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Market reaction to the announcement of CPC cultural development guideline

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ABSTRACT

Abstract: This paper investigates how stock prices respond to the announcements of cultural development guideline by using a standard event study methodology. Examining 36 Chinese listed companies in cultural and media industry from September 20th, 2011 to November 8th, 2011. To measure the economic relevance of accounting for cultural development guideline adopted by CPC, we conduct study with market model to explore the abnormal return including 31 event days. The result indicates that the positive abnormal return occurred in Chinese culture and media industry.

KEYWORDS

Event study;
Accumulated abnormal returns;
Market reaction;
Cultural development guideline.

INTRODUCTION

The 17th Central Committee of the Communist Party of China (CPC) conducted its Sixth Plenary Session in Beijing which ended on October 18th, 2011, to work over the country's cultural development, ended with a cultural development guideline[1]. In the guideline endorsed at the session, leaders stressed that culture is emerging as an important part of comprehensive competitiveness, and our country is facing an imperative need to boost cultural soft power and enhance the global image of its culture. Chinese companies like Sinopec and China Mobile are not newcomers to the list of the world's top 500 companies, however, Chinese cultural companies have not yet to produce a world-famous brand, according to Xinhua report. The guideline timely proposed China should not only provide people with an ample material life, but a rich healthy cultural life[2].

As is said in the statement on deepening the reform of China's cultural system, government will work to improve Chinese citizens' sense of identity and confidence in culture, and devote more resources to boosting public cultural services and speeding up the reform of cultural industry[1].

With CPC's resolution to boost culture construction, commercial lenders in China are turning their attention to publishing houses, television stations and other cultural enterprises in the hope of grasping opportunities in these correlative industries, which government has vowed to support. Securities analyst put forward that culture media industry has become the hottest plate since then, and seven cultural stocks has go up staying. All these flourishing phenomenons are owed to cultural development guideline on October 18th, and "promote socialism cultural boom" is easily to get stock market's accept.

FULL PAPER

LITERATURE REVIEW

Clearly, the cultural development guideline made on October 18th provides cultural media stock plenty of advantages such as policy supporting, big development potential to make long-term investment value appear. In China, more and more companies and persons have attempted to engage in culture industry or stock market.

Simultaneously, a number of recent normative research and empirical studies have attempted to show the relationship between country cultural policy and macro-economy Most of these studies have reported that macro-economy react positively to cultural industry development support policy news. Vesna opi (2009) proposed use of policy analysis has been shifting from core state sectors to others, cultural policies included[3], effect, quality and market reaction should be detailedly evaluated by scholars. Lu Lixin (2009) considered the growth of cultural industry investment notably worked on macro-economy[4]. Wang Changshou et.al (2010) deemed that there exists a long-time stable relationship between culture development investment and economy though cointegration analysis and Granger causality Tests, both interact during a short lag phase[5]. Yang Jingzhong, Lv Qinghua (2012) conducted an empirical analysis on the financial support on cultural industry development by quantitative analysis method, and the result showed that government financial expenses policy is positive related to cultural industry development scale and value, but is negative to cultural job growth[6].

However, the aforementioned studies are mostly referred to macro-economy at national level, few scholars research the cultural policy effect from microsystem level. Our study is in line with the second strand of studies. Compared to the prior studies which focus on the effect on economy, we search for varied types of culture-related firms and concentrate on the analysis of stock market reactions to the announcement. Examining 36 Chinese listed companies in cultural and media industry from September 20th, 2011 to November 8th, 2011, we find that cultural development guideling had a strongly positive impact on stock prices.

The rest of this paper is organized as follows. Section 3 describes the data and the event study methodology. Section 4 provides the results anddiscussions. Concluding remarks are offered in Section 5.

Data and event studymethodology

In an efficient capital market, stock prices on any day fully reflect available information about the present value of the stream of profits that a firm is expected to earn in the future (Fama, 1991)[7]. It is generally believed that the provision of new information of a firm can cause abnormal changes in stock price, which is the theoretical framework that underlies event study methodology to test the reaction of capital market to new policy or information[8, 9]. A standard event study involves five steps.

Identification event and definition of the event window

This paper follows standard event study methodology described in Warmer, Watts, and Wruck (1988) to analyze stock price behavior around the announcement day[10]. The event gets to be defined as the day cultural development guideline was announced on, which we define it as t=0. The event window is (-15, 15), which means 15 trading days before and after event occurrence point.

Selection of the sample used for analysis

The sample consists of 36 listed Chinese cultural and media firms, and we choose data of every companies from September 20th, 2011 to November 8th, 2011. Among these quoted corporations there are 14 in Shanghai Stock Market, 11 in Shenzhen Stock Market and 11 in Growth Enterprise Market (GEM).

Prediction of a "normal" return during the event window

This study adopts market model first proposed by Fama, Jensen and Roll (1969), which assumes a linear relationship between the return of security and the market portfolio:

$$R_{it}=\alpha_i+\beta_i R_{mt}+\mu_{it}$$

where t is the time index, and i= 1, ..., R_{it} and R_{mt} are the return on security i and the market portfolio. Respectively, during period t, μ_{it} is the random error term associated with security i[11].

As is generally known that the commonly used estimation method for the market model is Ordinary Least Squares(short for OLS). We define the abnormal re-

turn in the event window for firm i in period t as AR_{it}, $AR_{it} = R_{it} - R_{mt}$

Estimation of the cumulative abnormal return

The average abnormal return(AAR) and the cumulative abnormal return (CAR) are computed separately, to the sample companies, for each day according to the event window of [-15, +15].

$$AAR_t = \frac{1}{N}\sum_{t=1}^{N} AR_{it}$$

$$CAR_t = \sum AAR_t$$

Test whether the abnormal return is statistically different from zero

According market model, we assume the null hypothesis H_0: The event does not affect the mean or variance of returns, the CAR is normally distributed with a mean 0 and variance $D(t_1, t_2)$. The average cumulative abnormal defined as CAAR and its variance $\bar{D}(t_1, t_2)$ are calculated across N firms as follows:

$$CAAR(t_1, t_2) = \frac{1}{N}\sum_{t=1}^{N} CAR_t(t_1, t_2)$$

$$VAR[CAAR(t_1, t_2)] = \bar{D}(t_1, t_2) = \frac{1}{N^2}\sum_{t=1}^{N} D(t_1, t_2)$$

In view of the null hypothesis H_0, CAAR is usually distributed with a mean zero and variance $D(t_1, t_2)$,

$$T = \frac{CAAR(t_1, t_2)}{\sqrt{\bar{D}(t_1, t_2)}} \sim N(0, 1)$$

And we can use T to test H_0 hypothesis.

EMPIRICAL RESULTS

This paper examined the daily cumulative abnormal return CAR_t by Excel data analysis software and carried out T test by SPSS 16.0 software, separately analysed different market reaction in different market type. In this paper, there are totally 3 market types such as Shanghai Market (Market 1), Shenzhen Market (Market 4), and Growth Enterprise Market respectively (Market 16). Results are shown as follows in TABLE 1.

<t1>

TABLE 1 presents the regression of CARs of different market style in cultural and media industry, and Figure 1 shows the trend of their CARs for a 30-day window. The table and figure both indicate that the CARs are much higher after the announcement of the guideline than those before the announcement, whatever market the stock belongs to. In TABLE 1, the T value is much higher than the normalized value 2 and we're convinced of the obvious positive market reaction of the announcement, which illustrated the guideline is a piece of good news for stock market. The rising tendency depicted in Figure 1 also reminds us the good reaciton, which can be seen from the growth span. Before the zero spot, especially before the "-9" spot, the three lines goes flatly almost, while after "-9" they keep rising at a lightning speed, which illustrate the affect gets more greater when it is more closer to the announce day and after the zero day, it rises at a faster speed.

Then we take a analysis from different angle. As a

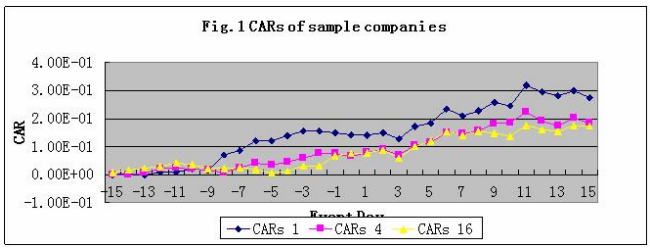

TABLE 1 : One sample Test

Market Style	Event Window	t	df	Sig.(2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
						Lower	Upper
1	CAR(-15, +15)***	8.332	30	.000	...	...	...
4	CAR(-15, +15)***	7.056	30	.000	...	...	...
16	CAR(-15, +15)***	7.386	30	.000	...	...	...

Note:* * *, * *, * denotes separately significance at 1%, 5% and 10% level(Two-tailed test).

while, the guideline affects the whole cultural industry, but the effect degree differs in different market style. The T test result in TABLE 1 shows us Market 1 reacts stronger than the other 2 markets and the growth trend in Figure 1 indicates us the fluctuation span of Market 1 is the largest, and the other two stock market reacts almost similarly. We estimate the reason contributing to this phenomenon maybe is that there are more cultural and media companies choosing to list in Shanghai Market, statistical data shows 14 quoted entities in Market 1 and both 11 ones in Market 4 and 16, which commendably explains why there similar market reaction in the latter two markets.

CONCLUDING REMARKS

This paper investigated how stock prices responded to announcements of CPC cultural development guideline by using a standard event study methodology. Examining 36 Chinese listed companies in cultural and media industry from September 20th, 2011 to November 8th, 2011, we found that cultural development guideling had a strongly positive impact on stock prices. Particularly, the effect degree differs in different market style and Shanghai Market reacts stronger than Shenzhen Market and Growth Enterprise Market, which may rise from the different list number and condition of markets.

These results indicate that, so far, as is known to us all, more and more contry policies will be implemented to promote cultural development. Meanwhile, more investors commercial lenders are turning their attention to publishing houses, television stations and other cultural enterprises in the hope of grasping opportunities in these correlative industries.

Furthermore, the government should make guideling into parctical action instead of only in written form. Construct socialist core values system, futher develop and expand traditional good morality, enhance citizen quality and pull off basic public cultural service, make culture industry become our countries' backbone industry of the national economy.

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