

The Study of Flatness and Timeliness of Financial Information on Pricing the irrational stock

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Abstract: One way to reduce the severity of irrational pricing of shares is making the transparency of information by providing high-quality financial reporting. The quality of financial reports may have different aspects of the features, But two factors including timely and reliability of financial reports, are the most important component quality of the information. If the reports have been got faster to the investors and have higher reliability, it cause that the investors act more wisely in Pricing of shares. In this study, we investigated whether the timely and reliability of financial reporting, have an effect on the rational pricing of shares and earnings and its components, or not? When reporting of data will be timely, it will be more reliable, accounting profit figures also will have higher quality. In this study we have investigated the effect of Timely and reliability of information on the irrational pricing of shares with using of income and its components in the listed companies in Tehran Stock Exchange, during the period from 1381 to 1391. The results show that using of accounting earnings and its components caused to incorrect price of stock. But when timely and the reliability of financial reporting will be increases.

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Introduction:

Financial reports are considered the important sources of information for economic decision-making. And managers, investors, creditors and other users used the financial report to gain their information needs. One of the purposes of financial reporting is Purification of information about business entity's financial performance for the period. And the interest rate plays an important role in measuring the performance of companies (conceptual statement of number 1, Financial Accounting Standards Board). Stock market participants, including investors and financial criticism pay much attention to profit by their companies. On the other hand, managers tend to realize forecasts of profit by stock market, because their salaries and benefits often depend on the performance of the stock price. Perhaps it should be said that among the financial information which is reported by business institute, profit has the highest position. One of the benefit applications priced stock companies. Using accounting profit for Pricing of shares, may lead to incorrect stock pricing of companies, because it is possible that manipulation made by management, lead to unrealistic profits which it's using for pricing the shares will make prices differ greatly from the value of stock. In this situation it will be said that stocks priced by income and its components in an irrational way. However, high quality of financial reporting can provide much clear information about the accounting profit and decreases the intensity of irrational pricing of shares. Stock Exchange since 1382, considers the criteria of quality

of reporting for the calculation of the member companies. These criteria include two components: timely and disclosure of information. Therefore, it is expected that the more timely financial reports to be submitted and have higher reliability, the use of accounting earnings number and its components for the pricing of stocks, causing stock prices to be closer to intrinsic value.

Irrational pricing of shares:

When investors use the information like: accounting profit in order to stock pricing, and this matter caused to abnormal result, it should be said that stock by using the accounting profit has been priced in an irrational way.

Profit Accounting:

It is the resulting of activities of business unit that marks its performance.

Operating of Cash Flow:

It is pure cash that a business unit will achieve from its business activities.

Assurance items:

It is the non-cash accounting which is the resulting of the implementation of accounting procedures. The amount of assurance items achieves from the fraction of cash flow from operations from profit pure accounting.

The quality of accounting earnings:

The theory quality of earning were raised, for the first time by financial analysts and stock brokers, because they felt the reported earnings does not show the power of the company's profit ability as it deserves. They found that the analysis of corporate

financial statements due to numerous weaknesses in the accounting information is difficult to measure. The main reason for financial analysts who don't use the pure reported profit in their assessing is that in determining corporate value they not only noted to quantify the benefits, but also its quality.

1. The relationship between earnings management and earnings quality

It is usually assumed that earnings management (with the use of accruals and manipulate the actual activity) reduces the quality of earnings (Dchv, Jay and Shrand, 2010). Assuming that management, think to their personal interests in opportunistic way, managers may manipulate earnings to gain the most benefits.

Smoothness of accounting earnings

This idea that even is one of the desirable features of profits is derived from this perspective that managers use their confidential information about future profits to smooth fluctuations temporary work therefore, to achieve an average and useful profit. One of the basic principles of accrual accounting system is that profit evens the random fluctuations in the timing of the receipt and payment of the Cash Flow. Therefore, it is expected to measure performance will be more informative regarded to profit and cash flow. Evening of cash flows can be volatile earnings stability and increase the amount of information.

Irrational in come Pricing and its components.

Michigan test is presented to check the irrational pricing in the macroeconomics (The assumptions about market efficiency). In accounting the Michigan test (1983) is used to check whether mentally market expectations of earnings and its components (in the process of formation of stock prices) with the objective of profit and reconfigured expectations (according to historical information) is identical or not. Suppose that we have a correct model (a proper equilibrium pricing equation) for predicting expected return. The estimated parameters of the model are compared with the objective of fitting profit expectations on historical information (such as cash flow, accruals). Recent equation is called the equation predicts. If the parameters are estimated have statistically significant difference equations, It will be understood that the subjective expectations of the market about profit, is not rational.. Because in this case, these parameters are objective parameters of expectations, according to historical data have significant differences.

Background of research:

Sloan (1996) was the first researcher who suggested that investors have to price the payable notes in such a way that they know the information contained in accruals (cash flow) more effective To forecast future profits higher (lower) than the actual

one (or they do wrong pricing). He found that by adopting a policy of long-term investment in shares of companies with low accruals and short-term policy of investing in shares of companies with large accruals will get the major future abnormal returns earned. He tested his predictions by using the portfolio hedge and get to the anticipated result. But he did not control the cash flow in this way. Collins and Hrybar (2000) suggest that irrational pricing of commitment items are different from the vacillation of Fluctuations. Dchv and Dychv (2002) studied the role of the commitment items in order to better measure performance of companies in a series of time. Because accruals require assumptions and forecasts future of cash flow, so the quality of accruals and income decreased with increasing of errors forecast in amount of accruals and income. Collins, Gang and Hrybar (2003) found that in companies with more institutional ownership percentage, than the companies with the less the percentage of institutional ownership, we can see less amount of irrational pricing. Balsam et al. (2003) use the quality of accruals for profit combing quality and say that if the quality of accrual is higher the quality of profit will be increased. Scalar (2004) also examined the quality of earnings through the quality of commitment items and method which is introduced by Dchv and Dychv(2002). On the whole, the findings of his study results confirmed the results Dchvv Dychv (2002). Scalar suggests that modeling, the relationship between accruals and cash flow help to understand the affecting factors of quality earning. Lu and Nysym (2004) by stability of commitment items showed that the negative correlation between accruals and future returns of stock with assumption the loss of the market's performance led to this fact that People who found this relationship to the use of arbitrage opportunities get their benefits. They showed that these discrepancies have been during the past and didn't reduce. But because of the transactions 'volume and cost of information related to using of accruals the rate of people's reaction is not high. Chan et al. (2006) were investigated the relationship between accrual with future stock returns (the difference between profit and cash flow). One interpretation of this result is that companies with low earnings quality, fell pick-efficiency after reporting profit. Kurdistan Rvdnshyn (1385) studied the components of cash and accrual earnings than the market value of their company. Their findings are revealed that cash earnings can predict the market value of the company. But no one can predict and explain the components of the benefit obligation and the market value of the company. Khoshdel (1385) in his study investigated the relationship between operating profit and free cash flow and return on equity, return on common shareholders' equity, efficiency and growth in the

market value of the net total operational. The results of the hypothesis show that Operating profit and net income as measures of interest accruals are effective on the value of the equity value of the company. But free cash flow is irrelevant for assessing the Shareholders equity. Modarress and Abbass Zadeh (1387) in a study considered to assess the impact of analysis and the ability to predict trends in the components of cash commitment on the quality of their expected profits. Rahnamay rood poshti and colleagues (1389) study the information content of the interest and fluctuations in profits and cash flows and found that earnings have information content that this context in the companies which have smoother benefit reduced than the than cash flow. Karimi and sadeghi (1389) had studied the relationship between the qualities of earning with stable earnings of companies which are accepted in Tehran Stock Exchange. Therefore, the qualities of earnings are calculated on investments in capital assets and labor. And by using of panel data's method has been tested experimentally in relation to the stability of income. Results of this study showed that there is a significant relationship between earnings quality and stability of earnings in retrospective approach and also in prospective approach. In a retrospective approach, has been used the financial ratios and in prospective approach, the time-series regression to calculate the quality of earnings is based on the investment. Companies with good performance (poor) tend to manage a decrease (increase) their profits. Namazi and colleagues (1390) showed that there is a positive but insignificant relationship between earnings management and the auditor and between Profit management and auditor tenure. Meshki and nooride (1391) showed that companies with stable profits are smoother than the other companies.

Research hypotheses

Hypothesis 1: Enhancing of timely disclosure of information led to reducing the level of irrational pricing of shares by the operating cash flow.

Hypothesis 2: Enhancing of timely disclosure of information led to reducing the level of irrational pricing of shares by the accruals.

Hypothesis 3: Increase the reliability of information reduces the level of irrational pricing of shares by the accounting profit.

Hypothesis 4: Increase the reliability of information reduces the level of irrational pricing of shares by the operating cash flow.

Hypothesis 5: Increase the reliability of information reduces the level of irrational pricing of shares by the accruals.

Research Methodology

The purpose of this study is based on its data application. Research variables have occurred in the

past and the researcher doesn't have ability to control and manipulate. The method of gathering data in this research was Library and Archives and the main purpose of it is to explain the amount and type of relationship between variables to be tested.

Research territory

Based on existing literature and identify research methods, every research have a three specified realms of time place and subject. The scope of subject is scope the impact of company's growth on abnormal accruals and operating cash flows. The scope of the investigation is the beginning of 1381 until the end of 1391. The place scope of research is Stock Exchange of Tehran.

Population and sample

The population of study is the companies which are listed in stock Exchange of Tehran in the period of 11 years from 1381 to 1391. In choosing the sample; the following conditions have been applied:

1. The end of the financial year was the end of March and during the period of study companies have no change during the fiscal year.
2. Stock companies trading don't have interruption more than 4 months.
3. They don't be one of the insurance companies, banking and financial investment.

With these restrictions, the volume of the sample of is about 196 companies (1751 year-corporation) that are used to test research hypotheses.

Data collection

In this research, the collection of data and required data has been gathered in to stages. In the first stage it has been used the library method to develop theoretical research (and referring to the letters and articles in Persian and English through relevant sites) and in the second stage, to collect the information it has been used the website of the central bank faces financial information provided to the Stock Exchange and other relevant data sources such as databases and new outcomes.

Data analysis

Before analysis of data it is required to ensure of reliable set of data during the period under review. To check the reliability of research data analysis, Dickey Fuller extended treatment (Fisher) and Phillips and Perron test (Fisher type) is used. To test the research hypothesis, the systems of equations estimate in nonlinear least squares method. To gain coefficients of β and α It is necessary to assume that α_0 in each equation is equal. If $\alpha_j = \alpha_j^*$ the sum of squared residuals bound system (SSRC) (which α_j is equal to α_j^*) should not significantly differ from the sum remaining unconstrained system (SSRU) (which α_j is not equal to α_j^*). Michigan (1983) showed that this limitation can be tested by using the likelihood ratio

(under the null hypothesis asymptotic distribution $X^2(q)$)

$$LR=2nLn(SSRc/SSRu)$$

Where, n is the number of observations in each of the equations (2n and the total number of observations) (Kraft et al., 2007).

1.7 descriptive statistics research

Descriptive statistics of research, including mean, median, maximum, minimum, and standard deviation is calculated and presented in table 1. These values provide the overview of the distribution of research data.

Table 1: Descriptive statistics research Variables Middle Max Min Mean variables SD

ABRET	27/0	08/0	24/4	78/0-	68/0
E	16/0	16/0	39/1	37/1-	23/0
CFO	10/0	10/0	67/1	99/1-	30/0
ACC	06/0	04/0	19/2	61/1-	34/0
TIME	50/0	49/0	37/1	23/0-	29/0
REL	59/0	70/0	00/1	00/0	32/0

Definition of variables:

ABRET: is equal to output of Abnormal returns of stocks that are deducted from the average market return is obtained.

E: pure profit homogeneous accounting by the start of stock market value.

CFO: Operating Cash Flow.

ACC: Accruals which are matched with the start of the stock market.

TIME: The timely disclosure of financial reports.

REL: The reliability of financial reports.

8. Test research hypotheses

In this section, the results of research test hypotheses have been proposed. In order to test the research hypotheses, systems of simultaneous equations requirements is estimated. Then the

Michigan test (1983) is done with using the estimating of Stata 12 software.

The results of the first and second research hypothesis testing

To test the hypothesis, first and second research system of simultaneous equations (3-4) is estimated and its results is provided in Table (4-7). The result of predicted equation shows that Operating cash flow variables factor (58/0) and accruals (49/0) at level of 1% and variable rate timely points (08/0) at level of 5% are significant. In the predicted equation, independent variables have made clear about 19% changes of dependent variables in total. Significant Chi-square statistic (50/549) in the level of 1% represents the significant of predicted equation.

Table (4-7): The results of equations (3-4)

Determination Coefficient	statistic 2(Significant)	statistic X	Z (significant)	Coefficient Variables
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A) Prediction equation:

Intercept	02/0	15/1 (25/0)	***50/549 (00/0)	94/18%
CFO	58/0	***54/13 (00/0)		
ACC	49/0	***64/13 (00/0)		
TIME	08/0	**08/0 (01/0)		
TIME*CFO	01/0-	73/0- (46/0)		
TIME*ACC	00/0	01/0- (99/0)		

B) pricing equation:

ET+1	28/0-	***94/3- (00/0)	***80/393 (00/0)	85/16%
Intercept	02/0-	12/0- (90/0)		
CFO	24/4	***28/4 (00/0)		
ACC	24/4	***26/4 (00/0)		
TIME	79/0	**61/2 (01/0)		
TIME*CFO	09/0-	23/1- (22/0)		
TIME*ACC	10/0	34/1 (18/0)		

C) Test Michigan test (1983):

First hypothesis: 01.26 (26/0) do not reject the hypothesis

The second hypothesis: 79/1 (18/0) do not reject the hypothesis

*** And ** significant at 1% and 5% respectively.

The result of the valuation equation also shows that correlation of profit variables future periods (28 / 0-) operating cash flow (24.4), and accruals (24.4) in the level of 1% and correlation of variable rate timely rating (61.2) is significant at the 5% level. In valuation model the independent variables in total have made about 17% changes of dependent variables. Significant of Chi-square statistic (80/393) in the level of 1% represents the significant of valuation equation. In the first hypothesis, the lack of meaningful statistics of Michigan test (1.26) shows that correlation of TIME*CFO has no significant difference in equations of forecasting and pricing. With increasing of timely rating reporting, Investors probably estimate the stability of operating cash flow. Therefore, increasing the timely disclosure of information is reduced the level of irrational pricing of shares by operating cash flow. So the fifth research hypothesis is not rejected. In the second hypothesis of the study, no significant of statistic Michigan (79/1) shows that the correlation of

TIME * ACC in two equations of forecasting and pricing have no significance difference. And with increasing of timely rating reporting Investors properly have estimated the stability of accruals. Therefore, increasing the timely disclosure of information is reduced the level of irrational pricing of shares by accruals. So the second research hypothesis is not rejected.

The third hypothesis test results Research

The third hypothesis testing research, System of simultaneous equations (3-5) is estimated and the results are provided in the table(4-8). The result of predicted equation shows that the coefficient of variation of net income (76/0) and rated reliability (10/0) at the level of 1% and intercept (03 / 0-) are significant at the level of 10%. And independent variables of predicted equation explain about 27% changes of net profit for the coming period. In pricing equation, Net profit rate of future periods (29 / 0-), intercept (89/0), net profit (93/3) and rated reliability (87 / 0-) are significant at 1% level. The independent equation variables explain about 18% of the valuation of changes coming period. Chi-square statistic is significant in equations, forecasting and valuation, reflects the overall significance of each of the equations in the 1%.

Table (4-8): The results of equations (3-5)

Determination Coefficient	statistic	statistic Z	Coefficient Variables
	2(Significant) X	(significant)	
A) Prediction equation:			
Intercept			
	03/0-	*71/1- (08/0)	***70/665 (00/0) 57/26%
E	76/0	***67/13 (00/0)	
REL	10/0	***20/3 (00/0)	
REL*E	10/0-	98/0- (32/0)	
B) Pricing equation:			
ET+1	29/0-	***19/5- (00/0)	***00/540 (00/0) 94/17%
Intercept	89/0	***09/4 (00/0)	
E	93/3	***49/5 (00/0)	
REL	87/0-	***13/3- (00/0)	
REL*E	07/1	55/1 (12/0)	

D) Test Michigan test (1983):

Third hypothesis: * 79/2 (09/0) third hypothesis is rejected.

*** And * significant at 1% and 10% respectively.

The third hypothesis research, Michigan statistical significance (79/2) at the level of 10% indicates that the correlation of REL * E have significance difference in equations of forecasting and pricing. Despite increasing reliability rating, Investors correctly did not estimate the stability of net income. Therefore, increasing the exposed information didn't reduce the level of irrational pricing of shares by accounting profits. So the seventh research hypothesis is rejected.

-45-6) Fourth and fifth research hypothesis test results

To test the fourth and fifth research hypothesis the System of simultaneous equations (3-6) is

estimated and its result is provided in Table (4-9). The result of the predicted equation show that correlation of variables of operating cash flow(59/0) and accruals (49/0) and correlation of variables of timely points (09/0) are significant in 1% level. In predicted equation the independent variables have explained about the 19% changes of the dependent variable in total. Significant of Chi-square statistic(80/540)also represent at 1% level forecast equation. The results of the equation also show that the valuation equation the correlation of Variable interest rate future periods (21 / 0-) operating cash flow (28.3) and accruals (24.3) at 1% and intercept (99/0) and differential reliability rating (99 / 0-) is significant at the 5% level. In valuation equation independent variables have explained about the 16% changes of the dependent variable in total. Significant of Chi-square statistic (50/380) in 1% represent the valuation equation.

Table (4-9): The results of equations (3-6)

Determination Coefficient	statistic	statistic Z	Coefficient Variables
	2(Significant) X	(significant)	
A) Prediction equation:			
Intercept			
	01/0	38/0 (70/0)	***80/540 (00/0) 17/19%
CFO	59/0	***69/13 (00/0)	
ACC	49/0	***34/13 (00/0)	
REL	09/0	***40/3 (00/0)	
REL*CFO	00/0	03/0- (98/0)	
REL*ACC	01/0-	77/0- (44/0)	
B) Pricing equation:			
ET+1	21/0-	***03/3- (00/0)	***50/380 (00/0) 33/16%
	99/0	**46/2 (01/0)	
CFO	39/5	***28/3 (00/0)	
ACC	54/5	***24/3 (00/0)	
REL	99/0-	**15/2- (03/0)	
REL*CFO	04/0	48/0 (63/0)	
REL*ACC	01/0	08/0 (94/0)	

C) Test Michigan Test (1983):

The fourth hypothesis: 23/0 (63/0) fourth hypothesis is not rejected.

Fifth hypothesis: 02/0 (88/0) do not reject the hypothesis fifth.

*** And ** significant at 1% and 5% respectively.

In study of the fourth hypothesis research Lack of meaningful statistics Michigan Test (23/0) shows that correlation of REL * CFO in equations of forecasting and pricing have difference significance. And with increasing of rating the reliability of reporting, Investors properly has estimated the stability of operating cash flow. Therefore, increasing the reliability of disclosed information has reduced the level of irrational pricing of shares by operating cash flow. So the eighth hypothesis dose not rejected. In the study of fifth hypothesis research Lack of meaningful statistics Michigan (02/0) shows that the correlation of REL * ACC in equations of forecasting and pricing have no significant difference. And by increasing the reliability of reporting points, investors have estimated the stability of accruals properly. Therefore, increasing the reliability of disclosed information has reduced the level of irrational pricing of shares by the accruals. So the fifth research hypothesis is not rejected.

Conclusion

In this study the impact of timely and the reliability of financial information was investigated on irrational pricing of shares. When information doesn't have enough transparency, investors estimate the sustainability accounting profit (which is an important measure of earnings quality) in a wrong way. And according to their wrong estimate, they decide to buy and sell their shares. Trading which are based on false perception of investors about the sustainability accounting earnings (cash and accrual components), Lead to the incorrect stock prices. In this case, it has been said that the stock has been priced in irrational way. The result of this study and its hypothesis show that investors estimate stability of income and its components in a wrong way. Based on an incorrect assessment of investors, they price the stock in an irrational way. However, further studies showed that when degree of timely and the reliability of financial reporting increase the operating cash flow and accruals irrational pricing is satisfied. But incorrect pricing and irrational accounting of profit still remains and market in relation to the information of earnings accounting is not useful.

Reference

1. Standard S, (1390), the relationship between ownership structure and profit management, financial accounting research, No. 8, pp 106-93.
2. Ismaeili (1386), the quality of profits, monthly accounting, No. 184.
3. Jhankhany, A, Zarifi Fard, AS, 1374. Do the directors and shareholders use the useful criteria for measuring the value of their company, Financial Research, Vol. II, 7-8: 41-67.
4. Hasas Yeganeh, Asadniya C, Hajizadeh S, (1392), the impact of institutional ownership on the valuation of commitment items in the company, the Journal of Accounting Studies, 1: 63-44.
5. Hosseini S., (1389), profit management theory and approaches, Household, No. 92, pp 9-2.
6. Khani A. Sadeghi, M., (1392), the impact of output, stability and abnormal commitment items on profits of listed companies in Tehran Stock Exchange. Sport Psychology, 8: 166-147.
7. Khodadadiand, Jan Jany R., (1390), the relationship between profit management and profitability of the companies listed on the stock exchange, financial accounting research, No. 7, pp 96-77.
8. Alavi Tabari, Bakeri A, (1390), profit management in order to achieve the benchmark, financial accounting research, No. 9, pp 18-1.
9. Kurdistani, (1383), review and explanation of the relationship between profit quality and market reaction to changes of cash profit, Ph.D. dissertation, Information and Documentation Center of Iran.
10. Kurdistani, Abrahami D., (1392), discloses the relationship between quality and incorrect price of commitment items and cash flow, accounting and auditing Research, No. 19, pp 53-38.
11. M. Mshki, norideh L (1391), survey the effect of profit management on the stability of the profit of firmed companies in the Tehran Stock Exchange, the Financial Accounting Research, 11, pp 118-105.
12. namazi M, the Bayazid, Jbarzadh Kngrlvvy S, (1390), studying the relationship between audit quality and profit management of company listed in the Tehran Stock Exchange, Accounting Research, No. 9, pp 21-4.
13. Ali Hashemi, the Hamidian, Abraham H, (1392), abnormal investigating of commitment items with respect to the risk of financial failure of listed companies in Tehran Stock Exchange, the Financial Accounting Quarterly, 19: 20-1.

14. Balsam S, Krishnan J, Yang J. 2003. Auditor Industry Specialization and Earning Quality. *Auditing*, 22(2), 71-97.
15. Chan K, Chan L, Jegadeesh N, Lakonishok J. 2006. Earnings Quality and Stock Returns. *Journal of Business*, 79: 1041-1082.
16. Collins, D.W; Hribar, P. 2000. Earnings-based and Accrual-based Market Anomalies: One Effect or Two? *Journal of Accounting and Economics* 29: 101–123.
17. Dechow, P.M., and I. Dichev. (2002). *The quality of accruals and earnings: The role of accrual estimation errors*, *The Accounting Review*, 77: 35-50.
18. Dechow, P.M., Ge, W and Schrand C.M. (2010). *Understanding earnings quality: A review of the proxies, their determinants and their consequences*, *Journal of Accounting and Economics*, New Accepted Manuscript.
19. Desai, H., Rajgopal, S., and Venkatachalam, M. (2004). Value glamour and accrual mispricing: One anomaly or two. *The Accounting Review*, 79: 355-385.
20. Fedyk, T., Singer, Z., and Sougiannis, T. (2011). *Does the accrual anomaly end when abnormal accruals reverse?* Working Paper, McGill University.
21. Kraft, A.G., Leone, A.J., and Wasley, C.E. (2007). *Regression-Based Tests of the Market Pricing of Accounting Numbers: The Mishkin Test and Ordinary Least Squares*. *Journal of Accounting Research*, 45: 1081-1114.
22. Lev B, Nissim D. 2004. The persistence of the accruals anomaly. Working Paper, PP:1-37, ssrn.com.
23. Li Qingyung and Tielin Wang. 2010. Financial reporting quality and corporate efficiency: Chinese experience, *Nankai Business Review International*, Vol. 1, Issue 2, PP.197.
24. Penman S. 2001. *Financial Statement Analysis and Equity Valuation*. New York, NY: McGraw Hill companies.
25. Scholer F. 2004. the quality of accruals and earnings and the market pricing of earnings quality. working paper arhus school of business, p.13.
26. Sloan, R.G. (1996). *Do stock prices fully reflect information in accruals and cash flows about future earnings?* *The Accounting Review*, 71(3): 289–315.
27. Wu J, Zhang L. (2011). *Does risk explain anomalies? Evidence from expected return estimates*, *The National Bureau of Economic Research*, 15950:1-46.

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