

*Original Paper*

# Social Responsibility and Financial Performance of Electric Power Enterprises

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Research on the identification and governance of new labor relations under the casual labor economy (KJQN202000905).

## **Abstract**

*This paper empirically tests the relationship between corporate social responsibility and financial performance in the power industry based on the listed companies in 2012-2018. It is found that there is a significant positive correlation between the financial performance and social responsibility of power industry enterprises, indicating that the better the financial performance is, the better the power industry enterprises will perform their social responsibility; the current social responsibility of power industry has a significant negative correlation with the current financial performance, indicating that social responsibility becomes the cost of power industry enterprises, and the degree of social responsibility performance The higher the level, the worse the financial performance of the power industry enterprises; there is a positive correlation between the early stage social responsibility of the power industry and the current performance, but it fails to pass the significance test, which shows that the positive impact of the corporate social responsibility of the power industry needs to appear after a certain period of time, but the positive relationship is unstable.*

## **Keywords**

*social responsibility, financial performance, power industry*

## 1. Introduction

Corporate social responsibility refers to that the way of business operation of an enterprise meets or exceeds the basic standards required by morality, law and the public. In the process of business policy operation, the impact on the interests of relevant interest groups will also be considered. At the beginning of the 20th century, enterprises in western developed countries began to attach importance to the issue of corporate social responsibility. In addition, in China, due to the early enterprise development, they paid too much attention to economic development and emphasized the large-scale creation of interests at any cost, thus ignoring the legitimate rights and interests of many stakeholders, which also caused harm to the interests of external stakeholders of enterprises to a certain extent. For example, the occurrence of a series of events, such as melamine incident, employee jumping off, environmental pollution incident, etc., makes all sectors of society find that enterprises should not only focus on economic interests, but also maintain a long-term sustainable development mentality, so that the issue of social responsibility is gradually concerned by the academic and practical circles. In recent years, with the aggravation of the concept of corporate social responsibility, there are also many good examples of corporate social responsibility, such as focusing on the hope project, charitable donation behavior after the disaster, and these behaviors have also been recognized by all sectors of society. Shan et al. (2008) found that charity donation will cause social repercussions and higher attention.

Academic circles pay attention to the issue of corporate social responsibility, the most fundamental is the relationship between social responsibility and corporate performance, which is because on the one hand, financial performance is the fundamental guarantee for the enterprise to achieve a series of other goals, the enterprise to fulfill social responsibility needs to have enough financial performance guarantee, on the other hand, the behavior of the enterprise to fulfill social responsibility will also affect financial performance. Since Moskowitz (1972) first used empirical evidence to discuss the relationship between social responsibility and financial performance, in order to reach a consensus conclusion, Maron (2006) found that there was a significant positive correlation between corporate social responsibility and financial performance, but Brammer et al. (2006) found that there was a negative correlation or no correlation between corporate social responsibility and financial performance Conclusion. It can be seen that the issue of how corporate social responsibility behavior affects financial performance still needs further study.

However, due to the differences between the economic and business characteristics of enterprises in different industries and the financial conditions needed for operation, there are also large differences in the performance of social responsibilities of enterprises in different industries. Zhang (2013) found that there are obvious industry differences in the level of corporate social responsibility in China. Compared with other industries, the electric power industry has certain particularity, because on the one hand, the operation business of the electric power industry enterprises involves the normal operation of the country and the stable life of the people, on the other hand, because the current Chinese electric power industry is still dominated by “coal power”, which requires the electric power industry enterprises to

carry out in the process of advocating “energy conservation and emission reduction” under the new situation of low-carbon economy. Therefore, the social responsibility of the power industry enterprises becomes more and more important. From the existing literature, Zhang (2013) found that the level of social responsibility of enterprises in the power industry is lower than the national average level, and He et al. (2011) also found that the research on the report of social responsibility of enterprises in the domestic power industry is less. Therefore, this paper chooses listed companies in the power industry as the research sample to discuss the relationship between social responsibility and corporate financial performance.

## 2. Theoretical Analysis

### 2.1 *The Influence of Financial Performance on Corporate Social Responsibility*

Qiu (2013) thinks that the relationship between corporate financial performance and social responsibility is not significant through business evidence, but corporate financial performance is the basic guarantee for the sustainable development of enterprises and the realization of one other non-financial goal. On the one hand, enterprises need to make progress in ideas and ensure that they have the basic idea of social responsibility. On the other hand, the most important thing is to implement the basic idea of social responsibility. That is to say, enterprises need to do things with actual expenses, such as charity donation, ensuring more welfare of employees. All of these needs to be spent actually, that is, if not enough economic strength guarantee that the behavior of enterprises in fulfilling their social responsibilities can only be an empty talk. And for the power industry enterprises, due to the reason of their business scope, at present, the whole society has higher and higher requirements for environmental protection. Some of the traditional business models and production processes of the power industry need to be improved, which requires a very large investment. Therefore, the power industry must have relatively good financial performance as the basic guarantee, so as to be able to transform the “ideal” for “reality”.

For power industry enterprises, in addition to fulfilling social responsibility in environmental protection, from the perspective of social responsibility stakeholders, good performance of corporate social responsibility also needs to ensure the legitimate interests of other stakeholders, including the interests of relevant shareholders, social interests, and the interests of upstream and downstream enterprises in the power industry. And only enough financial performance can ensure the power industry enterprises to complete these basic tasks, such as maintaining the continuous transmission of interests for shareholders, ensuring the regular distribution of cash dividends, ensuring the normal products for upstream and downstream enterprises, and ensuring the stable output of power for upstream and downstream enterprises. Moreover, the operation of electric power enterprises has certain public welfare, which also needs sufficient performance support, so as to ensure the power needs of daily life for residents, and the situation in the process of power output can be made up in time. Therefore, this paper puts forward the research hypothesis:

**Hypothesis 1:** There is a significant positive correlation between corporate financial performance and corporate social responsibility.

### *2.2 The Influence of Corporate Social Responsibility on Financial Performance*

From the research conclusion of the existing literature, there is no consistent conclusion about the impact of corporate social responsibility on financial performance. Some literature thinks that corporate social responsibility can have a negative impact on financial performance, while some literature thinks it can have a positive impact on financial performance. It is believed that the negative impact of corporate social responsibility on financial performance is based on the “cost perspective”, which is due to the cost of corporate social responsibility. For example, the above analysis shows that the better the financial performance is, the higher the corresponding social responsibility will be. When the corresponding enterprise performs its social responsibility, it needs to pay a certain cost, such as the money and materials directly donated in charity donation, such as the investment in hope project, which is the cost for the enterprise. The higher the cost, the corresponding enterprise will be affected Financial performance. For electric power enterprises, if they attach importance to the performance of social responsibility, many problems of the enterprises themselves need to be rectified as analyzed above. Because under the current situation of attaching importance to environmental protection and developing energy conservation and emission reduction, the common coal power business model will require the electric power enterprises to invest a large cost to rectify. Therefore, at present, the listed companies in the electric power industry fulfill the social responsibility the higher the level of accountability, the higher the cost, and to some extent, the worse the financial performance in the short term.

The positive impact of corporate social responsibility on financial performance is based on the “moral perspective” and “market perspective” of social responsibility. It is a kind of moral behavior of enterprises to perform social responsibility, which is considered by all walks of life. People from all walks of life will think that an enterprise with good social responsibility has sustainable development. They will think that it is not only an enterprise that can exist in the short term, so more investors will pay attention to such enterprises, and more market investors will invest in such enterprises. In this case, on the one hand, the enterprise can expand more easily, there will be more related parties to trade with the enterprise, the enterprise will have more profit opportunities, on the other hand, the enterprise is also easier to finance, without more long-term debt, its corresponding financial performance will be better. Zhou (2005) believed that social responsibility has become an important way for enterprises to obtain social capital and maintain competitive advantage. For power industry enterprises, due to their large investment in infrastructure and fixed capital, as well as the scope of their business, it is bound to belong to long-term development enterprises. Therefore, power industry enterprises will pay more attention to their social responsibilities than ordinary small and medium-sized enterprises and other business enterprises, so as to attract more investment opportunities and business opportunities. There is a greater probability of achieving good financial performance.

However, since the input and output of corporate social responsibility is a long-term process, not a result of “today’s input and today’s output”, Zhang et al. (2013) believed that there is an inter temporal impact between corporate social responsibility and financial performance, and that the social responsibility input of the current period will have a positive impact in the next period. This kind of cross period influence should be more obvious in electric power enterprises. This is because electric power enterprises belong to large-scale and long-term development enterprises, and their social responsibility investment may not appear quickly. On the one hand, for example, the development of electric power enterprises in environmental protection is not a day-to-day thing, which needs a long time of transformation. On the other hand, market investors have a great influence on these aspects. Therefore, the response of social responsibility investment of electric power enterprises to enterprise performance also needs time. Therefore, this paper puts forward the corresponding research hypothesis:

**Hypothesis 2:** There is a significant negative correlation between corporate social responsibility and financial performance.

**Hypothesis 3:** There is a significant positive correlation between corporate social responsibility and financial performance.

**Hypothesis 4:** There is a significant positive correlation between the current social responsibility and the next financial performance.

### 3. Empirical Model, Variables and Data Description

#### 3.1 Empirical Model

According to the research content of this paper, the following empirical models are set up:

$$CSR_t = \alpha_1 FP_t + \alpha_2 \ln(Size_t) + \alpha_3 Debt_t + \alpha_4 H10_t + \alpha_5 Mar_t + \alpha_6 Time_t + C + \varepsilon \quad (1)$$

$$FP_t = \alpha_1 CSR_t + \alpha_2 \ln(Size_t) + \alpha_3 Debt_t + \alpha_4 H10_t + \alpha_5 Ebits_t + C + \varepsilon \quad (2)$$

$$FP_t = \alpha_1 CSR_{t-1} + \alpha_2 \ln(Size_t) + \alpha_3 Debt_t + \alpha_4 H10_t + \alpha_5 Ebits_t + C + \varepsilon \quad (3)$$

The above three formulas test the previous research hypotheses respectively, among which (1) test research hypotheses 1, (2) test research hypotheses 2 and 3, (3) test research hypotheses 4. In the above three formulas, subscript t represents the current period, subscript T-1 represents the previous period, C represents the constant term, and  $\varepsilon$  represents the random error term. Other relevant variables are explained below.

#### 3.2 Variable Selection

The main research variables in this paper are social responsibility variables and financial performance variables of power industry enterprises. In formula (1), formula (2) and formula (3), the two variables are explanatory variables and explanatory variables. The specific variables are designed as follows:

**CSR in electric power industry:** This paper holds that the method of calculating CSR by using relevant data of financial report is universal and universal. Referring to the methods of Xiao and Yang (2011), a comprehensive index of CSR in electric power industry is constructed.

$$CSR = a_1 \text{ government contribution rate } (X_1) + a_2 \text{ employee contribution rate } (X_2) + a_3 \text{ shareholder contribution rate } (X_3) + a_4 \text{ creditor contribution rate } (X_4) + a_5 \text{ supplier contribution rate } (X_5) + a_6 \text{ customer contribution rate } (X_6) \quad (4)$$

In the formula (4), the government contribution rate is the ratio of the tax paid by the electric power industry enterprises minus the tax return income difference and the cash inflow value of operation, the employee contribution rate is the ratio of the cash paid to the employees by the electric power industry enterprises to the operating income, the shareholder contribution rate is the ratio of the dividend payable to the operating income, the creditor contribution rate is the ratio of the financial expenses to the operating income, and the supplier contribution rate is the ratio of the purchase The ratio of cash paid for goods and services to the outflow value of operating cash, and the customer contribution ratio is the ratio of operating cost to operating income.

In (4) city,  $a$  is the weight of  $CSR$ . Referring to the calculation results of Shen (2005), the weight results of  $CSR$  calculated in this paper are:  $a_1=0.0053$ ,  $a_2=0.0117$ ,  $a_3=0.4637$ ,  $a_4=0.2516$ ,  $a_5=0.1138$ ,  $a_6=0.1539$ .

**Financial performance of power industry enterprises (FP):** select the return on assets ( $FP-ROA$ ) as the accounting index to measure the financial performance of power industry enterprises, and select the Tobin Q ( $FP-Q$ ) as the market index to measure the financial performance of power industry enterprises.

In addition to the main research variables in this paper, add the control variables:  $\ln(Size)$ : measured by the total assets of power industry enterprises, and take the natural logarithm;  $Debt$ : measured by the ratio of total liabilities to total assets of power industry enterprises;  $H10$ : measured by the square sum of the top ten shareholders' shareholding ratio of power industry enterprises; Regional Marketization refers to Number ( $Mar$ ): measured by the market-oriented index of the registered area of power industry enterprises, which refers to the results of Fan et al. (2011);  $Time$ : measured by the difference between the sample year and the listed year of power industry enterprises;  $EBIT$ : measured by the ratio of ebit and operating income of power industry enterprises.

### 3.3 Data Description

Because listed companies will disclose relevant information in each fiscal year, and there are market supervision and external audit supervision, so the disclosure of relevant information is more accurate, while ordinary enterprises will not disclose information on time, so this paper chooses listed companies in the power industry as the research sample. At the same time, the CSRC revised the industry classification at the end of 2012. Therefore, in order to unify the data measurement standard, this paper sets the sample year as 2012-2018, and deletes the listed companies in the power industry specially processed in the sample and the listed companies in the power industry with more missing data. Finally, this paper gets 314 samples of Listed Companies in the power industry from 2012 to 2018.

## 4. Empirical Results and Analysis

### 4.1 Statistical Analysis

**Table 1. Sample Descriptive Statistics**

	<i>Mean</i>	<i>Median</i>	<i>Maximum</i>	<i>Minimum</i>	<i>Std. Dev.</i>
<i>CSR</i>	0.239	0.242	0.410	0.132	0.034
<i>FP-ROA</i>	0.019	0.022	0.154	-0.560	0.057
<i>FP-Q</i>	1.373	1.180	5.347	0.697	0.570
<i>ln(Size)</i>	22.754	22.583	26.326	20.136	1.428
<i>Debt</i>	0.621	0.637	1.262	0.093	0.164
<i>H10</i>	0.200	0.189	0.697	0.017	0.140
<i>Mar</i>	8.320	7.960	11.800	4.880	1.771
<i>Time</i>	10.975	11.000	19.000	1.000	4.204
<i>Ebit</i>	0.155	0.139	0.968	-1.228	0.203

Table 2 shows the descriptive statistical results of the main variables in this sample. In addition to variable *CSR*, the mean value of variable *FP-ROA* is 0.019, which indicates that the average return on assets of power industry enterprises is about 0.019, and the accounting performance of power industry enterprises is not high, but the mean value of variable *FP-Q* is 1.373, and the market performance of power industry enterprises is better. Among other variables, the average value of *ln(Size)* is 22.754, indicating that the average value of total assets of power industry enterprises is about 7.6 billion yuan, and the asset scale of power industry enterprises is large; the average value of variable *Debt* is 0.621, the debt scale of power industry enterprises exceeds 60% of the asset scale, and the debt pressure is large; the average value of variable *H10* is 0.200, indicating the shareholding ratio of top ten shareholders in power industry enterprises is square The sum is 2, the ownership concentration of power industry enterprises is relatively low; the maximum value of variable *Mar* is 11.8, and the minimum value is 4.88, indicating that there are differences in the degree of external marketization of different power industry enterprises; the median value of variable *Time* is 11, indicating that the average listing year of power industry enterprises is 11 years, and the average value of variable *Ebit* is 0.155, indicating that the profit before interest and tax of power industry enterprises accounts for about half of the operating revenue.

## 4.2 Empirical Results

**Table 2. Empirical Test Results**

	(1)	(2)	(3)	(4)	(5)	(6)
$FP-ROA_t$	0.278*** (0.034)					
$FP-Q_t$		0.006* (0.004)				
$CSR_t$			-0.255*** (0.066)	-1.092*** (0.089)		
$CSR_{t-1}$					0.072 (0.071)	0.651 (0.761)
$\ln(Size_t)$	0.007***	0.002*	0.006***	0.187***	0.003*	0.195***
$Debt_t$	0.011*	0.045***	-0.119***	-0.662***	-0.093***	-0.213
$H10_t$	0.021*	0.042***	-0.030*	-0.063	-0.028*	0.140
$Mar_t$	0.003***	0.003***	—	—	—	—
$Time_t$	0.001**	0.001**	—	—	—	—
$Ebit_t$	—	—	0.164***	0.197***	0.197***	0.155***
$C$	0.050	0.124***	0.003	6.275***	-0.007	5.690***
样本量	314	314	314	314	262	262
$R^2$	0.322	0.177	0.660	0.356	0.660	0.349
$F$ -statistic	24.260***	10.982***	119.756***	34.017***	99.326***	27.454***

Note. \*\*\* and \* indicate passing the test at 1%, 5% and 10% significance levels respectively, with standard error values in brackets.

Table 2 shows the empirical test results. From the overall regression results of each empirical model, the F statistics of each empirical result can pass the significance test of the conventional confidence level, which shows that the actual value of the explained variable of each regression result is not significantly different from the value fitted by the explained variable, that is, the regression result is credible.

Specific to the regression results, the regression results (1) and (2) are the test results of (1), i.e., test research hypothesis 1. It can be seen that there is a significant positive correlation between the explanatory variable  $FP-ROA$  and the explanatory variable  $CSR$ , which indicates that the larger the variable  $FP-ROA$  is, the larger the explanatory variable  $CSR$  is, that is, the better the accounting performance of the power industry enterprises, and the corresponding level of social responsibility is good. There is also a significant positive correlation between the explanatory variable  $FP-ROA$  and the explained variable  $CSR$ , which also shows that the larger the variable  $FP-ROA$  is, the larger the explained variable  $CSR$  is, indicating that the better the market performance of the power industry



enterprises is, the better their social responsibility will be. It can be seen that the better the financial performance of power industry enterprises is, the more capable they will be to fulfill their social responsibilities. That is to say, financial performance has become a sufficient condition for power industry enterprises to fulfill their social responsibilities. Therefore, hypothesis 1 of this study has been verified. Regression results (3) and (4) are test results of (2), i.e., test research hypothesis 2 and 3. From the test results, regression results (3) show that there is a significant negative correlation between variable *CSR* and explained variable *FP-ROA*, that is, the larger the variable *CSR* is, the smaller the explained variable *FP-ROA* is, that is to say, the higher the level of corporate social responsibility in the power industry, the corresponding accounting performance is on the contrary worse; regression results (4) show that there is also a significant negative correlation between the variable *CSR* and the explained variable *FP-ROA*, that is, the larger the variable *CSR*, the smaller the explained variable *FP-ROA*, indicating that the higher the level of corporate social responsibility in the power industry, the worse the market performance. It can be seen that the more the power industry enterprises invest in the performance of social responsibility, the corresponding financial performance will be worse, that is to say, the performance of social responsibility becomes the cost of the power industry enterprises, which affects their financial performance, indicating that in the power industry enterprises, the “cost” factor of social responsibility is higher, which verifies the research hypothesis 2 of this paper, while the research hypothesis 3 is not tenable. Regression results (5) and (6) are test results of formula (3), i.e., test research hypothesis 4. Regression results (5) show that there is a positive correlation between *CSR* in the last period of variables and *FP-ROA* in the current period of variables, but this positive correlation does not pass the significance test of conventional confidence level, which shows that the higher the social responsibility level in the last period of power industry enterprises, the higher the level of accounting performance in the current period. However, the positive correlation is not stable; regression results (6) show that there is also a positive correlation between variable *CSR* in the previous period and *FP-ROA* in the current period, but it also fails to pass the significance test of conventional confidence level, indicating that the higher the level of social responsibility in the previous period, the higher the level of market performance in the current period, and this positive correlation is also unstable, which can be seen from the power industry. It takes time for industrial enterprises to perform their social responsibility to have a positive impact on their financial performance. Although in the second phase, social responsibility can have a positive impact on their financial performance, the positive impact is still unstable, which shows that hypothesis 4 of this study can only be verified to a certain extent.

In order to test the correctness of the conclusions of this study, this paper tests the robustness. Replace the indicators to measure the financial performance of power industry enterprises, use *EPS* and *ROE* to measure the degree of financial performance of power industry enterprises, and then carry out empirical test; secondly, considering the influence of extreme values in the sample, this paper conducts empirical test after dealing with the extreme values of 0-1% and 99-100%. There is no substantial

difference between the results of robustness test and the previous empirical results, so the conclusion of this empirical test is robust.

## 5. Research Conclusion

Social responsibility is a sustainable development problem that enterprises must pay attention to in addition to their economic interests in the daily operation process. However, due to the particularity of its business objects, the social responsibility of the power industry is more important. Therefore, this paper chooses 2012-2018 listed companies in the power industry as a sample to empirically test the relationship between corporate social responsibility and financial performance in the power industry. The results show that there is a significant positive correlation between the financial performance and social responsibility of the power industry enterprises, that is, the better the financial performance of the power industry enterprises, the more capable they are to fulfill their social responsibility; there is a significant negative correlation between the current social responsibility and the current financial performance of the power industry enterprises, indicating that the performance of social responsibility is a large cost, which will affect the current period. There is a positive correlation between the social responsibility of the power industry enterprises in the last period and the financial performance of the current period, but the relationship is not significant, that is to say, the positive impact of the social responsibility of the power industry enterprises on the financial situation is lagging behind, and it takes time to show.

Social responsibility is a problem that enterprises in various industries attach importance to at present. If enterprises want to maintain sustainable development, they must attach importance to social responsibility. However, from the research conclusion of existing literature, there seems to be some problems in the process of fulfilling social responsibility in the power industry, especially the production nature of the power industry, which needs complex environment. Therefore, on the one hand, the power industry needs to; on the other hand, we need to implement the social responsibility. At the same time, the business evidence of this paper shows that the social responsibility of electric power industry enterprises has a negative correlation with financial performance, that is to say, the social responsibility of electric power industry enterprises does not have a positive effect in the short term, and the positive effect needs time to appear, so this problem requires sustained attention from academia and practice. In addition, the research sample of this paper is listed companies in the power industry, but there are still some large unlisted power enterprises in China, such as the State Grid, and the power industry enterprises such as the State Grid are the enterprises that perform better social responsibilities in the power enterprises. Therefore, with the passage of time, as well as the listing of the State Grid and other enterprises in the future, the social responsibilities of the power industry enterprises Question, is a problem worthy of continuous attention.

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## References

- Brammer, S., Millington, A., & Pavelin, S. (2006). Is Phi. Philanthropy Strategic? An Analysis of the Management of Charitable Giving in Large UK companies. *Business Ethics: A European Review*, 2006(3), 234-245. <https://doi.org/10.1111/j.1467-8608.2006.00446.x>
- Fan, G., Wang, X., & Zhu, H. (2011). *China's Marketization Index: 2011 Report on the Relative Process of Marketization in Various Regions*. Beijing: Economic Science Press.
- He, L., Li, Z., & Zhu, H. (2013). Research on Social Responsibility Report and Environmental Performance Information Disclosure of Listed Electric Power Companies in China. *Mathematical Statistics and Management*, 2013(3), 397-403.
- Maron, I. Y. (2006). Toward a Unified Theory of the CSP-CFP Link. *Journal of Business Ethics*, 2006(2), 191-200. <https://doi.org/10.1007/s10551-006-9023-7>
- Moskowitz, M. (1972). Choosing Socially Responsible Stocks. *Business and Social Review*, 1972(1), 71-75.
- Qiu, X. (2013). Research on the Relationship between Corporate Financial Performance and Social Responsibility. *Modern Business*, 2013(26), 103-106.
- Shan, L., Gan, L., & Zheng, T. (2008). Corporate Donation and Economic Motivation: An Empirical Study on the Donation of Chinese Listed Companies after Wenchuan Earthquake. *Economic Research*, 2008(11), 51-61.
- Shen, H. (2005). *Research on the Relationship between Corporate Social Responsibility and Corporate Financial Performance based on Stakeholder Theory*. Dissertation of Xiamen University.
- Xiao, Z., & Yang, J. (2011). Analysis of the Impact of Corporate Governance on Corporate Social Responsibility: Empirical Evidence from Chinese Listed Companies. *Securities Market Guide*, 2011(6), 34-40.
- Zhang, H. (2013). Measurement of Corporate Social Responsibility Level and Industry Differences in China: Empirical Analysis Based on factor analysis and TOPSIS. *Development research*, 2013(4), 117-120.
- Zhang, Z., Jin, X., & Li, G. (2013). Empirical Study on the Cross Period Impact between Corporate Social Responsibility and Financial Performance. *Accounting Research*, 2013(8), 32-39.
- Zhou, X. (2005). Social Capital Logic of Enterprise Theory. *China Industrial Economy*, 2005(3), 84-91.