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Gender, Political Connection, and Tax Avoidance in China

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Abstract

This paper investigates whether female chief executive officers (CEOs) perform different level of tax avoidance behavior compared with male CEOs in China. We further examine whether female CEOs with political background/connection can transform the relation between gender and tax avoidance behavior. Using the total book-tax differences and permanent book-tax differences to measure the level of tax avoidance behavior following prior studies, we find that Chinese female CEOs perform the same level of tax avoidance behavior relative to their male counterparts. In addition, we find significant evidence that female CEOs with political background tend to conduct more tax avoidance activities relative to those female CEOs without political relation. These results are in contrast to a traditional western viewpoint that female managers have a higher risk aversion attitude.

Keywords

Gender, Political Connection, Tax Avoidance, Feminism

1. Introduction

Traditional corporate tax avoidance research largely focuses on the influence of firms' characteristics instead of managers' characteristics. Based on western evidence mainly from the United States (US) and the European Union (EU), gender differences in risk-taking behavior have been examined extensively in many fields such as education, psychology, sociology, and economics. Despite the issue of gender diversity in business organizations had received increasing attention in both academic literature and the popular press, few researches examined whether gender plays a role in corporate tax avoidance activities. In addition, gend-

er-related research in China is still under developed, let along with issues incorporating tax avoidance. We examine whether gender differences exist in tax avoidance decisions at a top managerial rank under the largest planned economy. In contrast to western societies, this paper is embedded in socialist/Marxist feminism theoretical foundations and communistic politics to hypothesize that female CEOs do not engage less tax avoidance activities compared with male CEOs in China (detailed discussions presented in Section 2).

Few women in corporate leadership have become an increasingly important issue internationally. Many governments across the world are in the process of developing actions to promote and/or mandate increased female representation on corporate boards. In the US, 16.6% of Fortune 500 company directors are women in 2012 [1]. That is up from 13.6% in 2003, but the upward slope has flatlined for the past seven years [2]. In Australia, women hold 12.3% of directorships in the ASX 200 and only 9.2% in the ASX 500 [3]. In the EU, average number of women on boards is 11.7% which is up by 21% compared to 2008 [4]. In 2011, the average percentage of women in board is from the lowest 11% in Italy to the highest 44% in Norway. All of these statistics show that the proportions of women in enterprise leadership are significantly increased globally.

Prior research indicates that women tend to have less risky behavior in their decision making compared with men in general. For example, female CEOs are more likely to maintain compliance with rules and regulations [5]. Female board members are more cautious in corporate decision making than male member [6] and more diligent in monitoring and auditing corporate operating [7] [8]. Gender diversity in the board has a positive relation with information transparency [9]. In addition, female executives are associated with less earnings avoidance [10] and more conservative accounting [11]. Do female executives lead to lower level of tax avoidance activities due to their risk-averse attitude? Francis *et al.* [11] find that female chief finance officers (CFOs) are associated with less tax avoidance relative to their male counterparts using the US data. However, the aforementioned findings do not provide clear guidance in the case of China where the culture, religion, capital market structure, corporate governance, and the degree of government invention are different from that in the US and other developed countries [12].

Most western studies apply traditional gender stereotypes—men are more masculine (e.g., self-reliant, aggressive, competitive, and dominant) whereas women more feminine (e.g., sympathetic, passive, conservative, and risk averse)—to examine the gender differences in business professions. Traditional gender stereotypes postulate that women are less suited to higher managerial and leadership roles and may accept lower-paying jobs because they have relative to Equal Opportunity for Women in the Workplace Agency (EOWA) [3], the UK Davies

¹According to Equal Opportunity for Women in the Workplace Agency (EOWA) [3], the UK Davies Report recommends a voluntary target of 25% female representation on boards of FTSE 100 companies by 2015, which has led to an increase in female director appointments as well as changes to the UK's corporate governance code. Norway is one of the first countries to introduce mandatory quotas and Spain, France, Belgium, Italy and the Netherlands have followed suit.

tively lower career aspirations compared with men and they spend significantly more time in childcare and family responsibilities [13] [14] [15].

A large body of literature in psychology and sociology also indicates that women are more risk averse [16], less aggressive [17], and more anxious than men [18]. For example, Bonner [19] suggests that men are more prone to overconfidence than women, and the phenomenon is found to be significant in masculine domains, such as the business environment. Gender differences in attitudes toward risk and in risk-related decisions also have been examined in economics and finance settings. Most of previous literature supports that women are more risk averse or less confidence than men in financial decision making [20] [21]. However, much of the literature on women in leadership does not adopt appropriate gender-based theories to reflect both male and female perspectives. Mirchandani [22] indicates that approaches to women in leadership would benefit from theoretical insight on the gendered processes in work settings developed within feminist theory. This paper extends the concept of socialist/Marxist feminism to propose that female and male CEOs in China will perform equally on tax avoidance decisions because they experienced the same socialization processes under one-child policy.

With respect to political connection, state ownership represents a direct tie with the government. Having the support from the government, firms can acquire key resources and favorable tax flexibility; meanwhile, the government can embed their political and social objectives in firms' operation. As one of the largest transitional countries, China provides a special institutional environment in which to examine the relation among gender and political connection of CEOs and the level of firms' tax avoidance activities. Prior research finds that² there is a significant relationship between state-owned shares and tax avoidance activities in China [23]-[28] also indicate that firms with tight relation with government are more likely to avoid tax payments. However, whether the interaction of CEO's gender and political background affects the level of tax avoidance activities still remains unclear. We also provide empirical evidence to answer the second question: How is the level of tax avoidance influenced when female CEOs with government-related background? To identify the intervention or protection from government into a firm, the CEO's political affiliation is a suitable proxy to measure government influence, for the Chinese government possesses the right to appoint the CEO of a listed company [29]. Following prior research, we define CEO's political connection as serving a current or former government bureaucrat, that is, a current or former officer of the central or local governments or the military [26].

Anderson-Gough et al. [30] and Czarniawska [31] indicate that the topic of

²For example, Zeng [27] finds that the effective tax rates of government controlled firms are larger than those of non-government controlled firms. Chan *et al.* [22] show that compared to government-controlled firms, non-government-controlled firms pursue a more aggressive tax strategy. On the contrary, Chang and Huang [23] find that the relationship between effective tax rates and the state-owned percentage is significantly negative. Tang and Firth [24] find that state-owned firms have higher tax management activities.

gender relations in accountancy industry remains an "under-researched area". We pursue the line of research stream on the characteristics of top-management positions in China and investigate whether female CEOs are significantly different from their male counterparts on tax avoidance decisions. We also combine female top-management positions and their governmental background to investigate whether female CEOs with political connection lead to less or more tax avoidance activities level. Our settings provide direct linkages among the degree of tax avoidance activities, gender, and political connection. In contrast to a traditional western viewpoint suggesting female managers with higher risk aversion attitude, we find that Chinese female CEOs perform in difference on tax avoidance activities from their male counterparts. Next, we find evidence that female CEOs with political background (in political power) tends to conduct more tax avoidance activities compared with those female CEOs without government relation.

Our study contributes to finance and manager characteristics literature on tax strategy in two ways. First, although extant research shows gender diversity in board or leadership position affect firms' performance, investment activities, financial position and earnings quality, little evidence exists regarding the relation between woman in top managerial rank and tax avoidance behavior. Our empirical evidence indicates that Chinese female CEOs do not conduct less tax avoidance activities than male CEOs in the same industry. From the gender-difference perspective, our results can be summarized in three words: "Vive la indifference!" These results contrast with evidence from developed countries where female managers are less risk-taking and associated with less tax avoidance activities (e.g., [11]). From an international comparison perspective, "Vive la difference!" is summarized. We also find that female managerial leadership with political connection tends to conduct more tax avoidance activities. Next, we focus on a tax-specific setting to construct more powerful tests and provide a direct linkage among the gender of CEOs, leadership associated with political connection, and tax avoidance activities. Our evidence complements prior studies related to political connection background that female executives with political power lead to conduct more tax avoidance activities.

The remainder of this study is organized as follows. Section 2 describes references of gender differential behavior and develops research hypotheses. Section 3 presents our research design including data collection and empirical models. Section 4 discusses our findings. Section 5 offers our conclusions and suggestions for future research.

2. Literature Review and Hypotheses Development

2.1. Gender Behavioral Differences and Tax Avoidance

Prior studies indicate that female leadership contributes in non-monetary ways at times by complementing the male counterparts. Gender diversity in board or management is said to provide a number of benefits, including communication improvement [32], new idea and insights on female market segmentation [33] and transformational management style [34]. The presence of women on boards or leadership position could significantly affect the governance of companies in enhancing their effectiveness by tapping broader talent pools for their directors [7], improving the quality of board decisions and enhancing the legitimacy of firm practices [35]. The ratio of female directors is positively associated with board strategic control [36] and offsets weak corporate governance [37].

Most of previous literature provides evidence that women are more risk averse or less confidence than men in decision making. Related research indicates that females are inclined to feel less competent than males in financial matters [38]. Females have a lower preference for risk and less overconfident in financial decision making compared to males [20] [21], as a result that women tend to avoid losses and are less willing to take extreme risks than men are [39] [40] [41]. Firms with female CEOs have lower leverage, less volatile earnings, and a higher chance of survival than firms with male CEOs [42]. Male executives undertake more acquisitions and issue debt more often than female executives [6]. Mateos de Cabo et al. [43] find that lower-risk banks are associated with a higher proportion of female directors. Francis et al. [44] find that firms with female CFOs are associated with lower cost of debt. Furthermore, Martin et al. [45] find a significant reduction in capital market risk following a female CEO appointment, reflecting the market's perception of female CEOs as relatively risk averse. Together, these studies suggest that gender-based differences in an executive's risk tolerance may have a widespread impact on the financial related decisions.

Gender-based differences in levels of overconfidence and risk-taking can lead to differences in the financial reporting quality. The risk aversion of females significantly lowers their earnings relative to males [46], indicating that women in leadership position can lead to different financial reporting quality compared with male counterparts, for example, companies with female CFOs have lower absolute abnormal accruals and lower accrual estimation errors [10], female CFOs have lower absolute discretionary accrual [47], firms with female directors exhibit better reporting discipline by managers [48], female CFOs are more conservative in their financial reporting [11], CEO gender has positive relation with accounting conservatism [49]. While, some researchers suggest that gender differences among professionals in the quality of financial report are small or nonexistent, for example, Ge *et al.* [50] find no significant relation between CFO gender and discretionary accruals.

In China, owning to the policy declaration of Mao Zedong, who famously said that "women hold up half the sky", the Chinese Constitution officially institutionalized this position, states clearly that Chinese women have equal rights with men in political, economic, cultural, educational and social life. Basically, China is more open to women than other East Asian countries [51] [52]. However, survey statistics do not support the political slogan. Xiao *et al.* [53] find women take 6.58% of CEO positions in Chinese listed firms during 2006 to 2010, Liu *et al.* [54] find that the average board seat of women is 10.2% during 1999 to 2011.

Meanwhile, we find 8.9% of listed firms employ women as CEOs or chairpersons during 2010 to 2015. All the empirical findings show that the female CEOs or the board seat of women is lower than that in US or EU companies but higher than that in other Asian countries.³ Based on discussions above, the applicability of traditional stereotypes to female top executives is inappropriate in a communist and also an atheist state. We hypothesize that women who pursue the nontraditional career of top executives may reject the feminine stereotype and have goals, motives, and behaviors that are similar to those of men who pursue top executives. In addition, we extend the concept of socialist feminism to propose that female and male CEOs in China will perform equally because they experienced the same socialization processes. Lower percentage of women in leadership presents that sexism in business exists commonly, but this imbalance does not mean women are more risk-averse than men at the top leadership level.

Dyreng *et al.* [55] find that substantial variations in the level of firms' tax avoidance activities exist. Prior studies identify a wide range of firms' characteristics that can affect the level of tax avoidance activities.⁴ Comparing with firms characteristics, researches regarding managerial characteristics affecting firms' tax avoidance are less well established. Dyreng *et al.* [56] investigate whether individual top executives have incremental effects on their firms' tax avoidance that cannot be explained by characteristics of the firm. Their results indicate that individual executives play a significant role in determining the level of tax avoidance activities that firms undertake. This finding shows that the economic magnitude of the executive effects on tax avoidance activities is large.

Income tax reporting involves a high degree of complexity and discretion; the potential space to adopt tax avoidance is associated with the attitude of managers toward risk tolerance. The tools of tax avoidance include subsidiaries located in tax havens, foreign-source income, transfer pricing, and inconsistent book-tax treatment [57] [58]. Francis *et al.* [11] examine whether there are systematic differences in the choice of tax aggressiveness between female and male executives. They find that female CFOs are associated with less tax aggressiveness as compared to their male counterparts. In contrast with the western evidence, we expect that female CEOs in China are not more risk averse than male CEOs and they will perform in different from male CEOs on tax avoidance. Thus, our first

³Based on the survey from McKinsey & Company which shows that the female representations on board and executive committees in Asian countries in 2011 are 1% and 2% in South Korea, 2% and 1% in Japan, 5% and 3% in India, 6% and 5% in Indonesia and Malaysia, 7% and 15% in Singapore, 8% and 9% in China and Taiwan, 9% and 11% in Hong Kong, and 13% and 12% in Australia, respectively. They find that women account for 6% of seats on corporate boards in the ten Asian markets, and 8% of those on executive committees which is far lower than that in EU and US are 17% and 10%, and 15% and 14%, respectively.

⁴For example, more foreign operation can avoid more tax [72], tax management declines as the difference between voting rights and cash flow rights increases [73], companies with a higher probability of reporting a material weakness regarding tax-related internal controls have higher level of tax management activities [24], firms with greater board ties to low-tax firms have lower tax burdens themselves [74], firms with excessive irresponsible corporate social responsibility activities have a higher likelihood of engaging in tax-sheltering activities and greater discretionary/permanent book-tax differences [75].

hypothesis in the null form is as follows:

H1: Female CEOs engage in different level of tax avoidance activities compared with male CEOs.

2.2. Political Connections and Tax Avoidance

Political connections of corporations are a widespread phenomenon in developing and transition countries. With the help from government, firms can access key operational resources, such as market shares, sales channels, bank loans and favorable tax treatments. Prior studies have found that firms with political connections or government shares have significant positive effect on their performance, and exhibit poor accounting performance compared to their non-connection counterparts.

A country with high interventionist government and weaker protection of property rights like China, the benefits of political connections are greater [42]. Empirical evidence from China indicates that there is a significant relation between state-owned shares (SOEs) and tax avoidance; however, existing evidence is somewhat controversial. Zeng [27] finds that the ETRs of government controlled enterprises are larger than those of non-government controlled enterprises, indicating government controlled firms conduct less tax avoidance activities. Chan et al. [23] show that compared to government-controlled firms, non-government-controlled firms pursue a more aggressive tax strategy. On the contrary, Chang and Huang [24] find that the relationship between ETRs and the percentage of state-owned shares is significantly negative, finding that firms with more government shares conduct more tax avoidance activities. Sun et al. [28] indicate that firms with tight relation with government are more likely to avoid tax payments. Tang and Firth [25] find that SOEs have higher tax avoidance activities.

With respect to the political-related of CEOs, Wu et al. [26] argue that hiring politically connected managers can allow firms to overcome the market and state-level disadvantages and seek government-related benefits. Their finding shows that tax burdens of private firms with political connected managers are lower than that of private firms without such managers, indicating that the managers with political connections can help their firms to attain tax benefits. Based on the foregoing analyses, we present the following hypotheses:

H2: Female CEOs with political connections are more likely to be associated with tax avoidance activities compared with female CEOs without political connections.

Previous studies on women in leadership do not adopt appropriate feminist theories to reflect both male and female perspectives. There are two major streams of feminist thought—liberal feminism and socialist feminism—to explain why gender differences in various aspects of an organization. Liberal feminists seek change through appealing to the liberal values of equality, freedom, and choice right [59]. Liberal feminism does not recognize any inherent gender differences. Rationality, viewed as the human essence, is assumed to be a purely

mental capacity, and is considered to be separate from a person's gender. Liberal feminism proposes that women and men will perform equally if they are given identical opportunities [60]. Socialist feminism, in contrast to liberal feminism, posits that men and women are indeed different as a result of different socialization processes they experience. Men and women are viewed as two separate groups following traditional gender stereotypes, each with equally effective and valid. Socialist feminism mainly examines that men and women perceive themselves according to gender social identities. Socialist feminism proposes that women and men will perform equally if they experienced the same socialization processes.⁵

Marxism and feminism are theories of power and its distribution: inequality. However, Marxists have criticized liberal feminists as bourgeois in theory and in practice, meaning that it works in the interest of the ruling class. Even today women and men are equivalent in terms of age, education, qualifications, seniority, and experience, females are found to hold lower job status and be remunerated less than males. Marxist feminism argues that sexism is a sole factor to examine gender inequality in organizational hierarchies. Women are disadvantaged as a result of the traditional patriarchal structure of organizations. Kanter [61] observes a phenomenon that organizations reproduce themselves, so men in power mentor and encourage that people who are most like themselves. She postulates that social conformity is important if individuals are to reach upper level leadership positions, and that women reaching these levels, usually resemble the men in power. Maupin and Lehman [62] support the Kanter's hypothesis in big six CPA firms. We extend the concept of socialist/Marxist feminism to propose that female and male CEOs in China perform indifferently on tax avoidance decisions because they experienced the same socialization processes under one-child policy.

3. Sample Selection and Research Design

3.1. Initial Sample

We use the A-share market of the Shanghai and Shenzhen stock exchanges to analyze CEOs' gender and tax reporting of listed firms in China. Data on CEOs' gender and background, current income tax payable, applicable tax rates, asset impairments loss provisions and asset impairment reversals are manually collected from companies' English-version financial reports and the footnote disclosures available at the official website of China Security Regulatory Commission (CSRC) (http://www.cninfo.com.cn/new/index and

<u>http://www.sse.com.cn/</u>). Other required financial variables and ownership types are obtained from the CSMAR. The sample period runs from 2010 to 2015.

3.2. Research Design

Some previous studies adopt book-tax differences (BTDs) as a proxy to measure

⁵Both theories, though stemming from different assumptions, are not necessarily to be contradictory.

tax aggressiveness [63] [64], or to estimate the degree of tax shelters and tax avoidance activities [65]. Tang and Firth [25] find that BTDs are significantly related to a set of earnings and tax avoidance incentives, and suggest that BTDs are a useful proxy for tax avoidance activities in China. Based on these references, we choose BTDs as our measure for the level of tax avoidance activities.⁶ To test Hypotheses 1 and 2, our empirical models are based on Desai and Dharmapala [65] as follows:

```
TBTD_{i,t} \text{ or } PermBTD_{i,t}
= \beta_0 + \beta_1 FemaleCEO_{i,t} + \beta_2 GovCEO_{i,t} + \beta_3 AccCEO_{i,t}
+ \beta_4 FemaleCEO_{i,t} * GovCEO_{i,t} + \beta_5 FemaleCEO_{i,t} * AccCEO_{i,t}
+ \beta_6 GovCEO_{i,t} * AccCEO_{i,t} + \sum_q \left(qth \ control \ variables\right)
+ Industry \ Dummies + Year \ Dummies + e_{i,t}
(1)
```

3.2.1. Measurement of Dependent Variables

The total book-tax differences(*TBTD*) in Equation (1) is measured by the difference between reported pre-tax book income and taxable income scaled by total assets, where taxable income is defined as current income tax payable divided by applicable income tax rate.

Taxable Income = current income tax payable/applicable income tax rate (2)

$$TBTD = [pre-tax book income - taxable income]/total assets$$
 (3)

In addition, total book-tax differences (*TBTD*) consist of temporary and permanent components. Temporary book-tax differences (*Temp BTD*) reveal something about discretion in non-tax accounting accruals, while permanent book-tax differences (*Perm BTD*) usually cause by nondeductible expenses and nontaxable income. Based on prior studies argue that *Perm BTD* are mainly created by tax planning and tax avoidance activities [66], we also adopt *Perm BTD* as our measurement for tax avoidance activities. We derive *Perm BTD* from total book-tax differences less *Temp BTD*. Total book-tax differences are measured by book income less taxable income as discussed above. *TempBTD* are derived from deferred tax expense divided by statutory tax rate following prior studies [66].

3.2.2. Measurement of Interest Variables

Under Chinese special corporate systems, prior research considers both the chairperson of the board and the general manager are the top executives of a company [26]. Chairperson is the legal representative of the company under Chinese Corporate Law, and has important influence on a firm's operations. Most chairpersons are also the highest paid employees of their firms. Some re-

⁶However, due to the causes of BTDs are not only from tax shelter or tax management but also involves difference between accounting standards and tax law, corporate characteristics, and earnings management [67]. Therefore, we employ the differences of accounting principle and tax law, earnings management and corporate characteristic in the regression model of BTDs to control the non-tax effect and extract the "tax-effect BTDs", and further to analyze the relation between women CEOs and BTDs.

searchers regard chairperson as the top manager of a firm. The general manager is often regarded as equivalent to the CEO of U.S. firms [29]. For these reasons, this study extends the scope of CEOs' definition to include both firms' chairpersons of boards and CEOs.

To examine H1 regarding whether female CEOs engage the same degree of tax avoidance activities compared with male CEOs, our interest variable is *Female CEO*, which is defined as an indicator variable equal to one when CEOs' gender is female, and zero otherwise. The prediction sign of β_1 is insignificantly negative or positive. Regarding whether CEOs with political connections adopt more tax avoidance activities, our interest variable is *Gov CEO* which equals one if a firm has a politically connected chairperson and/or CEO, and zero otherwise. We define CEOs are politically connected if he or she is currently serving or has formerly served in the government or the military. The prediction sign of β_2 is significantly positive. If H2is supported empirically, that female CEOs with political connection conduct more tax avoidance behavior, the coefficient on the interaction term of *female CEO* and *Gov CEO* is expected to be positive.

In addition, the educational background and working experiences of CEOs can affect their professional judgment in tax avoidance activities, this study includes finance background (*Acc CEO*) in regression (1). We define *Acc CEO* are CEOs with finance or accounting profession if he or she is currently serving Chief Financing Officer (*CFO*) or hold the certificate of accounting profession or has accounting or finance working experience or major in accounting/finance. If CEOs have one of the above criteria then *Acc CEO* equals one, and zero otherwise. The prediction sign of *Acc CEO* and its interaction term with *Female CEO* or *Gov CEO* are uncertain.

3.2.3. Control Variables

Prior studies indicate that ownership structure affects the level of firms' tax reporting policy in China [24]; we include government control firms (*SOE*) and family firms (*FAM*) as our control variables. We define *SOE* equal to one if the firm is state-owned enterprise, and zero otherwise; *FAM* equals to one if the firm is family enterprise, and zero otherwise. According to Chang and Huang [24], the coefficient of *SOE* in Equation (1) is expected to be positive.

Following the findings of Seidman [67], we control for the earnings management, the difference between Chinese accounting standards and tax law, and general firm characteristics to extract tax-induced book-tax differences. This paper employs discretionary accrual (*DA*) as the proxy for earnings management where *DA* is measured from the modified Jones model [68]. We estimate the following cross-sectional regressions for each two-digit CSRC industry classification:

$$\frac{TAC_{it}}{TA_{it-1}} = \alpha_0 \left(\frac{1}{TA_{it-1}} \right) + \alpha_1 \left(\frac{\Delta REV_{it} - \Delta AR_{it}}{TA_{it-1}} \right) + \alpha_2 \left(\frac{PPE_{it}}{TA_{it-1}} \right) + \varepsilon_{it}$$

$$\tag{4}$$

where TAC is the total accruals; TA is the total assets; ΔREV is the change in

sales; $\triangle AR$ is the change in accounts receivable; and *PPE* is property, plant, and equipment. *DA* is the absolute value of residual term from Equation (4). The coefficient of *DA* in Equation (1) is expected to be positive.

Considering the impact of the regulatory differences between Chinese accounting standards and tax law on the level of book-tax differences, and firm characteristics, we include following variables to control possible effects [66]. LOSS is defined as an indicator variable equal to 1 for firms suffering a loss in the previous year, and 0 otherwise. We predict that the sign for LOSS is positive [69]. INV is measured as ending inventory divided by total assets to control for inventory intensity. Long term investment (LI) is defined as the ratio of long term investment to total assets to control investment intensity. The capital intensity (FA) is defined as the ratio of net fixed assets to total assets [70]. IA is defined as intangible assets divided by total assets. We measure AVL which is defined as gain or loss from asset valuation divided by total assets. TAIMP is defined as the provision of asset impairment loss minus its reversals divided by total assets. EQUITY is defined investment income or loss recognized under equity method divided by total assets. Further, we employ interest expense (EXP), growth of return on asset (GROA), leverage (LEV) and firm size (SIZE). EXP is defined as interest expenses divided by total assets, GROA is growth rate of ROA where ROA is defined as income before tax divided by total assets, and LEV is calculated as total liabilities divided by total assets. The firm size (SIZE) is measured by the natural logarithm of total assets. As the effects of the differences between Chinese accounting standards and tax law as well as firm's characteristics on TBTD/Perm BTD are uncertain, we do not estimate the signs of the aforementioned variables. Finally, we include dummy variables to control for year and industry fixed effects.

4. Empirical Results

4.1. Sample and Descriptive Statistics

Table 1, Panel A outlines our sample selection process. We start with all observations available on the CSMAR database with non-missing asset data for the years 2010-2015 excluding firms in the financial or banking services industry, where this initial data includes 14,264 firm-years. We drop 649 observations because they lack the ownership structure data, and another 942 observations due to missing gender or background information of CEOs. Finally, we drop 1046 observations because of missing data required to compute book-tax differences or other variables in our regression. This leaves us with a final sample of 11,627 firm-years.

Table 1, Panels B and C present the sample by year and by industry. Manufacturing industries comprise 7005 firm-years, which makes up 60.25% of our sample, with machinery at 14.67%, and petroleum, chemical products, and plastics at 10.23%. Non-manufacturing industries comprise 4622 firm-years, which make up 39.75% of our sample.

(a)	
		Number of observations
Total sample of A-share firms (excluding I	Banking and Insurance)	14,264
Less: Firms lacking requisite ownersl	nip structure data	(649)
Less: Firms lacking requisite gender or backgr	ound information of CEOs	(942)
Less: Firms lacking requisite account	ting number data	(1046)
Total firm-year observa	tions	<u>11,627</u>
(1	b)	
	# of obs.	percentage
2010	1514	13.02%
2011	1563	13.44%
2012	1721	14.80%
2013	2055	17.67%
2014	2320	19.95%
2015	<u>2454</u>	<u>21.11%</u>
Total firm-year observations:	<u>11,627</u>	<u>100%</u>
(c)	
Manufacturing	# of obs.	percentage
Food, Beverage	629	5.41%
Textile, Clothing, Leather Fiber	476	4.09%
Paper, Printing	288	2.48%
Petroleum, Chemical Products, Plastics	1189	10.23%
Electrical Equipment	526	4.52%
Metal, Non-metal Mineral Products	1027	8.83%
Machinery	1706	14.67%
Medicine, Biological Products	931	8.01%
Others	233	2.00%
Non-manufacturing		
Agriculture	184	1.58%
Mining	363	3.12%
Transportation, Storage	441	3.79%
Real Estate	805	6.92%
Tourism, Hotel	99	0.85%
Utilities	450	3.87%
Intelligent Technology	500	4.30%

858

29

40

286

<u>567</u>

11,627

7.38%

0.25%

0.34%

2.46%

4.88%

100%

Retail

Transmission and Entertainment

Personal and Social Service

Construction

Others

Total firm-year observations

Table 2 summarizes the descriptive statistics for all variables in Equation (1). All of the continuous variables are winsorized at 1 percent and 99 percent to minimize the potential influence of extreme values. Panel A shows that the mean (median) of *TBTD* and *Perm BTD* are 0.032 (0.034) and 0.037 (0.039), suggesting that aggregate Chinese book-tax differences in A-shares are generally positive. *Female CEO*, *Gov CEO* and *Acc CEO* take the 8.9%, 24.1% and 6.9% of all smaple, respectively. Table 1, Panel B shows the distributions of *Female CEO*, *Gov CEO* and *Acc CEO* by year, we find that women CEO proportion grows with years in our sample period, from 7.99% in 2010 to 9.45% in 2015. Consistent with the trend in US and EU, the proportion of woman enterprise leadership in China is increased. SOEs represent a significant proportion of ownership in China. The means (medians) of *SOE* and *FAM* are 50.4% (1.00), and 42.70% (0.00), respectively.

Table 3 presents the correlations for all variables, and shows a significantly positive correlation between *TBTD* and *Acc CEO*, and *Perm BTD* and *Acc CEO*, indicating that finance or accounting professional background of CEO increases the level of total and permanent book-tax differences. As for the relation between *TBTD*/*Perm BTD* and *Female CEO*, initially consistent with our prediction, *Female CEO* is insignificantly correlated with *TBTD*/*Perm BTD* which supports our Hypothesis 1 preliminarily. The correlation coefficients of *Gov CEO* and *TBTD*/*Perm BTD* are not significant.

In addition, *DA*, *LOSS*, *AVL*, *TAIMP*, *EXP* and *LEV* are significantly and positively correlated with *TBTD* or *Perm BTD*; these results show that firms with more discretionary accrual, firms with losses in the previous year, firms with more gain or loss from asset valuation, firms with larger asset impairment losses, interest expenses and leverage increase *TBTD* or *Perm BTD*. We also find that *TBTD* or *Perm BTD* is significantly and negatively correlated with *SIZE*. Finally, the highest variance inflation factor (VIF) is less than 4.50, suggesting that multicollinearity is not a serious problem in our empirical models.

4.2. Tests of Hypotheses

Table 4 presents the results for the estimation of Equation (1). In all tables, t-values are based on standard errors that are clustered by firm and year. Consistent with H1, we find that female CFOs are not associated with less tax aggressiveness as compared to their male counterparts. The *Female CEO* coefficient of 0.071 (*TBTD* as dependent variable) and 0.068 (*Perm BTD* as dependent variable) are both in significant positive. These results suggest that female CEOs in China are not more risk averse than male CEOs and they perform in different tax avoidance activities from male CEOs, consistent with the expectation of socialist feminism under Marxism socialization processes.

The *Gov CEO* coefficients of 0.036 (*TBTD* as dependent variable) and 0.035 (*Perm BTD* as dependent variable) are both positive and significant (at the 5% significance level), suggesting that after taking the control variables into account, CEOs with political background show more *TBTD* and *Perm BTD*. Next, the

Table 2. Descriptive statistics. (a): Descriptive statistics for variables; (b) Distribution of *Female CEO*, *Gov CEO and Acc CEO* by year.

1	1	

		(a)				
	Mean	Median	Minimum	Q1	Q3	Maximum
Dependent variables						
TBTD	0.032	0.034	-0.513	0.008	0.066	0.271
Perm BTD	0.037	0.039	-0.381	0.010	0.072	0.325
Interest variables						
Female CEO	0.089	0.000	0.000	0.000	0.000	1.000
Gov CEO	0.241	0.000	0.000	0.000	0.000	1.000
Acc CEO	0.069	0.000	0.000	0.000	0.000	1.000
Female CEO* Gov CEO	0.027	0.000	0.000	0.000	0.000	1.000
Female CEO* Acc CEO	0.011	0.000	0.000	0.000	0.000	1.000
Gov CEO* Acc CEO	0.020	0.000	0.000	0.000	0.000	1.000
Control variables						
SOE	0.504	1.000	0.000	0.000	1.000	1.000
FAM	0.427	0.000	0.000	0.000	0.000	1.000
DA	0.086	0.057	0.311	0.003	0.116	0.278
LOSS	0.085	0.000	0.000	0.000	0.000	1.000
INV	0.170	0.130	0.000	0.064	0.218	0.762
LI	0.071	0.022	0.000	0.002	0.083	0.319
FA	0.291	0.251	0.002	0.129	0.423	0.820
IA	0.051	0.032	0.000	0.013	0.061	0.343
AVL	0.002	0.000	-0.002	0.000	0.001	0.034
TAIMP	0.013	0.002	-0.015	0.001	0.006	0.133
<i>EQUITY</i>	0.002	0.000	-0.004	0.000	0.001	0.056
EXP	0.012	0.010	0.000	0.002	0.018	0.074
GROA	1.59%	0.92%	-25.46%	-0.87%	3.17%	56.75%
LEV	0.467	0.474	0.000	0.294	0.637	0.940
SIZE	14.722	14.575	11.800	13.900	15.400	18.600

(b)

	Fema	le CEO	Gov	CEO	Acc	CEO
	# of obs.	percentage	# of obs.	percentage	# of obs.	percentage
2010	121	7.99%	285	18.82%	96	6.34%
2011	129	8.25%	318	20.35%	98	6.27%
2012	144	8.37%	450	26.15%	141	8.19%
2013	185	9.00%	599	29.15%	173	8.42%
2014	218	9.40%	569	24.53%	147	6.34%
2015	232	9.45%	585	23.84%	143	5.83%

Table 3. Correlation matrix.

	Perm BTD	Female CEO	Gov	Асс	Female CEO * Gov CEO		Female Gov CEO* CEO * Acc CEO	SOE	FAM	DA	SSOT	INV	II	EA	IA	AVL	TAIMP EQUITY	EQUITY	EXP	GROA	LEV	SIZE
TBTD	0.823*** -0.003	-0.003	-0.005	0.034***	-0.002	-0.001	-0.001	-0.010	0.011	0.029***	0.032***	-0.010	-0.006	-0.014	-0.007	0.245***	0.030***	-0.002	0.892***	0.002	0.508***	-0.076***
Perm BTD		-0.003	-0.006	0.036***	-0.001	-0.001	-0.001	-0.009	0.012	0.028***	0.031***	-0.011	-0.005	-0.013	-0.006	0.245***	0.029***	-0.00167 0.873***	0.873***	0.003	0.510*** -	-0.077***
Female CEO			0.049***	0.066***	0.538***	0.049*** 0.066*** 0.538*** 0.336***	0.069***	-0.088***	0.103***	-0.0023	-0.017*	0.058*** (0.038***	-0.080***	-0.004	-0.024**	-0.004	-0.008	-0.003	900.0	- 600.0-	-0.050***
Gov CEO				0.032***	0.032*** 0.297***	0.044***	0.254***	-0.107***	0.106***	-0.007	-0.059***	0.046***	0.001	-0.048***	0.0237**	-0.030**	-0.017**	90000	-0.006	0.00491	-0.01905	0.02575
Acc CEO					0.065***	0.065*** 0.386***	0.527***	0.050***	-0.049***	-0.001	0.052***	0.038***	0.039***	-0.010	0.031***	0.016*	0.002	0.018	0.035*** -	-0.034**	0.046***	0.013
Female CEO * Gov CEO						0.252***	0.175***	-0.050*** 0.058***	0.058***	-0.004	-0.023**	0.057*** (0.033***	-0.072***	-0.009	-0.013	-0.004	-0.016^{*}	-0.002	0.001	-0.008	-0.007
Female CEO * Acc CEO							0.299***	-0.047*** 0.044***	0.044***	0.001	0.007	0.040*** (0.039***	-0.037***	-0.007	-0.005	-0.004	-0.001	-0.001	0.001	0.001	-0.002
Gov CEO* Acc CEO								-0.003	0.004	-0.003	0.003	0.047*** (0.034*** -	-0.042***	0.057***	-0.007	-0.001	0.015*	-0.001	0.001	0.001	0.026***
SOE									-0.871***	-0.036***	0.036***	0.0015	0.112***	0.235***	0.041***	0.016*	-0.015	0.069***	-0.010	600.0	-0.013 (0.363***
FAM										0.042***	-0.028***	0.024** -	-0.125*** -	-0.209***	-0.045***	-0.011	0.019**	-0.087***	0.011	-0.010	0.017* -	-0.323***
DA											-0.0051	0.045***	-0.013	-0.019**	-0.028***	-0.009	0.017*	0.011	0.028***	0.018*	0.007	-0.014
SSOT												-0.034*** (0.064***	0.098***	0.062***	0.113***	0.074***	-0.050*** 0.033***	0.033***	900.0	- ***960.0	-0.161***
ΛNI												1	- 0.086*** -	-0.409***	-0.202***	0.032*** -	-0.026*** -	-0.056***	-0.011	0.014	-0.010	0.137***
ALI													'	-0.204***	-0.072***	-0.006	-0.001	0.353***	-0.006	0.005	0.019**	0.010
FA															0.041***	0.016*	0.016*	-0.053***	-0.014	0.012	-0.002	0.175***
IA																0.009	-0.002	-0.026***	-0.007	900.0	-0.003 -	-0.038***
AVL																	0.099***	-0.015	0.253***	0.002	0.141*** –	-0.085***
TAIMP																		-0.016* (0.028***	0.001	0.274*** –	-0.084***
EQUITY																			-0.002	0.002	-0.004	0.078***
EXP																				0.001	0.508*** -	-0.078***
GROA																					-0.477*** 0.072***	072***
LEV																					ı	-0.153***

Note: ***, **, and * indicate significance at 1%, 5%, and 10% levels, respectively (two-tailed).

Table 4. Regression results for TBTD/PBTD on women CEO and political background.

		Full Sampl	e (N = 11,627)			
			TBTD dependent v		Perm B7	
			Coefficient	t-value	Coefficient	t-value
Intercept		none	-0.106	-0.56	-0.097	-0.51
Female CEO	$oldsymbol{eta_1}$	none	0.071	1.61	0.068	1.59
Gov CEO	eta_2	+	0.036***	2.33	0.035**	2.28
Acc CEO	β_3	none	-0.122**	-2.11	-0.124**	-2.15
Female CEO* Gov CEO	eta_4	+	0.090**	1.81	0.087**	1.73
Female CEO* Acc CEO	eta_{5}	none	0.134	1.04	0.127	0.98
Gov CEO* Acc CEO	$eta_{\!\scriptscriptstyle 6}$	none	-0.002	-0.03	0.002	0.03
SOE		+	0.049	1.29	0.048	1.27
FAM		none	-0.001	-0.03	-0.004	-0.12
DA		+	0.129	1.27	0.131	1.29
LOSS		none	-0.122	-1.61	-0.128*	-1.67
INV		none	-0.037	-0.32	-0.035	-0.30
LI		none	-0.209	-0.81	-0.265	-1.02
FA		none	-0.339***	-2.63	-0.344***	-2.66
IA		none	-0.827***	-4.65	-0.844***	-4.73
AVL		none	-20.377***	-4.37	-20.350***	-4.37
TAIMP		none	10.285***	4.04	10.324***	4.04
EQUITY		none	12.764***	3.97	12.934***	4.01
EXP		none	13.705***	13.03	13.705***	13.45
GROA		none	0.017***	2.81	0.016***	2.80
LEV		none	-0.001	-0.75	-0.001	-0.74
SIZE		none	0.018*	1.70	0.020*	1.67
Year Fixed Effect			yes		yes	
Industry Fixed Effect			yes		yes	
F-value			124.96***		136.54***	
Adjusted R ²			0.9038		0.8476	

Note: ***, **, and * indicate significance at 1%, 5%, and 10% levels, respectively; one-tailed where signs are predicted, two-tailed otherwise. The t-value is based on two-way cluster-robust standard errors.

 $Acc\ CEO$ coefficients of $-0.122\ (TBTD$ as dependent variable) and -0.124 ($Perm\ BTD$ as dependent variable) are both negative and significant (at the 5% significance level), suggesting that CEOs with finance background or experiences tends to be more conservative and show less incentive to reduce their taxable income base.

The interaction term of Female CEO and Gov CEO coefficients of 0.090

(*TBTD* as dependent variable) and 0.087 (*Perm BTD* as dependent variable) are both positive and significant (at the 5% significance level), suggesting that women CEOs with political background conduct more tax avoidance activities as compared to female counterparts without political background. These results are consistent with H2, and support the notion that Female CEOs with political connections are more likely to be associated with tax avoidance activities (*i.e.*, larger book-tax differences) compared with female CEOs without political connections.

After taking the control variables into consideration, our results are inconsistent with prior research based on US data [11] which suggest that female CFOs are associated with less tax avoidance activities as compared to their male counterparts. Our results support the argument of socialist feminism indicates that female and male CEOs in China will perform equally because they experienced the same socialization processes. Different from the traditional concept, this evidence shows that women in China are not more risk-averse than men at the top leadership level.

With respect to the effect of the control variables on tax avoidance activities, the coefficients on the *TAIMP*, *EQUITY*, *EXP* and *GROA* are positive and significant (at the 1% significance level). These results indicate that firms with larger asset impairment losses, investment income or loss, interest expenses and growth in ROA increase *TBTD*/*Perm BTD*. The coefficients on the *FA*, *IA* and *AVL* are negative and significant (at the 1% significance level). These findings show that firms with larger net fixed asset, intangible asset and asset valuation decrease *TBTD*/*Perm BTD*.

4.3. Additional Test

To examine whether the female CEOs Chair-Duality affects the degree of tax avoidance activities, we further separate our sample into CEOs position only (the executives serves only as CEOs) and CEOs Chair-Duality (the CEO is also the chairman of the board) subsamples. **Table 5** shows the results for the CEOs position only subsample; the evidence supports the expectations noted for H1 and H2. The *Female CEO* coefficient of -0.084 (*TBTD* as dependent variable) and -0.085 (*Perm BTD* as dependent variable) are both in significant negative. These results suggest that female executives in CEOs position only in China are not more risk averse than male CEOs and they will perform in different from male CEOs on tax avoidance activities. The *Gov CEO* coefficients of 0.147 (*TBTD* as dependent variable) and 0.141 (*Perm BTD* as dependent variable) are both positive and significant (at the 5% significance level), suggesting that female without CEOs Chair-Duality but with political background engage more tax avoidance activities.

Table 6 shows the results for the CEOs Chair-Duality subsample; the finding is opposite to the expectations noted as H1. The *Female CEO* coefficient of 0.184 (*TBTD* as dependent variable) and 0.186 (*Perm BTD* as dependent variable) are both significant positive (at the 10% significance level). These results suggest

Table 5. Regression results for *TBTD/PBTD* on women CEO and political background: CEO position only.

	Ful	ll Sample (N	N = 11,627)			
Variables	Parameter	Expected	TBTL dependent		Perm B7	
		Sign	Coefficient	t-value	Coefficient	t-value
Intercept		none	-0.104	-0.55	-0.095	-0.50
Female CEO	$oldsymbol{eta_1}$	none	-0.084	-1.62	-0.085	-1.63
Gov CEO	eta_2	+	-0.032	-0.56	-0.025	-0.45
Acc CEO	eta_3	none	-0.085	-1.55	-0.089	-1.60
Female CEO* Gov CEO	eta_4	+	0.147**	2.04	0.141**	1.97
Female CEO* Acc CEO	$eta_{\!\scriptscriptstyle{5}}$	none	-0.093	-1.12	-0.089	-1.06
Gov CEO* Acc CEO	eta_6	none	0.023	0.30	0.018	0.23
SOE		+	0.045	1.20	0.044	1.17
FAM		none	0.006	0.17	0.003	0.08
DA		+	0.129	1.27	0.130	1.28
LOSS		none	-0.126*	-1.65	-0.132*	-1.72
INV		none	-0.041	-0.35	-0.039	-0.33
LI		none	-0.202	-0.79	-0.258	-1.00
FA		none	-0.333***	-2.57	-0.338***	-2.61
IA		none	-0.819***	-4.64	-0.835***	-4.72
AVL		none	-20.399***	-4.36	-20.372***	-4.36
TAIMP		none	10.282***	4.04	10.321***	4.04
<i>EQUITY</i>		none	12.730***	3.96	12.899***	4.00
EXP		none	13.705***	13.09	13.705***	13.05
GROA		none	0.016***	2.81	0.017***	2.81
LEV		none	-0.001	-0.75	-0.001	-0.74
SIZE		none	0.021*	1.72	0.020*	1.69
Year Fixed Effect			yes		yes	
Industry Fixed Effect			yes		yes	
F-value			124.87***		123.70***	
Adjusted R ²			0.8974		0.8253	

Note: ***, **, and * indicate significance at 1%, 5%, and 10% levels, respectively; one-tailed where signs are predicted, two-tailed otherwise. The t-value is based on two-way cluster-robust standard errors.

that female executives in both CEO sand chairperson position tend to conduct more tax avoidance activities. Our findings confirm the argument of prior research that a conflict of interest arises when the CEO is also the chairperson, the chair owns power to influence the activities of the board, which leads to ineffective of monitoring and opening a door to abuse of the chair position [71]. The

Table 6. Regression results for *TBTD/PBTD* on women CEO and political background: Dual position.

	Ful	l Sample (N	= 11,627)			
Variables	Parameter	Expected	TBTD dependent		Perm B' dependent	
		Sign	Coefficient	t-value	Coefficient	t-valu
Intercept		none	-0.107	-0.56	-0.098	-0.52
Female CEO	$oldsymbol{eta_1}$	none	0.184*	1.86	0.186*	1.87
Gov CEO	eta_2	+	0.030**	1.83	0.029**	1.78
Acc CEO	eta_3	none	-0.064	-0.79	-0.065	-0.80
Female CEO* Gov CEO	eta_4	+	0.164**	1.71	0.156*	1.61
Female CEO* Acc CEO	$eta_{\!\scriptscriptstyle 5}$	none	-0.247**	-2.50	-0.249**	-2.54
Gov CEO* Acc CEO	$eta_{\!\scriptscriptstyle 6}$	none	0.097	1.23	0.100	1.26
SOE		+	0.047	1.24	0.047	1.21
FAM		none	0.002	0.05	-0.001	-0.0
DA		+	0.129	1.27	0.130	1.29
LOSS		none	-0.125	-1.63	-0.130*	-1.70
INV		none	-0.041	-0.36	-0.039	-0.3
LI		none	-0.207	-0.80	-0.263	-1.0
FA		none	-0.337***	-2.62	-0.342***	-2.6
IA		none	-0.838***	-4.72	-0.855***	-4.80
AVL		none	-20.370***	-4.37	-20.342***	-4.30
TAIMP		none	10.285***	4.04	10.324***	4.04
<i>EQUITY</i>		none	12.755***	3.97	12.926***	4.01
EXP		none	13.705***	13.10	13.705***	13.00
GROA		none	0. 016***	2.80	0.015***	2.79
LEV		none	-0.001	-0.75	-0.001	-0.7
SIZE		none	0.020*	1.70	0.020*	1.68
Year Fixed Effect			yes		yes	
Industry Fixed Effect			yes		yes	
F-value			122.80***		121.79***	
Adjusted R ²			0.9214		0.8982	

Note: ***, **, and * indicate significance at 1%, 5%, and 10% levels, respectively; one-tailed where signs are predicted, two-tailed otherwise. The t-value is based on two-way cluster-robust standard errors.

Gov CEO coefficients of 0.164 (TBTD as dependent variable) and 0.156 ($Perm\ BTD$ as dependent variable) are both positive and significant (at the 10% significance level), suggesting that female with CEOs Chair-Duality and political background engage more tax avoidance activities. This result is consistent with H2.

5. Conclusions and Suggestions

This research extends the existing western literature by examining whether gender differences exist in tax avoidance decisions at a top managerial rank in China. Based on socialist/Marxist feminism theoretical foundations, our empirical evidence offers a different viewpoint from the findings of western societies. Our results show that, in China, female CEOs do not engage less tax avoidance activities compared with male CEOs. In addition, we focus on a tax-specific setting to provide a direct linkage among the gender of top managers, leadership associated with political connection, and tax avoidance. Our evidence shows that female executives with political power lead to conduct more tax avoidance activities.

Our empirical findings are summarized as follows. Consistent with H1, female CFOs are not associated with less tax aggressiveness as compared to their male counterparts. However, if we further separate our sample into CEO-Chair person dual position and others, we find that female CEOs conduct more aggressive tax behavior in the subsample of dual position. This finding confirms the argument of prior research that a conflict of interest arises when the CEO is also the chairperson. Next, as the expectation of H2, female CEOs with political background engage in more tax avoidance activities, indicating the intervention or protection from government into a firm can affect female CEOs' attitude toward the tax avoidance behaviors.

With increasing numbers of females in their top management team, it is more important to fully understand potential influences of having female CEOs, especially in China. Our study could be viewed as providing empirical evidence in support of the theory of socialist/Marxist feminism. Future research could disentangle these potential explanations.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- [1] Catalyst (2012) 2012 Catalys Census of Women Board Directors of the Fortune 1000. Catalyst, New York.
- [2] Sellers, P. (2013) Is the Boardroom the Last Glass Ceiling? *Fortune*. http://fortune.com/2014/10/14/jc-penney-ceo-pay/
- [3] Equal Opportunity for Women in the Workplace Agency (EOWA) (2012) 2012 EOWA Australian Census of Women in Leadership. https://www.wgea.gov.au/
- [4] European Professional Women's Network (EPWN) (2004) The European PWN Board Women Monitor 2004. https://wearethecity.com/about-the-epwn-forthcoming-events/
- [5] Brinig, M. (1995) Why Can't a Woman Be More Like a Man? Or Do Gender Differences Affect Choice? Working Paper, George Mason University, Fairfax, VA.
- [6] Huang, J. and Kisgen, D.J. (2013) Gender and Corporate Finance: Are Male Execu-

- tives Overconfident Relative to Female Executives? *Journal of Financial Economics*, **108**, 822-839. https://doi.org/10.1016/j.jfineco.2012.12.005
- [7] Adams, R.B. and Ferreira, D. (2009) Women in the Boardroom and Their Impact on Governance and Performance. *Journal of Financial Economics*, **94**, 291-309. https://doi.org/10.1016/j.jfineco.2008.10.007
- [8] Gul, F.A., Srinidhi, B. and Tsui, J.S.L. (2008) Board Diversity and the Demand for Higher Audit Effort. Working Paper. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1359450 https://doi.org/10.2139/ssrn.1359450
- [9] Upadhyay, A. and Zeng, H. (2014) Gender and Ethnic Diversity on Boards and Corporate Information Environment. *Journal of Business Research*, **67**, 2456-2463. https://doi.org/10.1016/j.jbusres.2014.03.005
- [10] Barua, A., Davidson, L.F., Rama, D.V. and Thiruvadi, S. (2010) CFO Gender and Accruals Quality. *Accounting Horizons*, 24, 25-39. https://doi.org/10.2308/acch.2010.24.1.25
- [11] Francis, B., Hasan, I., Park, J.C. and Wu, Q. (2014) Gender Differences in Financial Reporting Decisionmaking: Evidence from Accounting Conservatism. Bank of Finland Research Discussion Papers. https://doi.org/10.2139/ssrn.2377312
- [12] Allen, F. (2005) Corporate Governance in Emerging Economies. *Oxford Review of Economic Policy*, **21**, 164-177. https://doi.org/10.1093/oxrep/gri010
- [13] Rubenstein, M. (1984) Equal Pay for Work of Equal Value: The New Regulations and Their Implications. The Macmillan Press, London. https://doi.org/10.1007/978-1-349-07547-8
- [14] Schwartz, F. (1989) Management Women and the New Facts of Life. Women in Management Review, 4, 65-76. https://doi.org/10.1108/EUM000000001789
- [15] Kirkham, L.M. (1992) Integrating Herstory and History in Accountancy. Accounting, Organizations, and Society, 17, 287-297. https://doi.org/10.1016/0361-3682(92)90025-N
- [16] Croson, R. and Gneezy, U. (2004) Gender Differences in Preferences. *Journal of Economic Literature*, **47**, 448-474. https://doi.org/10.1257/jel.47.2.448
- [17] Costa, P., Terracciano, A. and McCrae, R.R. (2001) Gender Differences in Personality Traits across Cultures: Robust and Surprising Findings. *Journal of Personality and Social Psychology*, 81, 322. https://doi.org/10.1037/0022-3514.81.2.322
- [18] Hall, J.A. (1990) Nonverbal Sex Differences: Accuracy of Communication and Expressive Style. Johns Hopkins University Press, Baltimore, MD.
- [19] Bonner, S. (2008) Judgment and Decision Making in Accounting. Prentice-Hall, Upper Saddle River, NJ.
- [20] Powell, M. and Ansic, D. (1997) Gender Differences in Risk Behavior in Financial Decision-Making: An Experimental Analysis. *Journal of Economic Psychology*, **18**, 605-628. https://doi.org/10.1016/S0167-4870(97)00026-3
- [21] Barber, B. M. and Odean, T. (2001) Boys Will Be Boys: Gender, Overconfidence, and Common Stock Investment. *The Quarterly Journal of Economics*, **116**, 261-292. https://doi.org/10.1162/003355301556400
- [22] Mirchandani, K. (1999) Feminist Insight on Gendered Work: New Directions in Research on Women and Entrepreneurship. *Gender*, *Work and Organization*, **6**, 224-236. https://doi.org/10.1111/1468-0432.00085
- [23] Chan, K.H., Mo, P.L.L. and Zhou, A.Y. (2013) Government Ownership, Corporate Governance and Tax Aggressiveness: Evidence from China. *Accounting and Finance*,

- 53, 1029-1051. https://doi.org/10.1111/acfi.12043
- [24] Chang, M.L. and Huang, J.T. (2013) The Impact of Reforms for Enterprise Income tax Law in China. *Mainland China Studies*, **2**, 79-113.
- [25] Tang, T. and Firth, M. (2011) Can Book-Tax Differences Capture Earnings Management and Tax Avoidance? Empirical Evidence from China. *The International Journal of Accounting*, **46**, 175-204. https://doi.org/10.1016/j.intacc.2011.04.005
- [26] Wu, Wu, C., Zhou, C. and Wu, J. (2012) Political Connections, Tax Benefits and Firm Performance: Evidence from China. *Journal of Accounting and Public Policy*, **31**, 277-300. https://doi.org/10.1016/j.jaccpubpol.2011.10.005
- [27] Zeng, T. (2011) Ownership Concentration, State Ownership, and Effective Tax Rates: Evidence from China's Listed Firms. *Accounting Perspectives*, **9**, 271-289. https://doi.org/10.1111/j.1911-3838.2010.00014.x
- [28] Sun, H., Yuen, D. and Zhang, X. (2012) Government-Business Relationship and Tax Avoidance: Evidence from China. 2nd Annual International Conference on Accounting and Finance (AF2012), 37-44.
- [29] Fan, J., Wonga, T.J. and Zhang, T. (2007) Politically Connected CEOs, Corporate Governance, and Post-IPO Performance of China's Newly Partially Privatized Firms. *Journal of Financial Economics*, 84, 330-357. https://doi.org/10.1016/j.jfineco.2006.03.008
- [30] Andersen-Gough, F., Grey, C. and Robson, K. (2005) Helping Them to Forget: The Organizational Embedding of Gender Relations in Two Large Audit Firms. Accounting, Organizations and Society, 30, 469-490. https://doi.org/10.1016/j.aos.2004.05.003
- [31] Czarniawska, B. (2008) Accounting and Gender across Time and Places: An Excursion into Fiction. *Accounting, Organizations and Society*, **33**, 33-47. https://doi.org/10.1016/j.aos.2006.09.006
- [32] Milliken, F. J. and Martins, L.L. (1996) Search for Common Threads: Understanding the Multiple Effects of Diversity in Organizational Groups. *Academy of Management Review*, **21**, 402-433. https://doi.org/10.5465/amr.1996.9605060217
- [33] Daily, C.M., Certo, S.T. and Dalton, D.R. (1999) A Decade of Corporate Women: Some Progress in the Boardroom, None in the Executive Suite. *Strategic Management Journal*, 20, 93-99. https://doi.org/10.1002/(SICI)1097-0266(199901)20:1<93::AID-SMJ18>3.0.CO;2-7
- [34] Rosener, J. (1990) Ways Women Lead. Harvard Business Review, 68, 119-125.
- [35] Hillman, A., Shropshire, C. and Cannella, A.A. (2007) Organizational Predictors of Women in Top Management Teams and Corporate Boardrooms. *Academy of Management Journal*, **50**, 941-952. https://doi.org/10.5465/amj.2007.26279222
- [36] Nielsen, S. and Huse, M. (2010) The Contribution of Women on Boards of Directors: Going beyond the Surface. *Corporate Governance: An International Review*, **18**, 136-148. https://doi.org/10.1111/j.1467-8683.2010.00784.x
- [37] Gul, F.A., Srinidhi, B. and Ng, A.C. (2011) Does Board Gender Diversity Improve the Informativeness of Stock Prices? *Journal of Accounting and Economics*, **51**, 314-338. https://doi.org/10.1016/j.jacceco.2011.01.005
- [38] Prince, M. (1993) Women, Men and Money Styles. *Journal of Economic Psychology*, **14**, 175-182. https://doi.org/10.1016/0167-4870(93)90045-M
- [39] Jianakoplos, N.A. and Bernasek, A. (1998) Are Women More Risk Averse? *Economic Inquiry*, **36**, 620-630. https://doi.org/10.1111/j.1465-7295.1998.tb01740.x
- [40] Olsen, R.A. and Cox, C.M. (2001) The Influence of Gender on the Perception and

- Response to Investment Risk: The Case of Professional Investors. *The Journal of Psychology and Financial Markets*, **2**, 29-36. https://doi.org/10.1207/S15327760JPFM0201_3
- [41] Schubert, R. (2006) Analyzing and Managing Risks—On the Importance of Gender Difference in Risk Attitudes. *Managerial Finance*, 32, 706-715. https://doi.org/10.1108/03074350610681925
- [42] Faccio, M., Marchica, M.T. and Roberto, M. (2012) CEO Gender, Corporate Risk-Taking, and the Efficiency of Capital Allocation. https://doi.org/10.2139/ssrn.1969782
- [43] Mateos de Cabo, R., Gimeno, R. and Nieto, M.J. (2012) Gender Diversity on European Banks' Boards of Directors. *Journal of Business Ethics*, **109**, 145-162. https://doi.org/10.1007/s10551-011-1112-6
- [44] Francis, W., Hasan, I. and Qiang, W. (2013) The Impact of CFO Gender on Bank Loan Contracting. *Journal of Accounting, Auditing & Finance*, 28, 53-78. https://doi.org/10.1177/0148558X12452399
- [45] Martin, A., Nishikawa, T. and Williams, M. (2009) CEO Gender: Effects on Valuation and Risk. *Quarterly Journal of Finance and Accounting*, **48**, 23-40.
- [46] Levy, H., Elron, E. and Cohen, A. (1999) Gender Differences in Risk Taking and Investment Behavior: An Experimental Analysis. Unpublished Manuscript, The Hebrew University, Jerusalem.
- [47] Peni, E. and Vahamaa, S. (2010) Female Executives and Earnings Management. *Managerial Finance*, **36**, 629-645. https://doi.org/10.1108/03074351011050343
- [48] Srinidhi, B., Gul, F.A. and Tsui, J. (2011) Female Directors and Earnings Quality. Contemporary Accounting Research, 28, 1610-1644. https://doi.org/10.1111/j.1911-3846.2011.01071.x
- [49] Ho, S.S.M., Li, A.Y., Tam, K. and Zhang, F. (2015) CEO Gender, Ethical Leadership, and Accounting Conservatism. *Journal of Business Ethics*, 127, 351-370. https://doi.org/10.1007/s10551-013-2044-0
- [50] Ge, W., Matsumoto, D. and Zhang, J.L. (2011) Do CFOs Have Style? An Empirical Investigation of the Effect of Individual CFOs on Accounting Practices. *Contemporary Accounting Research*, 28, 1141-1179. https://doi.org/10.1111/j.1911-3846.2011.01097.x
- [51] Cooke, F.L. (2005) Employment Relations in Small Commercial Businesses in China. *Industrial Relations Journal*, **36**, 19-37. https://doi.org/10.1111/j.1468-2338.2005.00343.x
- [52] Yu, E. (2011) Are Women Entrepreneurs More Likely to Share Power than Men Entrepreneurs in Decision-Making? *International Journal of Business and Management*, **6**, 111-119. https://doi.org/10.5539/ijbm.v6n4p111
- [53] Xiao, Z., He, R., Lin, Z. and Elkins, H. (2013) CEO Compensation in China Accounting Performance, Corporate Governance, and the Gender Gap. *Nankai Business Review International*, 4, 309-328. https://doi.org/10.1108/NBRI-09-2013-0032
- [54] Liu, Y., Wei, Z. and Xie, F. (2014) Do Women Directors Improve Firm Performance in China. *Journal of Corporate Finance*, 28, 169-184. https://doi.org/10.1016/j.jcorpfin.2013.11.016
- [55] Dyreng, S., Hanlon, M. and Maydew, E. (2008) Long-Run Corporate Tax Avoidance. *The Accounting Review*, **83**, 61-82. https://doi.org/10.2308/accr.2008.83.1.61
- [56] Dyreng, S., Hanlon, M. and Maydew, E. (2010) The Effects of Executives on Corpo-

- rate Tax Avoidance. *The Accounting Review*, **85**, 1163-1189. https://doi.org/10.2308/accr.2010.85.4.1163
- [57] Graham, J. and Tucker, A. (2006) Tax Shelters and Corporate Debt Policy. *Journal of Financial Economics*, **81**, 563-594. https://doi.org/10.1016/j.jfineco.2005.09.002
- [58] Lisowsky, P. (2010) Seeking Shelter: Empirically Modeling Tax Shelters Using Financial Statement Information. *The Accounting Review*, 85, 1693-1720. https://doi.org/10.2308/accr.2010.85.5.1693
- [59] Porter, E. (1994) Feminist Analysis. In: Parkin, A., Summers, J. and Woodward, D., Eds., Government, Politics, Power and Policy in Australia, Longman Cheshire, Melbourne, 327-345.
- [60] Lowe, M. and Bentson, M.L. (1984) The Uneasy Alliance of Feminism and Academia. Women's Studies International Forum, 7, 177-183. https://doi.org/10.1016/0277-5395(84)90008-6
- [61] Kanter, R. (1977) Men and Women in the Corporation. Basic Books, New York.
- [62] Maupin, R. and Lehman, C. (1994) Talking Heads: Stereotypes, Status, Sex-Roles and Satisfaction of Female and Male Auditors. Accounting, Organizations, and Society, 19, 427-437. https://doi.org/10.1016/0361-3682(94)90006-X
- [63] Mills, L.F. (1998) Book-Tax Differences and Internal Revenue Service Adjustments. *Journal of Accounting Research*, **36**, 343-356. https://doi.org/10.2307/2491481
- [64] Mills, L.F. and Sansing, R.C. (2000) Strategic Tax and Financial Reporting Decisions: Theory and Evidence. *Contemporary Accounting Research*, 17, 85-106. https://doi.org/10.1111/j.1911-3846.2000.tb00912.x
- [65] Desai, M. and Dharmapala, D. (2006) Corporate Tax Avoidance and High-Powered Incentives. *Journal of Financial Economics*, 79, 145-179. https://doi.org/10.1016/j.jfineco.2005.02.002
- [66] Hanlon, M., Krishnan, G. and Mills, L.F. (2012) Audit Fees and Book-Tax Differences. The Journal of the American Taxation Association, 34, 55-86. https://doi.org/10.2308/atax-10184
- [67] Seidman, J. (2010) Interpreting the Book-Tax Income Gap as Earnings Management or Tax Sheltering, Working paper. The University of Texas at Austin, Austin, TX. https://doi.org/10.2139/ssrn.1564253
- [68] Dechow, P.M., Sloan, R.G. and Sweeney, A.P. (1995) Detecting Earnings Management. *The Accounting Review*, 70, 193-225.
- [69] Amir, E and Sougiannis, T. (1999) Analysts' Interpretation and Investors' Valuation of Tax Carry Forwards. *Contemporary Accounting Research*, 16, 1-33. https://doi.org/10.1111/j.1911-3846.1999.tb00572.x
- [70] Mills, L.F. and Newberry, K. (2001) The Influence of Tax and Non-Tax Costs on Book-Tax Reporting Differences: Public and Private Firms. *Journal of the American Taxation Association*, 23, 1-19. https://doi.org/10.2308/jata.2001.23.1.1
- [71] Monks, R. and Minow, N. (2008) Corporate Governance. John Wiley & Sons, Inc., Hoboken, NJ.
- [72] Gupta, S. and Newberry, K. (1997) Determinants of the Variability in Corporate Effective Tax Rates: Evidence from Longitudinal Data. *Journal of Accounting and Public Policy*, 16, 1-34. https://doi.org/10.1016/S0278-4254(96)00055-5
- [73] McGuire, S.T., Wang, D. and Wilson, R.J. (2014) Dual Class Ownership and Tax Avoidance. *The Accounting Review*, 89, 1487-1516. https://doi.org/10.2308/accr-50718
- [74] Brown, J.L. and Drake, K.D. (2014) Network Ties among Low-Tax Firms. The Ac-

counting Review, 89, 483-510. https://doi.org/10.2308/accr-50648

[75] Hoi, C.K., Wu, Q. and Zhang, H. (2013) Is Corporate Social Responsibility (CSR) Associated with Tax Avoidance? Evidence from Irresponsible CSR Activities. *The Accounting Review*, **88**, 2025-2059. https://doi.org/10.2308/accr-50544