



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

The Evaluation Indicator System for the Audit of Township Leading Cadres' Economic Responsibility: Based on the Survey of One County in Chongqing

Yanfen LUO*, Chaozhou LU

Department of Business and Trade, Rongchang Campus, Southwest University, Chongqing 402460, China

Abstract Economic responsibility audit evaluation of township cadres is important and difficult. According to the evaluation content and principles, the paper constructs the evaluation indicator of five subsystems: "economic management", "economic decision-making", "implementation of economic policy", "economic development", and "honest and upright administration". Through the field survey of some county in Chongqing, evaluation indicator is screened. According to the expert questionnaire, it uses the Hierarchy Analysis Process method to construct the judgment matrix and calculate the indicator weight and thereby build evaluation indicator system. It focuses on traditional indicators and evaluation indicator of sustainable development to construct a new, more complete evaluation indicator system.

Key words Township leading cadres, Economic responsibility audit, Evaluation indicator system, AHP

1 Introduction

The evaluation for the audit of party and government leading cadres' economic responsibility is the priority and difficulty of economic responsibility audit, and many scholars have conducted a lot of researches and achieved some results, but the evaluation indicators in the existing research results are not systematic enough, and some evaluation indicators are of subjective and arbitrary features. Some indicators are not designed based on the specific financial responsibility assumed by party and government leading cadres, and fiscal and financial indicators are mainly considered, while there are few indicators on governance responsibility, social responsibility and environmental protection responsibility. As for the determining of the weight of each indicator, there is much subjectivity and arbitrariness, and as yet, a scientific evaluation indicator system for the audit of economic responsibility has not been established^[1]. Townships, at the most basic level in China's five-level governmental organizations, directly bear the responsibility of linking government with the masses, and the party's principles and policies are to be implemented by townships^[2]. The township leading cadres are the spokesperson of the Central Committee and State Council at the grassroots level, with specific and broad economic responsibilities. The fulfillment of economic responsibility is essential to rural development, and building an evaluation indicator system for the audit of township leading cadres' economic responsibility is of important practical significance.

2 Principles of determining the evaluation indicators for the audit of township leading cadres' economic responsibility

2.1 Principle of objectivity Based on the basic conditions, objective environment and economic development of townships, it is necessary to firmly grasp the main line of "economic responsibility fulfillment"^[3], refer to the indicators of township economic development assessed by higher authorities, and distinguish between different types of townships to evaluate the leading cadres using quantitative indicators.

2.2 Principle of equality of authority and responsibility^[4] It is necessary to make comprehensive evaluation of the responsibility that the leading cadres should bear within the scope of rights, to avoid ambiguous responsibilities and rights. Due to different division of labor, the township party and government leaders should clearly bear their respective direct responsibility and executive responsibility, collective responsibility and individual responsibility.

2.3 Principle of scientificity^[5] During the evaluation, it is necessary to pay attention to the creation of the development environment, well deal with the relationship between obvious achievements and potential performance, and consider the continuity of work and lag of efficiency exertion, as well as the dynamic development issues.

2.4 Principle of comprehensiveness It is necessary to comprehensively audit the township leading cadres' economic responsibility from macro and overall perspective, analyze various situations and problems, and avoid taking a part for the whole. There is a need to consider all aspects and a variety of factors, and design comprehensive and complete indicator system.

2.5 Principle of operability There are many indicators to reflect township leading cadres' economic responsibility, but when choosing the evaluation indicators, it is necessary to easily obtain

Received: August 10, 2014 Accepted: September 20, 2014

Supported by Fundamental Research Funds for Central Universities (SWU1409313); Business Management Cultivation Discipline of Rongchang Campus of Southwest University (RCQG207001); the Fifth Education Reform Project of Southwest University (2011JY111).

* Corresponding author. E-mail: lyfswu01@126.com

audit evidence, and make the evaluation indicators comparable to prevent the theorization of indicator evaluation system^[6]. According to Regulations on the Economic Responsibility Audit of Party and Government Leading Cadres and State-owned Enterprise Leaders^[7], combined with the field research conclusions, we divide the evaluation indicator for the audit of township leading cadres' economic responsibility into five subsystems, namely economic management responsibility audit evaluation indicator, economic decision-making responsibility audit evaluation indicator, economic policy implementation responsibility audit evaluation indicator, economic development responsibility audit evaluation indicator, incorruptible administration responsibility audit evaluation indicator.

3 Study design

3.1 Technical route of study To establish an objective, fair and workable evaluation indicator system for the audit of township leading cadres' economic responsibility, the actual research and survey work goes through the following three stages: (i) Through literature, we analyze the current situation of study on evaluation indicator for the audit of township leading cadres' economic responsibility at present. We initially establish the evaluation hierarchy and indicators for the audit of township leading cadres' economic responsibility by field interview with the relevant township leading cadres in Chongqing. (ii) In accordance with the statistical analysis of questionnaire survey, we screen the initially selected indicators to determine the evaluation indicators. (iii) Through the expert investigation method, we collect the experts' opinions and use AHP to determine the relative importance of various evaluation indicators, and thus determine the evaluation indicator system.

3.2 Specific survey and research process

3.2.1 Interview. In this phase, we mainly interview the residents and accountants in the townships and villages of one county, county organization department staff, staff of Economic Responsibility Audit Center of Auditing Bureau, and the relevant township government officials, and seek their opinions about the tentative evaluation indicators, to finally get 32 evaluation indicators.

3.2.2 Indicator screening and questionnaire survey. In this phase, we choose the village party branch secretary and accountants of community in one county, county organization department staff, staff of Economic Responsibility Audit Center of Auditing Bureau and the relevant township government officials and staff as the object of questionnaire survey. Using the face-to-face questionnaire distribution way, 80 questionnaires involving 32 indicators are distributed, and 80 questionnaires are called back, with response rate of 100%. The basic information of respondents is shown in Table 1.

3.2.3 Expert questionnaire survey. The experts selected mainly include the leading cadres of Auditing Bureau of one county responsible for the economic responsibility audit and the auditing staff engaged in the specific economic responsibility audit, the

staff of county party committee organization department in charge of economic responsibility audit, and the relevant township government officials.

Using the face-to-face questionnaire distribution way, 25 expert opinion questionnaires are distributed and 25 questionnaires are called back, with response rate of 100%. The basic information of expert survey sample based on AHP is shown in Table 2.

Table 1 Basic information of respondents and evaluation indicators

Items	Information category	Sample size	Proportion %
Work unit	Administrative village (community)	14	19.44
	Township (street) party committee and government departments	37	51.39
	Auditing Bureau	18	25
	Organization and personnel department	3	4.17
Education level	High school, technical secondary school	9	12.5
	Junior college	30	41.67
	Regular college	24	33.33
	Graduate	9	12.5
Work experience	Less than one year	4	5.56
	One to three years	5	6.94
	Three to ten years	12	16.67
	More than ten years	51	70.83

Table 2 Basic information of expert survey sample based on AHP

Items	Information category	Sample size	Proportion %
	Township (street) party committee and government departments	6	26.09
	Auditing Bureau	14	60.87
	Organization and personnel department [7]	3	13.04
Education level	High school, technical secondary school	0	0
	Junior college	5	21.74
	Regular college	13	56.52
	Graduate	5	21.74
Work experience	Less than one year	0	0
	One to three years	0	0
	Three to ten years	5	21.74
	More than ten years	18	78.26

4 Data processing and results

4.1 Determining of evaluation indicator We use SPSS13 software for data processing, and the mean, standard deviation and coefficient of variation of indicators are as follows:

4.1.1 Overall understanding of criteria layer. According to the overall understanding of five categories of evaluation indicators in the questionnaire, we get the mean, standard deviation and coefficient of variation of the five categories of evaluation indicators^[2], as shown in Table 3.

Table 3 Descriptive statistics of evaluation indicators for the audit of township leading cadres' economic responsibility ($N=72$)

Factors	Mean	Standard deviation	Coefficient of variation
Evaluation of economic management responsibility	4.32	0.68	0.16
Evaluation of economic decision-making responsibility	4.47	0.58	0.13
Evaluation of economic policy implementation responsibility	4.53	0.55	0.12
Evaluation of economic development responsibility	4.18	0.87	0.21
Evaluation of incorruptible administration responsibility	4.08	1.01	0.25

4.1.2 Screening of evaluation indicators. According to the statistical analysis of evaluation indicators in the questionnaire, we

Table 4 The evaluation indicators for the audit of township leading cadres' economic responsibility

Criteria layer	Evaluation indicators	Mean	Standard deviation	The coefficient of variation	Ranking
Economic management responsibility B_1	Implementation rate of township budget and final accounts	4.11	0.97	0.23	1
	Fiscal revenue growth rate	3.86	1.08	0.28	6
	The ratio of available financial resources to financial revenue	3.88	1.07	0.28	7
	Completion rate of tax revenue plan	3.72	1.15	0.31	9
	The rate of fiscal revenue and expenditure balance	3.68	1.05	0.29	8
	Financial debt ratio	3.97	0.93	0.23	2
	Inflation-proofing and appreciation rate of state-owned collective assets	3.90	0.88	0.23	3
	Management of major investment projects	4.01	0.96	0.24	4
Economic decision – making responsibility B_2	Soundness and effectiveness of the internal control system	3.90	0.93	0.24	5
	Scientificity of decisions on major economic events	4.31	0.88	0.20	1
	The degree of democratic centralism of major economic issues	4.08	0.81	0.20	2
	Success rate of major economic decisions	3.85	1.13	0.29	5
	The ratio of decision loss to total project investment	3.78	0.96	0.25	3
	Benefit ratio of major investment projects	3.83	0.97	0.25	4
Economic policy implementation responsibility B_3	Ratio of illegal special funds	3.79	0.93	0.24	1
	Validity of financial information	4.18	0.99	0.24	2
	The ratio of illegal funds to auditing amount	3.88	0.94	0.24	3
	Implementation of the major economic issues decisions	3.72	1.19	0.32	5
	Implementation of economic policies concerning "agriculture, farmers and countryside"	3.81	0.97	0.25	4
Economic development responsibility B_4	The growth rate of per capita net income of farmers	4.17	0.96	0.23	1
	The growth rate of per capita GNP	3.69	1.10	0.30	6
	The growth rate of total food output	3.63	1.11	0.31	9
	Agricultural industrial structure adjustment and development of competitive industries	3.76	0.86	0.23	2
	The growth rate of financial investment in infrastructure and public utilities	3.82	0.95	0.25	3
	The growth rate of township investment	3.40	1.01	0.30	7
	Requisition – compensation balance ratio of farmland	3.72	0.92	0.25	4
	Environmental investment – GDP ratio	3.75	0.94	0.25	5
	The natural population growth rate	3.47	1.03	0.30	8
Incorruptible administration responsibility B_5	Control rate of entertainment expenses	3.94	0.96	0.24	1
	Per capita spending level	3.63	1.02	0.28	3
	Control rate of individual compensation	3.67	1.09	0.30	4
	Personal integrity and self-discipline	4.03	1.00	0.25	2

4.2 Determining of evaluation indicator weight based on AHP

The degree of importance of many economic responsibilities assumed by township leading cadres is different, so it is necessary to determine the weight of evaluation indicator. Based on the actual field survey data in a county of Chongqing, and relevant requirements of AHP, we use the expert questionnaires to judge the relative importance of indicators, and use 5 scale method to score the relative importance of each evaluation indicator. 25 ex-

get the mean, standard deviation and coefficient of variation of each indicator, as shown in Table 4.

4.1.3 Determining of evaluation indicators. According to the mean and standard deviation of indicators in the questionnaire, we measure the coefficient of variation to screen indicators, and sort the indicators in terms of importance according to the mean of each indicator. The coefficient of variation indicates the degree of coordination of indicator, and if the value is smaller, the degree of coordination of this indicator is higher. In this study, we abandon the evaluation indicators with coefficient of variation greater than 0.25, and feed the screening results of evaluation indicators back to the audit experts. After reaching the consensus, we determine the evaluation indicator system for the audit of township leading cadres' economic responsibility, as shown in Fig. 1.

pert questionnaires are called back, and 2 questionnaires with incomplete information are excluded, with validity rate of 92%.

4.2.1 Consistency test. According to AHP model, we perform the statistical processing of the expert questionnaire. First, we carry out the consistency test of each expert questionnaire, and require $CR < 0.1$. Through the consistency test of 23 expert questionnaires, there are 3 failing to pass the test, and finally 20 valid samples passing the consistency test.

4.2.2 Calculation of weight of indicators in criteria layer. We build the judgment matrix of pairwise comparison data of relative importance of indicators in criteria layer to indicators in goal layer

in the 20 valid samples, calculate the eigenvalues and eigenvectors, and perform the hierarchical sorting and consistency test. The weight of indicators in criteria layer is shown in Table 5.

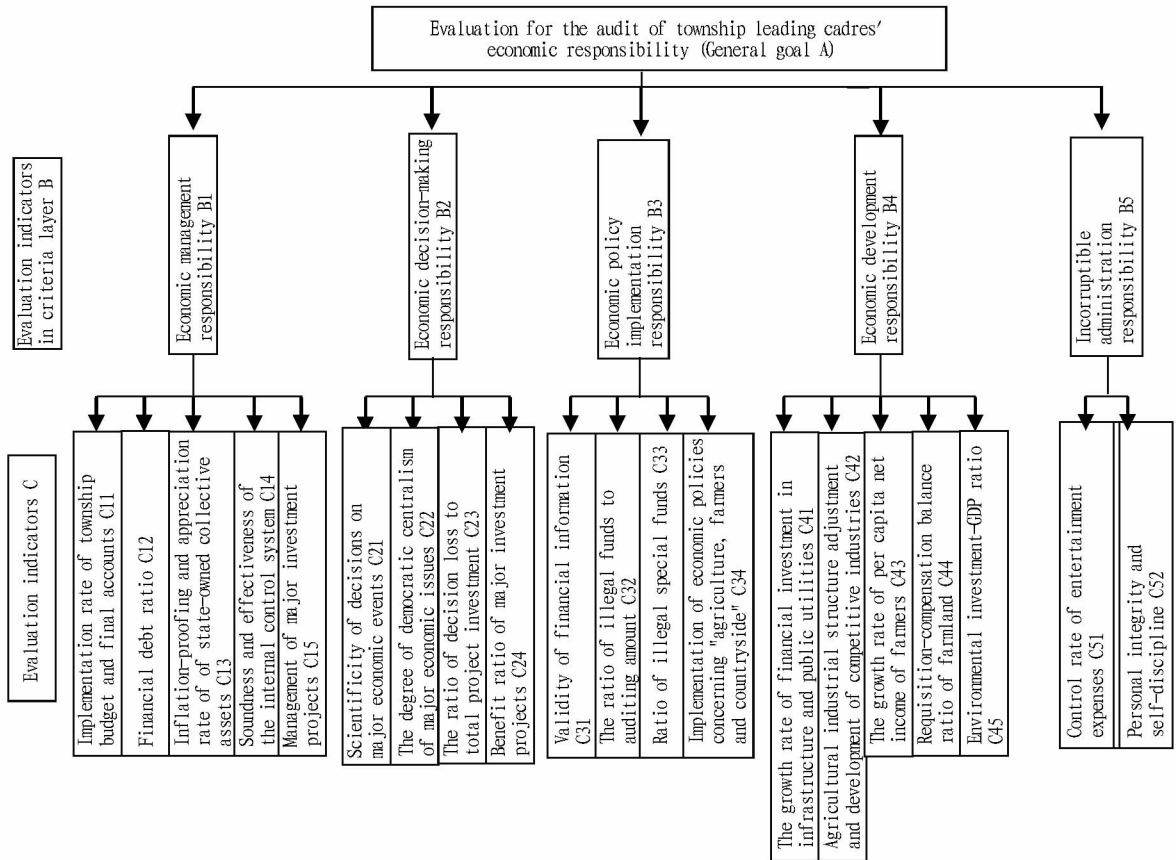


Fig. 1 Hierarchical diagram of evaluation indicator system for the audit of township leading cadres' economic responsibility

Table 5 The weight of evaluation factors in the criteria layer for the audit of township leading cadres' economic responsibility

Expert sequence	Weight (ranking)				
	Economic management responsibility	Economic decision-making responsibility	Economic policy implementation responsibility	Economic development responsibility	Incorruptible administration responsibility
1(2) *	0.327(1)	0.124(4)	0.325(2)	0.066(5)	0.158(3)
2	0.172(4)	0.080(5)	0.262(2)	0.287(1)	0.199(3)
3(2) *	0.179(3)	0.352(1)	0.196(2)	0.096(5)	0.175(4)
4	0.280(1)	0.220(3)	0.250(2)	0.105(5)	0.145(4)
5	0.298(1)	0.148(4)	0.295(2)	0.092(5)	0.168(3)
6(3) *	0.198(3)	0.151(5)	0.180(4)	0.220(2)	0.251(1)
7	0.311(2)	0.112(4)	0.331(1)	0.075(5)	0.171(3)
8	0.277(3)	0.074(5)	0.279(2)	0.088(4)	0.281(1)
9	0.278(2)	0.102(4)	0.288(1)	0.065(5)	0.268(3)
10	0.158(3)	0.109(4)	0.158(3)	0.278(2)	0.298(1)
11(4) *	0.250(1)	0.250(1)	0.250(1)	0.125(2)	0.125(2)
12(2) *	0.275(1)	0.095(4)	0.269(3)	0.271(2)	0.090(5)

※: The figures in brackets represent the number of questionnaires with the same experts' opinions.

Through the analysis results of 20 valid samples, the arithmetic average method is used to determine the weight of criteria layer as follows:

$$WA = [0.247 \ 0.172 \ 0.249 \ 0.151 \ 0.181] .$$

4.2.3 Determining of weight of evaluation indicators. Similarly, by building the judgment matrix of experts' scoring of importance

of pairwise evaluation indicators in the 20 valid samples, we calculate the weight of evaluation indicators, and calculate the arithmetic mean of weight of evaluation indicators, to get the weight of evaluation indicators for the audit of township leading cadres' economic responsibility, as shown in Table 6.

Table 6 The weight of evaluation indicators for the audit of township leading cadres' economic responsibility

Criteria layer	Evaluation indicators	Weight
Economic management responsibility B ₁	Implementation rate of township budget and final accounts C ₁₁	0.278
0.247	Financial debt ratio C ₁₂	0.146
	Inflation – proofing and appreciation rate of of state-owned collective assets C ₁₃	0.178
	Soundness and effectiveness of the internal control system C ₁₄	0.280
	Management of major investment projects C ₁₅	0.118
Economic decision-making responsibility B ₂	Scientificity of decisions on major economic events C ₂₁	0.391
0.172	The degree of democratic centralism of major economic issues C ₂₂	0.325
	The ratio of decision loss to total project investment C ₂₃	0.142
	Benefit ratio of major investment projects C ₂₄	0.142
Economic policy implementation responsibility B ₃	Validity of financial information C ₃₁	0.384
0.249	The ratio of illegal funds to auditing amount C ₃₂	0.152
	Ratio of illegal special funds C ₃₃	0.130
	Implementation of economic policies concerning "agriculture, farmers and countryside" C ₃₄	0.334
Economic development responsibility B ₄	The growth rate of financial investment in infrastructure and public utilities C ₄₁	0.355
0.151	Agricultural industrial structure adjustment and development of competitive industries C ₄₂	0.196
	The growth rate of per capita net income of farmers C ₄₃	0.216
	Requisition – compensation balance ratio of farmland C ₄₄	0.149
	Environmental investment – GDP ratio C ₄₅	0.084
Incorruptible administration responsibility B ₅	Control rate of entertainment expenses C ₅₁	0.400
0.181	Personal integrity and self-discipline C ₅₂	0.600

5 Conclusions and discussions

Based on the real needs of social development, we design the evaluation indicators for the audit of township leading cadres' economic responsibility from "economic management responsibility", "economic decision-making responsibility", "economic policy implementation responsibility", "economic development responsibility" and "incorruptible administration responsibility". By the screening of indicators, we finally determine 20 evaluation indicators for the audit of township leading cadres' economic responsibility, and introduce the indicators on sustainable development while focusing on the traditional evaluation indicators. Using AHP, we determine the weight of indicators to form a new and complete evaluation indicator system for the audit of township leading cadres' economic responsibility. From the previous statistical analysis results, experts' identification of importance of economic management responsibility, economic decision-making responsibility and economic policy implementation responsibility is consistent, but there are considerable differences in the understanding of importance of economic development responsibility and incorruptible administration responsibility. The importance of economic development responsibility identified by the experts of organization departments and township government departments is much higher than identified by the experts of audit department. The incorruptible administration responsibility is an important aspect for the audit of party and government leaders' economic responsibility, and it plays a role of "one-vote veto" in the assessment and appointment of cadres, but from the results of sample analysis, there is serious divergence. We think that it is related to some phenomena in current economic and political reform of China. For example, for local economic development, one government official strives for investment or special funds, leading to excessive outlay for activity, but he brings funds and programs for the local economic development, then how to evaluate him? Some people praise him while others vilify him.

So there are great differences in the importance of incorruptible administration responsibility. The universal and dynamic features of evaluation indicators should be noted. Due to different situation in different townships, on the one hand, to lay equal emphasis on commonness and individuality, we can reserve two evaluation indicators for different townships on the basis of common evaluation indicators for their choice, in order to reflect the difference; on the other hand, there are changes in the economic responsibility assumed by leading cadres in the same township in different time periods, which can be reflected by the adjustment of indicator weight. Moreover, in addition to evaluation indicator system, a complete evaluation model for the audit of township leading cadres' economic responsibility also needs scientific evaluation criteria and evaluation methods.

References

- [1] CHEN ZX. Thinking on several problems in economic responsibility audit of mayors and county magistrates[J]. Audit Research, 2003 (6): 16 – 20. (in Chinese).
- [2] LI JZ. Strengthen the audit of "three rural issues" and serve for the progress of agricultural modernization and for the construction of the new socialistic countryside[J]. Audit Research, 2011 (5): 13 – 17. (in Chinese).
- [3] XU RH, ZHENG LX, WU ZL. Carrying out economic responsibility audit using responsibility as the focus[J]. Research of Financial & Accounting, 2011 (8): 69 – 71. (in Chinese).
- [4] ZHOU YP, CHEN T. On contents and methods of economic responsibility audit of the Party and administration officials [J]. Audit Research, 2006 (2): 38 – 42. (in Chinese).
- [5] Scientific Research Group of Economic Responsibility Audit Evaluation of Henan Province. Scientific research of economic responsibility audit evaluation[J]. Audit Research, 2005 (5): 80 – 83. (in Chinese).
- [6] YANG GY. A brief analysis on economic responsibility audit of town officials[J]. Shaanxi Audit, 2008 (2): 27 – 28. (in Chinese).
- [7] WANG XX. Thinking on constructing economic responsibility audit evaluation system of the Party and administration town officials[J]. Industrial & Science Tribune, 2009 (3): 218 – 219. (in Chinese).