond the suitable scale. But the author thinks that this is not an effective measurement of our country's suitable scale of government. In terms of economy, economic growth is only a tache and can not substitute for overall economic development. There are still many problems of China compared to developed countries, and most of them are still in the catch-up situation, which increases the needs for a great deal of government departments to coordinate. Thus the actual function of the government does not just consider the economic factor. From a society's perspective, part of the community still need to be linked by the local government, even in the overall and long-term development plans. However, particularly in integration of the economy and society, the government is playing a vital role that can not be completely substituted by the market. China's current economic development also places a high premium on government services.

There is a certain degree of relationship between the growth of public expenditure and the governmental impacts on the different course of economic development at all stages. In the middle-developed stage of economic development (differs from the early performance of economic development of which there is a shortage of private investment), the government's public investment acts as a supplement to private investment and gradually steady decline in the relative proportions. Considering the fact that government consumption expenditure in GDP accounted for the proportion is a negative driving factor indicator in model, we can see that the role of China's current public spending on economic development has changed from driving into inhibiting. The reason for this problem is the problem of structure, or direction, and also is a manifestation of government failure, namely, the impact of government can not normally occur. Here there are two aspects of the structure problems: one is the problem of the own structure of government. Since the structural deficiency of its own leading to the low efficiency of government, in other words the problem is arising from the administrative monopoly. The other is the problem of the

structure of government expenditure, which is reflected both in the quantity and quality, and its contradictions can be seen most obviously on the game between the financial expenditure of central government and local government.

Then we can make conclusions as follows. The government and the market is not completely contradicted to each other, but rather complementary. The market value naturally contains a reflection of governmental service value, or we should view government as a node of the whole socio-economic. The node must bear different social functions in different countries, but it shares two meaning here:

Firstly, governmental service value should first mine their own potential. The specific contents are their own behavior and the political system (see the Figure 1 of the mechanism of government structure).

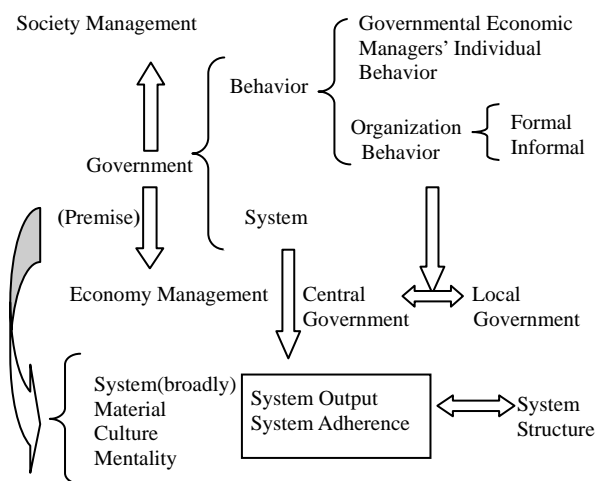


Figure 1. The Mechanism of Government Structure

Secondly, governmental service value can be reflected in the social and economic services provided by the use of its special status.

At this point, in order to achieve the faster economic development under the guidance of the concept of scientific development, governments at all levels should first confirm the concept of services, improving their operating efficiency, adjusting the economic structure, and continue to improve the social security. But for the public service and the supply of goods should be acted according to circumstances, along with the adjusting of supply structure so as to avoid damages to economic development arising from the inefficient supply.

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