

# THE RELATIONSHIP BETWEEN DIVERSITY AND FIRM PERFORMANCE: EVIDENCE FROM PUBLIC COMPANY IN CHINA

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## ABSTRACT

Today companies are facing an increasing relationship between diversity and firm performance. This study researches the relationship between diversity and firm performance among public companies in China. Data were gathered from 150 public companies in China. Regression analysis indicated that a significant and positive effect of gender diversity and age diversity on firm performance. But the racial diversity has no significant with firm performance in this study. The firm size of control variables also has a positively associated with firm performance. So from the results of analysis, I can get that more number of female of employees on company will have better firm performance, and that's benefit for firm performance if older and younger employees are more quantity in companies. Meantime, I also got that larger company can increase firm performance.

Key words: diversity, firm performance, public company, significant, relationship

## INTRODUCTION

This study researches the relationship between diversity and firm performance among public companies in China. Today companies are facing an increasing globalized environment leading to the growing need to relate and work effectively with people from different societal and economic backgrounds and age stage. Due to these developments, diversity has become an emergent factor in organizational life, and the utilization and management of diversity is increasingly important to meet the diversity challenge (D'Netto and Sohal, 1999). Managing this emergent diversity in organizations can turn new challenges into promising organizational opportunities, as the ability to attract, retain, and

motivate people from diverse backgrounds may improve competitive advantage and firm performance. Researchers and practitioners have also assumed that diversity is critical to firm financial success.

1. To examine the relationship between diversity and firm performance
2. To determine what relationship between gender diversity and firm performance and between racial diversity and firm performance and between age diversity and firm performance.
3. To used financial method to test the hypotheses relationships between the components of diversity (i.e., racial, gender and age) and firm

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performance.

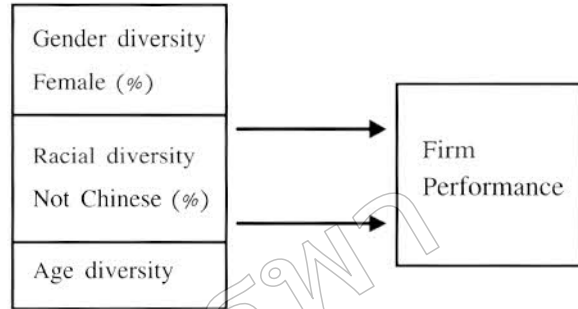
4. To compare the relationships of racial and gender and age diversity on firm performance.
5. To use multiple regressions analyses find the relationship between gender diversity and racial diversity and age diversity and firm performance.
6. To use data of survey from public companies on women and race and age businesses, it is possible to control for salient firm characteristics, such as industry, size, and tenure.
7. To be applied to a large comprehensive sample of new employer firms.
8. To provide empirical evidence on relationship between diversity and firm performance in China, and can be applied to develop HR policy in Chinese firm.

According to some researches, earlier studies found mixed results. So, this paper research what relationships between diversity and firm performance, the diversity special focus on gender diversity and racial diversity and age diversity. In order to get more accurate results, this paper also consider some control variables like tenure and firm size. Meantime, this paper only gets evidences from public companies in China. Because in the west society diversity affect firm performance have had researched and applied companies. Due to the west society and China have different culture, history, and environment and so on, so how does the conclusion of diversity from the west society affect firm performance and how does the conclusion of diversity apply to firm in China, it will be a significant point.

In a word, this paper researches the relationship between diversity and firm performance. Diversity in this study includes gender diversity, racial diversity and age diversity. Firm size and tenure are control

variables in this paper.

Table 1.1 Conceptual framework



So this paper researches the relationship between gender diversity, racial diversity and age diversity on firm performance. And from conceptual framework, the diversity of this paper focuses on gender diversity, racial diversity and age diversity. So I can make following hypothesis:

Hypothesis 1, there is a positive relationship between diversity and firm performance.

Hypothesis 2: there is a positive relationship between gender and firm performance.

Hypothesis 3, age diversity has a significant and positive effect on firm performance.

## LITERATURE REVIEW

### GENDER AND RACIAL AND FIRM PERFORMANCE

This paper research diversity only focuses on gender and racial and age, diversity has been studied by Milliken & Martins (1996), that diversity on more observable characteristics, such as racial, gender, age, tenure and firm size diversity, may also influence firm performance. The hypothesis that international diversification and firm performance should be positively related has been tested in numerous ways such as tracking company performance longitudinally as global expansion occurs (e.g., Smith and Zeithaml (1993), comparing the performance of two or more

groups of firms differing in their international involvement (e.g., Michel and Shaked (1986), and examining the regression effects of foreign involvement on firm performance (e.g., Kim, Hwang and Burgers (1989). Unfortunately, research findings have been contradictory, suggesting that other factors may be responsible for the observed results. For example, Grant (1987), Grant, Jammine and Thomas (1988), and Geringer, Beamish and daCosta (1989) report a positive relationship between international diversification and firm performance, whereas Michel and Shaked [1986] found a negative relationship between these variables. Further, Shaked (1986), Buhner (1987), and Kim et al. (1989) report no significant or equivocal support for the proposition that firm performance is a positive function of international diversification.

Diversity has been studied in both laboratory and field settings. In general, lab studies, grounded in the value-in-diversity perspective, have indicated that diversity within work groups increases their effectiveness (Cox et al., 1991; Watson et al., 1993). In contrast, field studies, guided by social identity and related self-categorization theories, have suggested that diversity is associated with negative performance outcomes (Pellet et al., 1999; Tsui et al., 1992). In this section, we integrate predictions from these two perspectives to provide a theoretical framework based on Blau's (1977) theory of heterogeneity.

#### **GENDER DIVERSITY AND FIRM PERFORMANCE**

Gender diversity means the proportion of males to females in the workplace. Is it a more even distribution or is the employee pool composed of mostly males or mostly females? This can have an effect on how people interact and behave with one another in the workplace and would impact culture

and social environment. The research on women in management suggests that these differences are played out in reward mechanisms, perceptions, career advancement opportunities, values, and management role models (Brush, 1992; Buttner and Moore, 1997; Carter and Cannon, 1988). Therefore, it follows that women may make decisions related to the growth of their businesses using a different process than men do, or by weighting risks and rewards differently from men. Moreover, these studies suggest that women and men hold differing attitudes about the outcomes of growth, work within different reference groups, have different levels of start-up resources, and face different challenges in terms of marshalling the resources necessary for business growth. (Orser and Hogarth-Scott, 2003: 287).

#### **AGE DIVERSITY AND FIRM PERFORMANCE**

Age diversity can be considered a part of human capital. According to some researchers (e.g., Peterson & Spiker, 2005; Avery, McKay & Wilson, 2007), age diversity may increase the amount of capabilities and resources possessed by a firm that are unique and difficult to copy, which can lead to a sustained competitive advantage. Age diversity is difficult to copy because it is protected by barriers of interpersonal connections, knowledge and experience that are socially highly complex. In other words, a right balance of age diversity in a firm often represents a mix of human capital that can make this firm differs from its competitor, which can also be elusive and hard to understand by people from outside the organization, and therefore can be very difficult to copy. In addition, as the populations in markets throughout the world are getting older, an appropriate level of age diversity among the employees of a firm

can help to improve a firm's marketing and financial performance (Jayne & Dipboye, 2004). This is because age diversity can help a firm to understand better the preferences and demands of its customers (Morrison, 1992), which in turn can help improve performance. As some authors suggest (e.g., Beaver & Hutchings, 2005), firms that capitalize on age diversity put themselves in a better position to attain competitive advantages by being the employer of choice for talented workers, which can also have a positive effect on firm performance.

## RESEARCH METHODOLOGY

In this paper, it will research what relationship between diversity and firm performance of public companies in China.

## PULATION AND SAMPLE

This study is conducted among firm performance in public companies, from regions in both the West and East in China.

China is a manufacturing giant, exporting products including machinery, equipment, textiles, tea and steel and so on. Lots of public companies were appeared in China market. Actually in this paper, it is obtained a stratified random sample frame consisting of 150 public companies in China. Due to lots of public companies in China, so in this paper, the data for the study were collected from industry public companies. We sent questionnaires to the 150 Human Resources Manager of industry of public companies. The content of the questionnaires mainly include: the number of female employees in the company in 2006, 2007 and 2008, the number of different racial employees in the company in year 2006, 2007 and 2008, the total number of employees

in 2006, 2007 and 2008, and net income of company in year 2006, 2007 and 2008, total asset of company in year 2006, 2007 and 2008. In order to get comparatively accurate data, in questionnaire I gather data from 2006, 2007 and 2008 years, then make an average data as utilized data. Firms included in this paper were obtained from public companies in China. Gender diversity is measured by the ratio of female to total employees. Racial diversity is measured by the ratio of employees who are not Chinese to those who are Chinese. But age diversity is measured by range age divide by average of age. Range age equate to maximum age minus age.

## MEASUREMENT

**Dependent Variable** The major dependent variable tested here was firm performance. Many relevant past studies adopted a firm's return on assets (ROA). (e.g., Richard, 2000), and we therefore also measured firm performance in terms of these dimensions of performance.

**Independent variables** Gender and racial and age diversity are major independent variable in this study. Using data provided by the Human Resource Manager, we assessed the racial and gender and age of each public companies from questionnaire.

**Control Variable** This study controlled for the effect of firm size, which was measured as the log total employees in each firm. The study also controlled for the effect of tenure of employees.

**Firm performance** Blau's (1997) index of heterogeneity was used to develop measures of racial (white, black, Hispanic, Asian, and Native American) and gender diversity in management. But in this paper, we measure firm performance by ROA of financial. ROA is the most frequently used performance measure



From above Table 1, it tells us the mean and standard deviation of each variable and the Pearson correlation coefficient of each variable and also shows us the significant of each variable. We can get the correlation each two variables and the relationship each two variables. From Table 1, it is easy to know that gender diversity has significant with ROA, and has positive relationship with ROA. It means that gender diversity and firm performance has significant and it is positively. So the more female employees can improve firm performance. It also shows a contrary result that there is not significant relationship between racial diversity and firm performance, and there is significant relationship between firm size and racial diversity, but it is a negative relationship.

Table 2 Model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.509a	.259	.234	.0639470
a. Predictors: (Constant), Firm size, Tenure, Gender, Age, Racial				

This table is important. The Adjusted R Square value tells us that our model accounts for 23.4% of firm performance. R is a measure of the correlation between the observed value and the predicted value of the criterion variable. In our study this would be the correlation between ROA by our predictor variables. R Square (R2) is the square of this measure of correlation and indicates the proportion of the variance in the criterion variable which is accounted for by our model – in our study the proportion of the variance in the ROA for by our set of predictor variables (gender, racial, age etc). This Adjusted R Square value gives the most useful measure of the success of our model.

Table 3 ANOVA

ANOVA <sup>b</sup>					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.206	5	.041	10.092	.000a
Residual	.589	144	.004		
Total	.795	149			
a. Predictors: (Constant), Firm size, Tenure, Gender, Age, Racial					
b. Dependent Variable: ROA					

This table reports an ANOVA, which assesses the overall significance of our model. In this study, the number of degrees of freedom is 5, and the F-test is 10.092. The overall significance of our model is less than 0.005, it's available.

Table 4 Coefficients

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.224	.067		-3.371	.001
Gender	.071	.013	.404	5.329	.000
Racial	3.097	2.035	.124	1.522	.130
Age	.106	.049	.184	2.167	.032
Tenure	.000	.004	.002	.025	.980
Firm size	.028	.013	.181	2.195	.030
a. Dependent Variable: ROA					

The Standardized Beta Coefficients give a measure of the contribution of each variable to the model. A large value indicates that a unit change in this predictor variable has a large effect on the criterion variable. The t and Sig (p) values give a rough indication of the impact of each predictor variable – a big absolute t value and small p value suggests that a predictor variable is having a large impact on the criterion variable. The p value of age and firm size are 0.032 and 0.030, respectively. The p value of both are less than 0.05, it means both of them are available. But the p value of racial and tenure diversity



are 0.130 and 0.980, respectively. So, it's unavailable. It means racial and tenure doesn't have impact on the ROA.

Results Based on the data, regression analyses were conducted to test the hypotheses. We first tested the –Hypothesis 1 that there is a positive relationship between diversity and firm performance. As can be seen in table above, the Adjusted R Square value of 0.234, we have account 23.4% of the variance in the criterion variable. The value of F test is 10.092, it's useful to compare of the components of the total deviation. From Table 4, we can get gender diversity ( $\beta = 0.404$ ,  $t = 5.329$ ,  $p < 0.001$ ) is positively to related to firm performance, and has a large impact on the firm performance. Thus, Hypothesis 2 (there is a positive relationship between gender and firm performance) received support. But it has no significant relationship between racial diversity and firm performance. The value of Sig. of racial diversity is 0.130, which more than 0.05.

Hypothesis 3, age diversity has a significant and positive effect on firm performance. Table 4 shows a significant and positive effect of age diversity on ROA ( $\beta = 0.164$ ,  $t = 2.167$ ,  $p = 0.032$ ). So, hypothesis 3 received support.

Control variables focus on tenure and firm size in this study. From above table, firm tenure of employees and firm size has different result. The results from table indicate that higher levels of firm size diversity are positively associated with firm performance ( $\beta = 0.181$ ,  $t = 2.195$ ,  $p = 0.030$ ). In contrast, the value of firm tenure of employees diversity have no significant on firm performance ( $p = 0.980$ ). Anyway, according to analysis above, gender and age diversity and firm size diversity have positively associated with performance. So,

Hypothesis 1, accordingly, is supported by the data.

## CONCLUSION

In this study, we measured that there are positively relationship between diversity and firm performance. The data was gathered from 150 public companies in China. The main effects of diversity, firm performance, and other contextual variables and moderating effects on firm performance were examine through the multiple regression analysis. According to output of SPSS to analyses kinds of variables and get results, it has been proved and checked our hypothesis, and realized our objectives.

We found gender diversity and age diversity has a positively relationship with firm performance. The findings concerning the effects of other control factors are also interesting. The effects of firm size were significant, but had only a small effect on the relationship between diversity and firm performance. We hope this study has any benefit for manage diversity in companies, so that enhance firm performance. Thus, according to outcome of this study, the implications will be more number of female of employees in companies, the company will have better firm performance, and that's benefit for firm performance if older and younger employees are more quantity in companies. Meantime, we also got that larger company can increase firm performance.

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