

# Empirical Analysis on the Characteristics of Accounting Elements of Listed Companies in Building Materials Industry

Liu Yun, Yang Qiaowen, Yao Yonghong

Hua Shang Accounting College, Guang Dong University of Finance and Economics, Guangzhou, China

**Email address:**

ly2005112@163.com (Liu Yun), yangqiaowen22@qq.com (Yang Qiaowen)

**To cite this article:**

Liu Yun, Yang Qiaowen, Yao Yonghong. Empirical Analysis on the Characteristics of Accounting Elements of Listed Companies in Building Materials Industry. *Journal of Finance and Accounting*. Vol. 6, No. 2, 2018, pp. 76-83. doi: 10.11648/j.jfa.20180602.14

**Received:** April 24, 2018; **Accepted:** June 6, 2018; **Published:** June 20, 2018

---

**Abstract:** This paper builds an empirical model of accounting factors such as inventory, receivables, liabilities, net assets, operating costs, operating income, net profit and other accounting factors in the assets of accounting factors. To net profit to be explained variable, other accounting elements as the explained variable, for China's building materials industry (A shares) in the third quarter of 2017 financial indicators for the empirical analysis, trying to find out decision accounting elements dependent data regularity of construction building materials industry net profit model, the elements of accounting in the model structure characteristics, in order to strengthen industrial chain management, to the back-end industry: A leading role in the real estate industry to provide decision basis; To provide the decision-making basis for the construction materials industry and the internal supply side reform of specific companies in the industry.

**Keywords:** Building Materials, Profit Model, Characteristics of Accounting Elements

---

## 1. The Introduction

Building materials for building materials, building for the real estate industry to provide housing products, building materials - construction - real estate is the same industrial chain, building materials, construction is the real estate front-end product supply chain. In the present research on the supply side of real estate industry, the research should be carried out according to the industrial chain, the system, the related, dynamic and carry out. This is the real estate industry research at the same time, to the real estate industry front research, namely, through the study of architectural building materials industry from decided to real estate industry front-end industry research, to reveal the real estate industry association effect, to reveal the construction materials associated with the continuation of the real estate industry chain development and influence. Industry listed companies in the development of the industry elite, representative and typicality, this article attempts through the empirical analysis of listed companies in construction building materials industry, observation of the real estate industry association about the existence of the front-end industry construction

building materials industry, construction building materials industry whether there is a lever, debt reduction, cost reduction, reduction problem such as accounts receivable, from the perspective of industry chain, to discover problems, solve problems, promote the building materials, construction, health, orderly and steady development of real estate industry chain; We will promote high quality growth in industries and industries.

The construction industry refers to the industry specialized in civil engineering, housing construction and equipment installation and engineering survey and design related work. By the end of December 2017, China has 418,036 registered enterprises, 90 listed enterprises and 78326 patents. The construction material industry refers to the enterprise specialized in building materials management, this article does not separate statistics. The author through the analysis of construction building materials industry constitute accounting elements performance characteristics, research, mainly provides the management basis for the construction materials healthy and effective development, for the follow-up industry chain of the real estate industry orderly and long-term development, strengthen the related party

reform of the supply side, provides the basis for industry coordinated development.

## 2. Literature Review

Luo Yanfang; Xiao-long liu; (2013) "the housing market and the study on the relationship between the architectural building materials sector information transmission based on VAR - BEKK GARCH binary model through the use of VAR BEKK - GARCH model of the housing and building materials sectors of information transmission between the relationship between the empirical analysis, found there is a cointegration relationship between, is a two-way price spillover effects, but in the short term, the impact of each other with asymmetry, mainly housing plate impact of building materials. In addition, there is volatility spillover effect between the two cities, but their correlation coefficient with the conditions of instability, reflects the two cities integration degree is low. The national natural science fund project (71071059); Special fund financing project of basic scientific research operating expenses of central universities (2012ZMO031)

Cao Hu; Zhao Dui (2016) in the "standard of construction materials quality inspection and supervision of construction analysis according to related statistics, building materials the proportion of 30% to 80% of total project cost, to some extent this prompted a variety of new building materials. Therefore, strengthening building materials quality inspection and supervision is the key to ensure construction quality, however, it is very important to the original building materials quality inspection, must be in strict accordance with the national related standards of the construction industry, the building materials of various technical indicators systematic inspection and supervision, at the same time for building materials whether meet relevant standards to judge correctly. Next, this paper analyzes the construction material quality inspection and supervision standard construction.

Tong Chao; Rui-feng Zhang (2017), the green environmental protection building material for residential construction development trend analysis of the influence of green environmental protection building materials in various aspects such as energy saving, water saving, material saving, environmental protection has the advantage, these advantages are undisputed, also is the trends of green building development, the meaning of green environmental protection building materials are not only embodies in energy conservation and emissions reduction, pay more attention to reduce indoor pollution, the improvement of people's living conditions, improve people's health and safety. Green and environmental protection has become the current world architecture development trend. The use of green and pollution-free building materials is the general trend. This paper analyzes the trend and influence of environmental protection building materials on the development of residential buildings.

Jessie & gin (2017), effective use of computer technology

in construction materials management) construction engineering construction is a complicated system engineering, there are many needs to coordinate and deal with the problem, which carries on the effective management of building materials is a huge job. In the traditional management of building materials, due to the variety and quantity of materials, it has brought some difficulties to the related management. In this case, the management of building materials should be innovated to improve the efficiency of management. The application of computer technology to the management of building materials can effectively improve the efficiency of building materials management, so that construction can be carried out smoothly.

Joe fong kuo (2016), the unified thought To take on responsibilities reverse excess shortage coexistence of confusion Resolutely fight building materials industry supply side structural reforms to be completed in China building materials federation council of five five and 2016 of all the conference speech "< > is this year's national work conference on system building materials industry association and President of all the meeting earlier than usual time, such an arrangement with our industry faces is closely related to the situation and very urgent task. Last year, the President of the plenary meeting, we put forward the deep understanding of the situation, grasping the opportunity and driven by innovation push the building materials industry in the new period work ideas and the purpose of this meeting is consistent in the thoughts, is different with the change of the situation and task, need we to surplus and shortage coexistence.

Jiang Feng (2004), the effect of assets reorganization of listed companies in China's building materials industry empirical analysis of asset reorganization is one of the enterprises to carry out the strategy of expansion or contraction inevitable choice and means, in the modern age of international m & a tide come, effective integration and utilization of assets often determines the rise and fall of an enterprise survival, so get the wide attention of academia and enterprises. Based on China's building materials industry recent merger, acquisition and reorganization activities of listed companies as the basis, with modern enterprise strategy management theory, merger and acquisition reorganization theory as a guide, combined with the current building materials industry development trend and assets reorganization of listed companies in the domestic building materials industry as an example, the building materials industry m & a motives, methods, characteristics and the effect of the assets reorganization of listed companies, and the empirical research on the problems such as market response, by using classification analysis, window analysis and regression analysis methods, such as inspection accumulation average excess return of shares of listed companies, that type of restructuring, performance changes, market reaction correlation conclusion, hoping to provide decision-making reference for China's building materials industry enterprises.

The paper should be written in English. The paper should

be composed of title, author(s), abstract, keywords, introduction, main body, conclusions, and references. The paper submitted to the conference should be 6-12 pages.

### 3. Analysis Model Design

#### 3.1. Variable Selection

In variable selection, considering that can reflect the enterprise profit core index as the net profit amount, is as the explained variable (dependent variable), and then select based on the accounting elements of other variables to explain.

The first choice of operating income is to interpret variables and try to observe how the sales revenue of building materials company supports the net profit under the action of the selected common factors.

Choose to explain the operating cost of variable, under the action of common factors, try to observe the decrease of operating cost of listed companies in building materials industry and how to reduce the impact on net profit? How big is the cost space for each company?

Choose a net worth of explanatory variables, under the action of a common factor, trying to observation, company's own money can bring much profit, to reveal the enterprise net assets data characteristics of the impact on the company's profits increase.

Select corporate liabilities to explain variables. Under the

action of common factors, it is attempted to observe whether the building construction materials industry should reduce the liabilities, the leverage of the liabilities on net profit is positive correlation or negative correlation; What does it mean for companies to reduce leverage to net profit? Sometimes it might be a curve; How much leverage is needed?

Select the company's inventory as the explanation index of net profit, under the action of the selected common factor, try to observe the company's current inventory product's explanation of net profit? If it is negative, it is suggested to reduce the inventory. Otherwise, it's the other way around.

Choose the company's accounts receivable is the interpretation of the net profit variables, under the action of a common factor, trying to observation, based on commercial credit line up on the premise of business on the data characteristics of net income support? Moreover, the implementation of the sales at the present stage in China accounting is based on accrual accounting, accounts receivable, capital takes up too much, on the one hand, in the event of a phase of inflated profits, according to the actual income of accounting did not draw back; In overdue, would amount to a corporate profits lower again, at this time, reduce the settlement funds occupy, alert the company controls settlement risk, to the company's profit increase, the improvement of economic efficiency has a realistic significance.

#### 3.2. Model Design

Table 1. The variable symbol and the coefficient assumption.

Variable name	Net profit	Operating income	Operating cost	Net worth	liabilities	Inventory	Accounts receivable
Variable name	NP	OI	OC	NW	LI	IS	AR
The letter	y	X1	X2	X3	X4	X5	X6
Plus or minus	+	+	-	+	?	?	?

Regression model:

$$NP = \beta_0 + \beta_1 OI + \beta_2 OC + \beta_3 NW + \beta_4 LI + \beta_5 IS + \beta_6 AR \tag{1}$$

#### 3.3. Analytical Methods and Tools

This paper adopts empirical method to 2017 in the third quarter 90 financial accounting index as the observation samples () the whole samples, using cross-sectional data to

construct performance model, and on the basis of the model, analyzing the characteristic of the accounting elements. Data analysis tools: SPSS19.0, Excel2010.

#### 3.4. Data

Table 2. Building materials listed company Third quarter of 2017 finance Accounting data.

Stock name	NP	OI	OC	NA	LI	IS	AR
China constructs	25782.18	770899.4	697192.2	207252.2	21910.73	541761	147857.5
China hands over to set up	11728.55	307297.1	266095	173499.3	26864.59	149064.5	87397.15
In China iron	11035.8	470276.8	427379.1	150556.6	15111.95	236055.8	151277.6
Chinese iron sets up	10528.78	460384.5	419884.5	139454.1	13451.07	284108.9	138745.3
China electricity sets up	5689.494	186172.4	161643.8	77408.08	11746.26	121418	42125.22
In China Ye	3548.886	150801.1	131388.4	80656.5	11916.98	127289.7	69359.33
Ge continent dam	2589.317	74308.23	65345.77	40206.78	5514.54	50951.86	11559.01
Shanghai sets up work	1898.895	99539.38	89548.81	26595.16	2967.106	69938.15	17417.52
BeiXin building materials	1564.635	8107.106	5346.482	11641.63	6011.085	1317.354	198.4861

Stock name	NP	OI	OC	NA	LI	IS	AR
Gold praying mantis	1437.133	15731.43	13118.55	10995.66	2190.055	216.4902	18592.87
Chinese chemistry	1292.532	38345.39	33082.1	28282.97	4499.757	18359.57	14059.32
Tunnel share	1159.422	19959.95	17632.32	18550.76	2448.871	7026.789	14092.03
Shen Tong's express delivery	1127.408	8564.63	6884.969	6420.321	1566.305	27.63289	768.6315
Medium iron industry	900.2592	11466.61	9185.856	14267.18	3542.396	10359.6	11296.04
Eastern rain Hong	868.7317	6970.548	4192.826	6240.889	4134.55	990.5796	3655.243
Eastern park	866.486	8635.429	6051.027	9994.072	4268.483	10064.91	5710.885
Medium work nations	853.2796	6232.992	4513.396	7694.135	2931.45	2143.419	4318.869
Medium material nations	717.5808	13287.43	10989.92	7490.405	1565.92	4208.761	3237.837
Wei star new material	544.7566	2575.724	1367.792	2916.256	2575.42	499.6499	191.3656
Jian group in the sky	543.9182	4544.746	3156.68	6490.671	2854.098	13114.58	626.1705

Due to space constraints, only 20 listed companies listed in 90 listed companies are listed, but the sample observation is still 90 companies.

## 4. Statistical Analysis

### 4.1. Descriptive Statistics

Table 3. Descriptive statistics.

	N	Minimum	Maximum	Sum	All be worth		Sigma	Variance
	statistic	statistic	statistic	statistic	statistic	Standard error	statistic	statistic
NP	90	-302.65	25782.18	94783.15	1053.1461	354.46280	3362.72940	11307949.038
OI	90	303.04	770899.40	2926446.81	32516.0757	11743.77711	111411.25202	1.241E10
OC	90	113.87	697192.20	2597037.77	28855.9752	10602.51155	100584.25622	1.012E10
NW	90	19.93	207252.18	1239066.43	13767.4047	3804.58034	36093.41829	1.303E9
LI	90	.19	26864.59	210478.99	2338.6554	477.45295	4529.51635	20516518.385
IS	90	1.85	542217.67	1864719.89	20719.1099	7588.63765	71992.13794	5.183E9
AR	90	9.17	151277.60	887646.66	9862.7406	2990.50098	28370.38333	8.049E8

### 4.2. Initial Return

Table 4. Summary output.

The regression statisticses	Adjusted R Square	0.985716
Multiple R	0.993317	Standard error margin
R Square	0.986679	Prognosticate a value
		401.8948
		90

Table 5. The variance is analytical.

	df	SS	MS	F	Significance F
The regression is analytical	6	9.93E+08	1.66E+08	1024.646	1.33E-75
Cripple bad	83	13406112	161519.4		
Total	89	1.01E+09			

Table 6. Regression coefficient.

	Coefficients	Standard error margin	t Stat	P-value	Lower 95%	Upper 95%	Next limit 95.0%	Upper limit 95.0%
Intercept	71.58477	49.90869	1.434315	0.15524	-27.6816	170.8512	-27.6816	170.8512
X Variable 1	0.254535	0.072216	3.524642	0.000693	0.110901	0.39817	0.110901	0.39817
X Variable 2	-0.23059	0.076488	-3.01472	0.003411	-0.38272	-0.07846	-0.38272	-0.07846
X Variable 3	-0.00348	0.013711	-0.25376	0.800306	-0.03075	0.023791	-0.03075	0.023791
X Variable 4	0.02379	0.029433	0.808267	0.421247	-0.03475	0.082331	-0.03475	0.082331
X Variable 5	-0.00373	0.003817	-0.97644	0.331684	-0.01132	0.003865	-0.01132	0.003865
X Variable 6	-0.05795	0.008694	-6.66554	2.72E-09	-0.07524	-0.04066	-0.07524	-0.04066

## 5. Mixed Regression

### 5.1. Analysis of the Relationship Between Net Assets and Net Profit

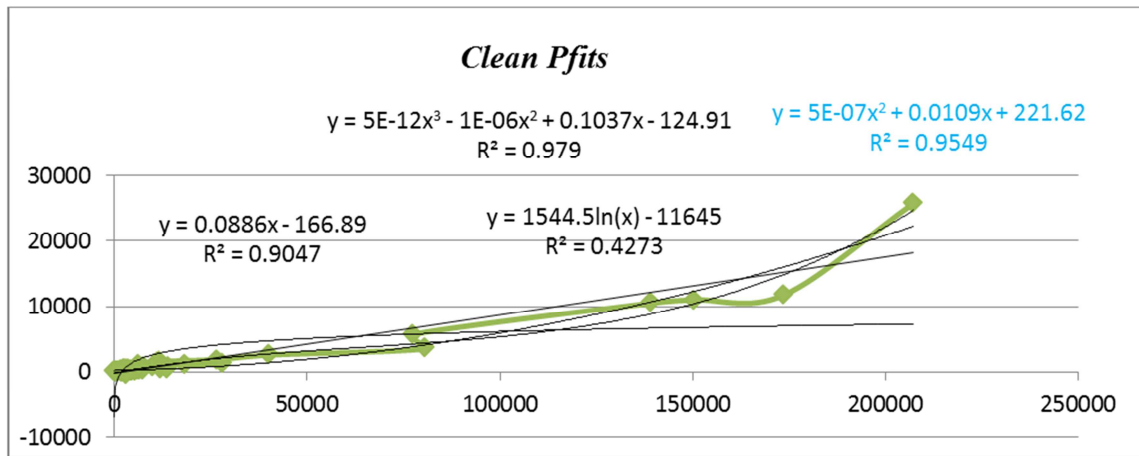


Figure 1. NA & Clean Pfits.

Analysis of structural relationship between liability, inventory and net profit.

### 5.2. The Relationship After Conversion of Variables

Table 7. Correlation.

		NP	OI	OC	NW^3	LI	LI^2	IS^2	AR
NP	Pearson The correlation	1	.979**	.977**	.972**	.846**	.834**	.917**	.907**
	Significance(bilateral)		.000	.000	.000	.000	.000	.000	.000
	N	90	90	90	90	90	90	90	90
OI	Pearson The correlation	.979**	1	1.000**	.934**	.824**	.784**	.888**	.961**
	Significance (bilateral)	.000		.000	.000	.000	.000	.000	.000
	N	90	90	90	90	90	90	90	90
OC	Pearson The correlation	.977**	1.000**	1	.932**	.817**	.776**	.890**	.961**
	Significance (bilateral)	.000	.000		.000	.000	.000	.000	.000
	N	90	90	90	90	90	90	90	90
NW^3	Pearson The correlation	.972**	.934**	.932**	1	.821**	.878**	.900**	.853**
	Significance (bilateral)	.000	.000	.000		.000	.000	.000	.000
	N	90	90	90	90	90	90	90	90
LI	Pearson The correlation	.846**	.824**	.817**	.821**	1	.938**	.626**	.828**
	Significance (bilateral)	.000	.000	.000	.000		.000	.000	.000
	N	90	90	90	90	90	90	90	90
LI^2	Pearson The correlation	.834**	.784**	.776**	.878**	.938**	1	.622**	.761**
	Significance (bilateral)	.000	.000	.000	.000	.000		.000	.000
	N	90	90	90	90	90	90	90	90
IS^2	Pearson The correlation	.917**	.888**	.890**	.900**	.626**	.622**	1	.754**
	Significance (bilateral)	.000	.000	.000	.000	.000	.000		.000
	N	90	90	90	90	90	90	90	90
AR	Pearson The correlation	.907**	.961**	.961**	.853**	.828**	.761**	.754**	1
	Significance (bilateral)	.000	.000	.000	.000	.000	.000	.000	
	N	90	90	90	90	90	90	90	90

\*\* . Significant correlation was found at.01 level (bilateral).

The correlation between the transformed variables and the correlation coefficient between the two factors were significant at 0.01; The correlation between net profit and operating income is 0.979, which is lower than the overall fit of 0.997, so there is no multiple collinearity in the regression model.

### 5.3. Hybrid Regression Model

Table 8. The regression statistics.

Multiple R	0.9985427		
R Square	0.9970876	Standard error margin	190.227358
Adjusted R Square	0.9967999	Prognosticate a value	90

Table 9. The variance is analytical.

	df	SS	MS	F	Significance F
The regression is analytical	8	1003476362	125434545.3	3466.340389	2.5438E-99
Cripple bad	81	2931102.265	36186.44772		
Total	89	1006407464			

Table 10. Hybrid regression model coefficient.

	Coefficients	Standard error margin	t Stat	P-value	Lower 95%	Upper 95%	Next limit 95.0%	Upper limit 95.0%
Intercept	5.3008239	28.62601	0.18517507	0.853555	-51.656	-51.656	62.25761	-51.656
X Variable 1	0.303349	0.023477	12.921066	2.25E-21	0.256637	0.256637	0.350061	0.256637
X Variable 2	-0.306871	0.025389	-12.087012	8.06E-20	-0.35739	-0.35739	-0.25636	-0.35739
X Variable 3	1.112E-12	2.01E-13	5.52180603	3.94E-07	7.11E-13	7.11E-13	1.51E-12	7.11E-13
X Variable 4	0.1141758	0.024733	4.61627432	1.45E-05	0.064964	0.064964	0.163387	0.064964
X Variable 5	-8.75E-06	1.84E-06	-4.7519079	8.61E-06	-1.2E-05	-1.2E-05	-5.1E-06	-1.2E-05
X Variable 6	-0.013302	0.002599	-5.1190084	2.03E-06	-0.01847	-0.01847	-0.00813	-0.01847
X Variable 7	2.26E-08	4.93E-09	4.58934297	1.6E-05	1.28E-08	1.28E-08	3.24E-08	1.28E-08
X Variable 8	-0.011795	0.004492	-2.6259426	0.010329	-0.02073	-0.02073	-0.00286	-0.02073

Compared with the linear regression model, the above hybrid regression model has been improved, from 98.57% to 99.68%. All the accounting variables have passed the 99% trust level student t statistic test, the regression model is very good.

#### 5.4. The Regression Equation

$$NP = 5.30082 + 0.30335OI - 0.30687OC + 1.112(E - 12)NW^3 + 0.11418LI - 8.75(E - 06)LI^2 - 0.0133IS + 2.26(E - 08)IS^2 - 0.0118AR \quad (2)$$

The positive and negative number of regression equation is assumed, and the positive and negative Numbers of operating income, operating costs and net assets are verified. The relationship between liabilities and net profit is quadratic, and there is a maximum inflection point of net profit. The explanation of the inventory to net profit is also quadratic,

but the coefficient of the quadratic term is negative, which indicates that the effect of inventory on net profit has a minimum inflection point; The accounts receivable coefficient indicates that, under the joint action of accounting factors, the industry will reduce the net profit by 1.18 yuan for each account receivable of 100 yuan.

#### 5.5. Accounting Factor Characteristic Table of Building Materials Industry

Table 11. Each company Six factors Action sheet on net profit.

Stock name	OI&NP	OC&NP	NW&NP	LI&NP	IS&NP	AR&NP
China constructs	9.063387	-8.29199	0.383665	-0.06582	-0.02179	-0.06759
China hands over to set up	8.029666	-7.03378	0.500258	-0.27997	-0.12758	-0.0888
In China iron	12.54488	-11.5329	0.333714	-0.02371	-0.16543	-0.15691
Chinese iron sets up	13.70893	-12.6481	0.296032	-0.00471	-0.19194	-0.16064
China electricity sets up	9.828666	-8.6328	0.089764	0.023258	-0.22327	-0.08647
In China Ye	11.47252	-10.1117	0.146330	0.029626	-0.33282	-0.20517
Ge continent dam	10.3672	-9.22264	0.033242	0.167198	-0.28469	-0.0627
Shanghai sets up work	15.26596	-13.8932	0.010575	0.132329	-0.41447	-0.10387
BeiXin building materials	2.09143	-1.39527	0.001492	0.314789	-0.01487	-0.00199
Gold praying mantis	6.456832	-5.44691	0.002000	0.281544	-0.00389	-0.29672
Chinese chemistry	8.051748	-7.02722	0.017415	0.232993	-0.16378	-0.11479
Tunnel share	9.688906	-8.65841	0.011360	0.363449	-0.14779	-0.26598
Shen Tong's express delivery	4.067144	-3.30747	0.000461	0.246351	-0.00058	-0.01419
Medium iron industry	5.011764	-4.06152	0.004653	0.424549	-0.19507	-0.19197
Eastern rain Hong	1.922987	-1.17012	0.000246	0.293279	-0.01196	-0.03921
Eastern park	2.917096	-2.0678	0.001236	0.365182	-0.14655	-0.07501
Medium work nations	2.733575	-2.0024	0.000732	0.375183	-0.04107	-0.07365
Medium material nations	5.540062	-4.63534	0.000642	0.216249	-0.0764	-0.05249
Wei star new material	1.315319	-0.70659	0.000046	0.397307	-0.01118	-0.0038
Jian group in the sky	2.801099	-1.96817	0.000618	0.517275	-0.34655	-0.01501
The intelligence of Zhuo Lang	3.322909	-2.43031	0.000041	0.198065	-0.05248	-0.04776
Road bridge in Sichuan	14.47839	-13.2881	0.004578	0.287747	-0.43256	-0.06179
Water conservancy in Anhui	24.00491	-22.3412	0.001225	0.216538	-0.51824	-0.38066
Road bridge in Shandong	10.26767	-9.04127	0.000278	0.270682	-0.32308	-0.19709
Medium the south construct	28.76206	-23.8972	0.014815	1.320765	-4.8353	-0.39167

Above case to explain the accounting elements based on net profit characteristics, Chinese architecture, for example, the characteristics of the accounting elements of net income for that company for every 10% of revenue, can increase net income 90.63%; For every 10% operating cost, net profit will be reduced by 82.92%. With a capital of 100 yuan, the net profit will be 38.37 yuan. For every 100 yuan in debt, net profit will be reduced by 6.58 yuan. If the inventory is 100 yuan, the net profit will be reduced by 2.18 yuan. Accounts receivable of 100 yuan, will reduce net profit 6.76 yuan. Above constitutes a net profit of accounting elements characteristics show that the Chinese construction company, to expand sales, reduce costs at the same time, really need to reduce the financial leverage, reduce inventory, reduce the accounts receivable, in order to achieve better economic benefit. The accounting factors of other companies explain the characteristics of net profit, and the characteristics of these accounting factors are the same as that of Chinese construction companies. Limited to space, we did not list the accounting characteristics of 90 building materials industry listed companies, only 25 of them were listed.

## 6. The Conclusion

### 6.1. Characteristics of Industry Performance Accounting Elements

According to the hybrid regression model, the accounting elements of listed companies in building materials industry are analyzed as follows:

#### 6.1.1. Business Income Characteristics

The whole building materials industry listed companies during the period of 1 to 3 quarter of 2017, in the accounting factors operating income, operating cost, net assets, liabilities, inventory and accounts receivable, under the action of the net profit of joint industry every obtaining business income is 100 yuan, will bring the company net profit of 30.34 yuan, this shows that the listed companies in building materials sales net profit levels higher, industry revenue net content, industry is not only the effective supply of products, and is efficient supply, expanding effective in sales. But there is still plenty of room for the industry to consolidate its domestic market and open up foreign markets.

#### 6.1.2. Business Cost Characteristics

Six factors, in the accounting industry every operating cost 100 yuan, will reduce the net profit of 30.69 yuan, to the industry shows that to reduce the operating cost, effect on net income elasticity at 30.69%, the ratio is higher than the net income of the business income ratio, but is higher than the cost of operating revenue, otherwise, the two indicators can make up the loss; Reducing the operating cost of the industry is the eternal theme of increasing net profit and improving economic benefits. Reduce operating costs, increase sales margin, and increase the company's net profit is particularly important.

#### 6.1.3. Characteristics of Net Assets

Six factors, in the accounting industry every take up their own capital 10000 yuan, 1.03 yuan will bring industry net profit, suggests that the company's own capital use effect is poorer, less elastic effects on the company's economic benefit, the net effect on net income elasticity is not obvious. The positive correlation interpretation of regression is consistent with the coefficient of preset variables. In order to improve the efficiency of the company, we should use EVA value-added method to strengthen the management of its own capital and increase the return on equity.

#### 6.1.4. Characteristics of Liabilities

Throughout the macroeconomic regulation and control of environment, "three down one filling" seems to be a pattern, but the regression results show that the construction materials industry listed companies' debt leverage for the interpretation of the net income (6.52457 billion yuan), the following is a turning point for net profit is a positive correlation, otherwise, is a negative correlation; This is not consistent with the assumption that the liabilities in the default are positive or negative for net profit. In six factors, accounting model show that when the company liabilities of more than 6.52457 billion yuan, would have negative effect to the net income, debt to net a quadratic curve relationship between the elastic function of liabilities in the above construction building materials industry should fall when the maximum leverage, otherwise, do not need to leverage.

#### 6.1.5. Inventory Characteristics

Six factors in accounting, inventory for the interpretation of the net profit of dependent characteristics, namely industry inventory has the function of net profit quadratic curve relationship, quadratic term is positive, that inventory has a minimum value of 294.24779 billion yuan, the company is higher than the inflection point value is to increase net income is positive correlation; Below the inflection point inventory, the company net profit growth is negative correlation. At the end of September 2017, the inventory of the whole building materials listed company was 18,64719.89 million yuan. According to this ratio, the inventory factor increased net profit by 5378.85 million yuan. This result is inconsistent with the presupposition. Should strengthen the inventory management, especially to prevent enterprise, loan repayment, interest payments without during treatment, but the capitalization processing, the company to the follow-up expenses, inflated inventory, higher asset-liability ratio, amount of inventory cost didn't increase area, and increase the value, continue to promote real estate prices artificially high.

#### 6.1.6. Accounts Receivable Characteristics

Six factors in accounting, the interpretation of the net profit for the account receivable, and accounts receivable there every 100 yuan, industry companies will reduce the net profit of \$1.18, shows that the company's accounts receivable

to strengthen control. Accounts receivable is the commercial credit under the premise of credit behavior, 90 listed companies accounts receivable at the end of September 2017 totaled 887.64666 billion yuan, if the proportion of model structure calculation, accounts receivable to reduce the industry's total net profit of 10.47423 billion yuan, equivalent to 11.05% of the total net income during, visible, in order to strengthen the management of accounts receivable, importance to improve the company's economic benefit.

## 6.2. Contribution and Deficiency of This Paper

### 6.2.1. This Article Refers to the Accounting Language

This paper introduces the accounting profession, accounting element terminology, as the variable of regression model, which reflects the forecasting and decision-making function of management accounting, and expands the diversity of accounting equation. It further proves the relation between accounting and mathematics, revealing that accounting has social attribute (subjectivity of subject setting) and natural attribute (natural relation with mathematics).

### 6.2.2. The Performance Hybrid Model Constructed in This Paper Is Widely Used

In this paper, the performance model of building materials industry is composed of both linear and curvilinear models. The advantage is: fit well; The function structure of the independent variable and the reliable level of statistical test can be obtained. A change of the current empirical model is a straight line. The research methods and results not only adapt to the comprehensive analysis needs of zhongguan industry, but also apply to the analysis and evaluation needs of individual companies with industry as the analysis standard.

### 6.2.3. Deficiencies

In this paper, the data samples are not used for accounting data of the annual report, because the disclosure of financial reports of listed companies needs to be delayed before the end of April. Limited to space, no data conversion and representation of the hybrid model are constructed; the accounting elements of all corporate performance are not listed.

Finally, I would like to thank the reviewer for the

Suggestions proposed in this paper.

## References

- [1] Confirm: Papers are 2018GZGJ167 funded projects.
- [2] Luo yanfang, liu xiaolong. Research on information conduction relationship between housing market and building materials sector -- based on VAR- bekk-garch binary model [J]. Henan science, 2013, 31(08):1294-1299.
- [3] Net profit of listed companies in building materials industry was increased by 34% [J]. Building materials development orientation, 2011, 9(05):71-72.
- [4] Cao hu, zhao dun. Analysis on quality inspection and supervision of building materials [J]. China standardization, 2016(17): 18-19.
- [5] Tong chao, zhang ruifeng. Analysis on the impact of green and environment-friendly building materials on the development trend of residential buildings [J]. Building materials and decoration, 2017(27): 65.
- [6] Liu qin. Effective application of computer technology in building materials management [J]. Building materials technology and application, 2017(04): 34-36.
- [7] Joe fong kuo. Unified thought To take on responsibilities reverse excess shortage coexistence of confusion Resolutely fight building materials industry supply side structural reforms to be completed in China building materials federation council of five five and 2016 of all the conference speech [J]. Journal of building materials in China, 2016 (9): 26-33.
- [8] Liu yun, Chen Margaret, Yang Qiaowen, YaoYonghong, Accompanying the binomial - the function of regression model building is introduced to Beijing entity class 2017 mid-term financial indicators of listed companies, for example, "[c]. 2016. (5):56-63.
- [9] Hang zhang, Yun Lin. The Research Based on Big Data Management Accounting Model Building Science Lnnovation. Science Publishing Group USA. Volume4 Numbr4 August 2016:228-233.
- [10] Hang zhang, Liu yun. Economic Growth and International Trade Effect on Fiscal Revenue Empirical Research - For Example in China Area. Science Publishing Group USA. Journal of Finance and Accounting. 2017; 5(3): 96-101.