ABSTRACT
The Public Offering Review Committee plays a significant role in China's capital market, in which the individual determines whether the company can be listed or not, then affect the issuance quality. Most of the previous research take the 'social connect' as committee members' personal characteristics, This paper tests the relationship between the committee members' gender characteristics and the quality of the issuance. We found that the participation of female committee members significantly lowers the pass rate of applicant companies, and the accounting performance and market performance of listed companies approved by the female committee members are better than those of the listed companies approved by an all-male Committee. In theory, these findings may contribute to the understanding of the decision-making mechanism of the committee members and the role of women in organizational economic decision-making, and may provide certain policy reference in the reform of the offering system and the elimination of gender discrimination.

1. Introduction
The offering review system play an important role of China’s capital market. Since 2000, the Shanghai and Shenzhen Main Board, the Small and Medium-sized Board (SME Board) and the Growth Enterprise Market (GEM) have all required companies to be approved by the Public Offering Review Committee (The Committee) organised of the China Securities Regulatory Commission (CSRC) before they can be listed. Since then, the registration system represented by the Science and Technology Innovation Board has been implemented. However, whether it can be listed still relies on the deliberation and approval of the listing committee organised by the Stock Exchange. This means that even under the registration system, in which the power to select listed resources is delegated to the...
Exchange, the selection has not changed substantially. In other words, the Public Offering Review Committee or the Listing Committee, which is responsible for examine the applicant companies, plays the role of ‘Gatekeeper’ in the capital market and shoulders the major responsibility of improving the quality of listed companies and promoting the long-term healthy development of the capital market.

According to the current rules of offering and listing, ‘the Public Offering Review Committee members shall attend the meetings in their personal capacity, perform their duties according to law, independently express review opinions and exercise their voting rights’. At the same time, it is stipulated that as long as two or more of the seven members of the committee vote against it, the review will be taken as failed. This shows that the individual decision of a single member has an important impact on whether the applicant company can obtain the listing permission, which means the result is a collection of individual decisions made by members. However, the existing research has paid insufficient attention to the decision-making mechanism of the Committee. Some studies take the Committee as a whole, focusing on the overall preference, such as financing demand and property right nature (Zhu & Lu, 2012), earnings quality (Huang & Li, 2016), dividend commitment (Wang & Wang, 2014), sponsor reputation (Dai et al., 2014), etc. These studies help us to understand the overall preference of the committee, but they do not open the ‘black box’ of the Committee and lacks detailed investigation on the individual decision-making mechanism. In addition, a small number of studies have been narrowed down the individual level of the committee members to explore the impact of their personal characteristics on their performance of duties. Coincidentally, they focus on the the social relationship of the committee members, and study the direct contact between the accountants and law firms employed by the listed companies and the committee members (Chen et al., 2014; Du et al., 2013; Li and Liu, 2012a), and the indirect contact between the underwriters and the committee members (Huang & Xie, 2016). These studies reveal the ‘rent-seeking’ under the supply side regulation of capital market assets. Meanwhile, it also shows that the stock issuance examination mechanism is not a mechanical process, but a decision-making process affected by individual characteristics. It is also worth noting that with the improvement of the capital market system and the increase of anti-corruption efforts, there has been less space for the ‘social relations’ effect, which can hardly be used as a dominant decision-making factor in the issuance examination for a long time. Then We’re curious, are there other factors that will affect their individual decision-making, and further affect the issuance examination efficiency that is significance to the capital market?

Hambrick and Mason (1984) put forward the Prospect Theory that because of the complexity of the external environment, there are incomplete information and incomplete rationality in individual decision-making, and individual decision-making depends on their understanding of the information they have. Therefore, individual characteristics, such as age, education, experience and so on, will affect their economic decisions. Accordingly, the individual characteristics of the committee members may also affect their decision-making, and then affect the quality of listed companies. Among them, gender may be an important dimension. In reality, women are not rare in the Committee. From 2003 to 2017, a total of 461 persons served as the committee members successively, including 73 women, accounting for about 16%. Theoretically, empirical economics provides evidence that there are systematic differences in behaviour patterns and decision-making mechanisms between women and men (Charness & Gneezy, 2012; Eckel &
Taking women of different identities as objects, a large number of empirical studies in China have also found that women’s participation has a positive impact on organisational decision-making. For example, due to higher moral standards, female controlling shareholder will less encroach on the interests of minority shareholders (Ma et al., 2018). Women are more risk averse, so female executives are less likely to invest (Jiang et al., 2009), are more averse to investment risk (Zhu et al., 2012), and reduce the risk of stock price crash (Li & Liu, 2012b); female analysts can reduce the stock price synchronisation (Yi et al., 2015). Due to the natural altruism tendency of women, companies with more female executives will assume more social responsibility (Wang, 2016), improve audit quality (Kuang & Chen, 2011), restrain earnings management (Du et al., 2017), etc. On one hand, the committee members need to be highly professional to judge the authenticity of the information disclosure of the applicant company and the operating risk after listing; on the other hand, it also requires the committee members to be independent, impartial and prudent, so as to avoid the impact of ‘social connections’ and mentioned above on the quality of asset supply in the capital market. There is a certain common between the female characteristics revealed by the above research and the performance requirements of the Committee. This leads us to speculate that the gender differences of the members may also affect the quality of the issuance examination.

In this paper, we take the issuance examination from 2003 to 2017 as the sample, and investigate the impact of gender characteristics of the Committee on the quality of issuance examination. The results show that: (1) when there are female committee members participating in the examination, the pass rate of the applicant companies is significantly lower in both statistical and economic level; and it becomes lower for the companies with higher risk. (2) Both the accounting performance and the market performance of the listed companies approved by female committee members are better than those of the listed companies approved by the committee with no female members. Those two findings suggest that the gender characteristics of the committee members do affect the decision-making. As the female committee members are more cautious, they reject some high-risk companies to be listed, thus improving the quality of listed companies. Furthermore, we find that (3) when the female committee member is a senior full-time member from the CSRC, she has a more significant influence on the results of the offering. Also, the influence of female committee members with the background of being accountant or lawyer is more significant. On one hand, those findings imply that even in the highly specialised organisation like the Committee, there may still be gender discrimination. On the other hand, it also indicates that the professional background may also affect the individual decision-making of female committee members.

The contribution of this paper is limited but clear: first, the issuance examination is essentially an entry regulation of the capital market, and the relevant research mainly focuses more on the Capture Effect of the regulation on the executor (Stigler, 1971). When it comes to the issuance examination, almost all existing research focuses on the social connection characteristics of the Committee (Chen et al., 2014; Du et al., 2013; Huang & Xie, 2016; Li & Liu, 2012a). This paper shows that even if the ‘capture’ or ‘rent-seeking’ motivation of the regulator is not taken into account, the natural gender characteristics will still affect the regulation results. This shows that as long as there is artificial regulation, the results of regulation will
inevitably be affected by the individual characteristics of the regulator. In theory, it can not only deepen the understanding of the issuance examination mechanism, but also provide a new perspective from the regulator’s individual characteristics to the investigation of the influence of regulation on resource allocation. In practice, this paper shows that regulation executors are inevitably constrained by individual characteristics, thus affecting the regulation results. This may provide some policy implications for further reform of capital market offering system that it should reduce the influence of human factors in system design and have the market play a decisive role in the capital market resource allocation.

Second, this paper may contribute to the Prospect Theory (Hambrick & Mason, 1984), especially the literature on gender differences. Most existing research on the effect of gender characteristics on organisational behaviour are carried out by examining the cases of female executives and directors. These studies are often confronted with three challenges. First, whether there are women in the organisation may be a result of self-selection, leading to potential endogenous (Sila et al., 2016). Second, whether female executives and directors can lead to differences in corporate behaviour may be related to corporate culture, local customs and other social factors (Zhou et al., 2013), which will also lead to differences in corporate behaviour. Third, different executives and directors in different enterprises may show large difference in their ability. This means the influence of female executives and directors on corporate behaviour may be a result of individual ability differences, rather than gender differences. Therefore, it is difficult to sort out the influence of gender differences on organisational behaviour from that of many other factors, which may account for the inconsistency of previous research conclusions. Our paper examines the role of gender characteristics in the context of the issuance examination, which can better solve the problems above. First, whether or not there are female members or how many female members there are in the Committee may be random; and composition of each Committee is random. Moreover, it is very difficult for the applicant companies to affect whether there are female committee members. Therefore, whether there are female members in the Committee can be regarded as a strong random process, thus alleviating the problem of self-selection. Second, as a central government organisation, the Committee has a relatively stable external environment with a consistent and sustained influence by culture and customs for a long time, so the interference of these factors on gender differences can be removed. Finally, each member selected by the SCRC from all over the country is an elite in the industry, leaving small ability difference between members, which can also exclude the influence of ability differences in the results. Therefore, using the issuance examination as the research scenario may provide more robust evidence for the economic consequences of gender differences. In practice, there are still serious gender discrimination in China (Guo & Yan, 2015). The findings of this paper suggest that women have unique natural advantages in some aspects, which may provide certain policy implication for eliminating gender discrimination, promoting gender equality, and helping women better playing the role in organisations.
2. Institution background and literature review

2.1. Institutional background

The issuance examination system grows with the development of China’s capital market. Early in 1993, CSRC has formed an internal issuance examination mechanism, which employs the committee members from government agencies, experts and scholars to examine the companies to be listed. Since 1999, symbolised by the issuance of Chinese Securities Regulatory Commission Stock Issuance Examination Committee Regulations, the Public Offering Review Committee has been established as a basic system, but the information of the committee members is not disclosed to the public. Since 2003, the system began to mature. In terms of composition, each Committee has 25 members, which are divided into full-time members and part-time members. The term of office is one year and can be renewed. As for the actual composition of the staff, in addition to the five from the CSRC, all the others are highly professional and popular industry or academic experts who are familiar with the capital market. In terms of function, the list of seven members participating in the meeting shall be determined and announced five working days before each issuance examination meeting, each with one vote. The ‘abstention’ vote of the committee members has been cancelled, and only ‘yes’ or ‘no’ can be selected, and the anonymous voting is changed to the open ballot. Only companies with 5 or more ‘yes’ can be listed. When it comes to information disclosure, the composition of each committee and the basic information of its members are not only disclosed to the public, but also on the website of the CSRC. Since then, the system has seen some adjustments in 2006, 2009 and 2017, but the operating mechanism and information disclosure of the Committee have been generally consistent and stable.

From a brief review of the institutional background, it can be found that, if more than two committee members vote against it, the company cannot be listed. Therefore, the individual decisions of each member have a substantial impact on the results of the issuance examination. It becomes practical to discuss the significance of the issuance quality from the perspective of individual decision-making mechanism. Secondly, the list of members is relatively random. The current system has no special provisions on the selection of members of each meeting. It is more difficult for the applicant company to influence the participation of female committee members. Therefore, to a certain extent, each participation of the member can be regarded as a random combination, which helps to control and alleviate the self-selection problem of ‘whether there are female committee members’. Third, the other social characteristics of the members are controllable. One of the challenges met by the previous studies on gender characteristics is the impact of gender social differences on the results (Zhou et al., 2013). For example, whether female directors influence the company’s decision-making may be determined by its institutional and cultural environment (Jin et al., 2015), and such differences may also lead to differences in company’s decision-making. However, these challenges may not be serious in the Committee. As a temporary selected organisation, the Committee is composed of professionals and celebrities from regulatory agencies and the capital market, and receives less environmental impact. This provides a better condition for the observation of the causal relationship with the former.
The registration system is also worth attention as the institutional background. The Administrative Measures for the Registration of Initial Public Offerings on the Science and Technology Innovation Board (Trial) launched in 2019 became the first attempt of the registration system in China’s capital market. The Measures stipulate that ‘the Exchange shall set up an independent examination and approval department to examine the application for public offering and listing of issuers’; at the same time, it also stipulates that the Exchange ‘shall establish a stock listing committee on the Science and Technology Innovation Board, which shall be responsible for putting forward opinions on the examination report issued by the social departments and the application documents of the issuer’. Correspondingly, the Shanghai and Shenzhen stock exchanges have also formulated special management measures for the listing committee. For example, the administrative measures for the Listing Committee of Science and Technology Innovation Board of Shanghai Stock Exchange stipulates that each review of the listing committee shall be attended by five members of the listing committee. After discussion and subject to the principle of majority by a minority, the opinions are formed. For those who are decided not to be listed in the deliberation opinions, ‘the decision to terminate the examination and approval of the issuance and listing shall be made in combination with the deliberation opinions’.

From the provisions above, the registration system implemented in the Science and Technology Innovation Board has not completely abandoned the issuance examination, and the Listing Committee of the Exchange still plays a decisive role in whether the company can be listed. This also supports the generalisability and practical significance of this research conclusion.

2.2. Literature review

First of all, what is closely related to this paper is the research on the characteristics of the social connection and the decision-making of the Committee. Li and Liu (2012a) has early studied this issue. Taking SME Board listing examination as the object, they found that it was easier to grant listing permission when the issuance examination committee members were related to the intermediary agencies employed by the enterprises to be listed. Du et al. (2013) carried out similar work. Their empirical results with all A-share companies as the object showed that the social connection of the Committee does affect the decision-making of the issuance examination, and the companies with connection are more likely to be approved. Furthermore, they also found that the performance of listed companies with the social ties of the committee members decreased more significantly after listing. Chen et al. (2014) took private companies to be listed as samples to further study this issue. They found that the influence of the social connection characteristics of the Committee on the decision-making of the issuance examination is more reflected in the intermediary organisation of the accounting firm. Huang and Xie (2016) also investigated the influence of the social connection characteristics of the Committee on the decision-making from the perspective of the social connection between the committee members and the underwriters. The results also supported that the social characteristics of the Committee would affect the decision-making of the issuance examination.

Obviously, these studies show high consistency by taking rent-seeking caused by entry regulation as the theoretical starting point to investigate the impact of the committee
members’ social connection on the issuance examination. If we change the perspective and regard the members’ social connection as a dimension of individual characteristics, then the studies above can also be regarded as examining the influence of individual characteristics on the decision-making. In this way, on one hand, it indicates that the individual characteristics do have an impact on the examination efficiency; on the other hand, it also enlightens us whether other individual characteristics besides the social connection will also affect the decision-making.

Secondly, what is closely related to the paper includes studies on the impact of female characteristics on organisational behaviour. The most common focus of these studies is the impact of female executives on corporate decision-making, which have drawn the diverse conclusions though.

Adams and Ferreira (2009) systematically studied the influence of female directors on corporate governance. They found that female directors had a higher attendance rate and were more likely to get appointed in the supervisory committee, and had a stronger supervisory role for CEOs. Evidence from Barua et al. (2010), Peni et al. (2010) showed that female CFOs do less earnings management than male CFOs. Liu et al. (2014) conducted a study on female directors of Chinese companies. They found that there was a positive correlation between female directors and corporate performance, and female executive directors played a greater role than female independent directors, which supported a better supervisory role of women. Cumming et al. (2015) also studied the impact of female directors on corporate financial fraud by taking Chinese companies as the research objects. They found that companies with female directors were less likely to engage in financial fraud due to their moral and risk attitudes. Ho et al. (2015) believed that because women were with higher morality and risk aversion that were closely related to accounting conservatism, companies with female CEOs may have a higher conservatism. Their empirical results supported this theoretical deduction. Similarly, Francis et al., 2015 took Standard & Poor’s constituent companies from 1988 to 2007 as samples, and found that accounting conservatism had been significantly improved in both economic and statistical sense after the company replaced a CFOs as women. The evidence provided by Chen et al. (2017) suggested that companies with a higher proportion of female directors will also pay more dividends.

In the meantime, some studies have paid attention to the influence of gender differences on corporate behaviour in China as well. He and Liu (2010) found that companies with female directors were less likely to have financial restatement. Zhu et al. (2012) studied the investment behaviour of companies during the financial crisis. They found that the companies with higher proportion of female directors saw more decrease in the investment and the long-term bond financing. Both findings suggest that women are more risk averse. The research of Li and Liu () found that female CEO’s company had lower risk of stock price crash, and when the female CEO had greater power and experience, the inhibition effect of gender difference on stock price crash risk became more obvious. They provided the theoretical explanation that compared with men, women had higher moral standards, so the principal-agent contradiction was lower; women were better at communication and cooperation, thus reducing information asymmetry; women were more concerned about risk aversion. All these factors can reduce the risk of a crash. Kuang and Chen (2011) believed that female board members were more risk averse. At the same time, due to the existence of gender discrimination, female directors may have better
working ability than men, which can improve the demand for high-quality external audit, thus ensuring the success of corporate governance. Their empirical results showed that companies with female directors had higher audit expenditure and tended to choose the top 10 domestic or the top 4 international audit service providers. Wang (2016) found that female executives had a positive effect on corporate disclosure of social responsibility performance. Du et al. (2017) found that there was an inverted U-shaped relationship between the proportion of female executives and the level of earnings management. Ma et al. (2018) studied the influence of the human nature of actual controller on corporate governance. They found that companies with female actual controllers would conduct less related party transactions. The theoretical explanation is that women have higher morality and greater altruistic tendency, so they will not encroach on the interests of minority shareholders. These studies show that female executives may have different decision-making mechanisms than men because of their natural gender characteristics, such as moral standards, risk preference, sense of responsibility, etc., which have a positive effect on corporate behaviour.

However, there are some studies that have different or even opposite conclusions. Sila et al. (2016) found that there was a negative correlation between female directors and corporate risk when endogeneity was not controlled. However, after controlling some endogeneity, the results showed that female directors could not significantly reduce the company’s risk. This finding suggested that the relationship between gender characteristics and corporate behaviour may be disturbed by many unobservable social factors, which may affect the reliability of the conclusions. Ge et al. (2011) found that gender differences in CFOs cannot explain the earnings manipulation. Similarly, Dyreng et al. (2010) found that gender differences in executives did not affect corporate tax avoidance behaviour. In the study of China’s female executives, there were similar conclusions. Jin et al. (2015) studied female directors and corporate investment, and found that there was a negative correlation between the proportion of female directors and corporate investment efficiency. Lin et al. (2016) found that a female secretary of the board of directors cannot effectively improve the quality of companies’ information disclosure. Compared with companies with male secretaries of the board of directors, those with female secretaries of the board of directors had lower quality of information disclosure. These evidences seem to indicate that the gender differences of executives may not completely affect the corporate behaviour, or even have a negative effect.

It can be seen that the empirical evidence about the gender characteristics of executives and corporate behaviour shows obvious inconsistency. Although most of the literature has provided evidence for the positive impact of gender differences on corporate behaviour, some literature still argues that the two have no clear relationship or that gender differences have a negative impact. Apart from the inconsistency of observation objects and research perspectives, an important reason lies in the possible interference of other factors. As Sila et al. (2016) said, there may be interference from factors such as whether to choose women as executives, the unobservable systematic social characteristics bias of men and women. Although most of the related researches in recent years have also tried to control them by means of pairing and difference-in-differences, the problems above may still not be solved completely. This enlightens that on one hand, there should be new evidence for gender differences leading to organisational behaviour
differences; on the other hand, it requires appropriate research scenarios to control the possible interference of self-selection and unobservable factors.

Based on the institutional background and literature review, it is believed that considering the importance and the sustainability of review, it is necessary to break through the limitations of studying the individual decision-making mechanism of the Committee from the perspective of ‘social connection’, and further examine the decision-making mechanism and efficiency from the perspective of other individual characteristics. Also, the committee members have high professionalism and relatively equal social status, and there is relative randomness of the composition of each committee. An investigate on the influence of gender differences on individual decision-making from the perspective of female committee member may better, in the observation object level, control and alleviate the endogenous of relevant conclusions, and provide a more robust new evidence for gender difference research.

3. Hypothesis development

According to the official regulations, the responsibilities of the Committee are as follows: “according to the relevant laws, administrative regulations and the provisions of the CSRC, it shall examine whether the application for stock issuance meets the relevant conditions; it shall examine the relevant materials and opinions issued by securities service institutions such as the sponsor, accounting firm, law firm, asset appraisal agency and relevant personnel for the stock issue; and to examine the preliminary review report issued by relevant functional departments of CRSC. If we interpret it literally, it seems that the review work of the Committee is only mechanically checking the relevant requirements with the situation of the listed companies one by one, without making individual decisions. However, according to the actual situation and previous studies, the work of the Committee may not be limited to this.

First, it requires the Committee to verify the authenticity of the information reported by the companies. The existing research shows that facing the strict requirements of the current listing rules, the applicant companies will conduct information manipulation. Taking profit information as an example, a large number of studies have shown that companies applying for listing will modify their performance. For instance, Cai et al. (2013), Qi and Huang (2016) all found that the companies to be listed may carry out accrual earnings management and real earnings management. Liu and Lv (2015) suggested that the case objects have carried out accrual and real earnings management at the same time two years before listing. The work of Huang and Xie (2014) showed that companies with greater performance pressure are more likely to adopt radical accounting policies and modify their statements in the short term. All these indicate that the information disclosed by the companies applying for listing may be distorted and falsified. One of the tasks of the Committee is to verify the relevant information and exclude the companies with seriously distorted report information from the capital market (Huang & Li, 2016). From this point of view, the examination may be a decision-making process of information screening and verification.

Second, the Committee also needs to consider whether the listed companies can develop for a long time or not. The Committee not only needs to examine the compliance of the companies applying for listing, but also undertakes the task of
screening high-quality asset supply for the capital market. According to the practice of China's capital market, some listed companies perform well before listing, but they often have serious performance decline after listing. There are not only non-market factors such as government intervention (Wang et al., 2015), political ties (Lu et al., 2015), but also market risk factors such as market environment, core technology and suppliers. All of these require the Committee to judge whether there are risk factors affecting the long-term operation of the listed companies. In fact, the committee members also pay close attention to the risk of the company. For example, according to statistics, from 2010 to 2015, the two factors of profit persistence and debt risk account for 80% of the rejection of financial accounting by the Committee. Therefore, the examination may also be a process for the committee members to judge the risk factors of the listed companies.

Finally, the commission members are also faced with the moral problems. As mentioned in the literature review, there are certain ‘rent seeking’ in the process of issuing and approving. The members can obtain personal interests by following these rules, and at the same time, though it will damage the public interests of the capital market. From this point of view, the issuance examination may also be the decision-making of the members to balance personal interests and public interests.

Gender differences may have some impact on the requirements of the Committee. First, women may be more cautious. Experimental economics on gender differences that shows women were more likely to be risk averse than men (Charness & Gneezy, 2012). Moreover, most empirical studies on gender differences and risk attitudes of different gender also supported this point. For example, the research on CFO showed that women are more risk averse, thus improving accounting conservatism (Francis et al., 2015; Ho et al., 2015). Because they were more afraid of the legal risks brought about by fraud, companies with a higher proportion of female directors were less likely to be financial fraud (Cumming et al., 2015). For aversion to risk, female executives would reduce investment during the financial crisis (Zhu et al., 2012). Female executives had higher risk awareness and would reduce the risk of stock crash (Li & Liu, 2012a), etc. Apart from these studies only focusing on the possible role of women in collective decision-making, some other studies provided clearer evidence for women’s caution in individual decision-making. For example, Sundén and Surette (1998) found that women would invest less in high-risk assets. Yi et al. (2015) found that female analysts were more cautious about earnings forecasts of the companies they track; Gao et al. (2017) conducted a study on individual investment behaviour in P2P investment, which suggested that female investors were less likely to be overconfident. The research on women's individual decision-making and collective decision-making showed that women may naturally have higher prudence. As mentioned before, the Committee needs to screen the supply of high-quality assets for the capital market. On one hand, it should judge whether the disclosure materials of the applicant company are true and compliant; on the other hand, it need to consider whether there are significant risks in the company's long-term development after obtaining the listing qualification. Being more cautious, female members tend to notice the problems existing in the declaration information and the risks of the applicant company, which makes them more likely to refuse the listing application. This screening may eventually contribute to better quality of the companies that pass the examination.
Secondly, compared with men, the previous research shows that women may be more serious about work and better at supervision. Adams and Ferreira (2009) research on the board of directors showed that women were less absent, more likely to join the supervisory committee, and had more stringent supervision of CEOs. In addition, existing research also shows that women pay more attention to details when processing information. Research based on consumer information processing suggested that men pay more attention to information of self-interest, while women pay more attention to information of other relevant details (Meyers-Levy, 1989). Darley and Smith (1995) also found that women considered both objective and subjective information when facing advertising information, so they made more comprehensive decisions. These studies suggest that women may be more diligent and take a more comprehensive perspective about information. As mentioned above, before a company get approved, the authenticity of its declaration information and the long-term investment value after listing needs to be checked. This means that the committee members need to make a careful and detailed analysis of the applicant company, and the research above on women’s work attitude and information analysis characteristics indicates that the female committee members may be able to better comprehensively analyse the risks in the long-term development of the applicant company. In terms of the results, it is easier for the female committee members to reject those companies that may have risks, which will have a positive impact on the efficiency of the issuance examination.

Third, generally speaking, women have a higher sense of morality and social responsibility. The survey on China’s female entrepreneurs reported that female entrepreneurs had strong aversion to immoral behaviours such as breaking the law and breaking faith, and had strong self-evaluation on social responsibility (Li et al., 2017). Psychological studies supported that women have higher moral standards due to the differences between male and female roles in childhood (Dawson, 1997). Experimental economics showed that, compared with men, women were more reluctant to cause losses to others by lying (Erat & Gneezy, 2012). On the other hand, there was empirical evidence that women were faced with less principal-agent conflicts. It can be illustrated by indirect evidence that female directors can suppress financial fraud (Cumming et al., 2015) and that they pay more attention to corporate social responsibility (Wang, 2016). There was also direct evidence found by Ma et al. (2018) that female actual controllers were less likely to encroach on the interests of external shareholders. All these indicate that women may naturally have a higher sense of morality and social responsibility than men. The Committee is not only related to the assets supply in the capital market and the basic interests of the majority of investors, but also faces the personal interests provided by the ‘social connection’ mentioned above. Women’s higher sense of social responsibility and moral concept may better enable them to resist the temptation of private interests and reduce the possibility of ‘rent seeking’. This will also contribute to more rigorous and fair issuance.

To sum up, the issuance examination is the selection of listed companies. The Committee has to pay attention to the compliance of the companies to be listed as well as their investment value, and to a certain extent, faces the trade-off between private interests and public interests under the ‘social connection’. This requires that the committee members should be careful, objective and fair. The previous research shows that women have stronger sense of morality and social responsibility, higher work
engagement and prudence, and greater risk aversion. All of these will help the female committee members to strictly examine the companies to be listed, so as to exclude those unqualified companies and improve the quality of the capital market. Therefore, the basic assumptions of this paper are as follows:

H1: The issuance examination of the Committee with female committee members is more strictly.

H2: The companies approved by the Committee with female members show better quality.

4. Research design

4.1. Sample selection

Since the CSRC did not announce the list of the Committee before 2003, we select 2836 companies applying for IPO in Shanghai and Shenzhen stock markets from 2003 to 2017 as the sample. The data is screened by the following process: 1. Delete the samples of financial companies; 2. Delete the samples that cannot be found due to the personal information of the members participating in the issuance examination; 3. Delete the companies that cannot be found in the prospectus. 2235 observations are obtained after the selection. The list of the committee members participating in the examination and the approval are from the WIND database; the financial data of the companies that have passed the examination are from the CSMAR database. The personal characteristic data of the Committee is manually collated based on the announcement of the CSRC; the financial data of the company that fails to pass the examination are manually collected from the company’s prospectus. In order to exclude the influence of extreme value, all continuous variables are winsorised at 1% level.

4.2. Models and variables

In order to investigate H1, i.e. the influence of gender characteristics of the committee members on IPO approval, we refer to Zhu and Lu (2012), Chen et al. (2014) and Huang and Xie (2016), and constructed Model 1 as follows:

$$
\text{pass} = a_0 + a_1 \text{female} + \text{control} + \sum_{y}^{y} \text{ear} + \sum_{i}^{i} \text{industry} + \sum_{p}^{p} \text{province} + \varepsilon
$$

In Model 1, the dependent variable pass is the proxy variable indicating whether the company passes the IPO review, which is defined as 1 if the IPO review is passed, otherwise it is 0. The main independent variable is female, which is defined as 1 if at least one of the seven committee members participating in the review is female, otherwise it is 0. If H1 is true that the female committee members are more cautious and strict, the regression coefficient $a_1$ is expected to be significantly negative, i.e. the pass rate of the Committee with female members is lower.
Control variables mainly include the average review experience of the committee member ($m_{exp}$), average education level ($m_{education}$), company size relative to industry ($ab_{size}$), relative debt ratio ($ab_{lev}$), relative profitability ($ab_{roa}$), growth ($ab_{growth}$), earnings volatility ($ab_{vol}$), state-owned or not (soe) and listed on GEM or not (cyb). In addition, considering whether the company has female board members and CEOs may have an impact on the quality of corporate governance, we also control whether the chairman of the board is female ($female_{chair}$), the proportion of female directors in the company’s board of directors ($female_{board}$), and whether the CEO is female ($female_{ceo}$). In order to control the factors of year and industry, we also control the fixed effect of year and industry. Finally, Chen et al. (2008) found that regional factors may also affect the allocation of IPO resources by CSRC. Therefore, we control the regional fixed effect of listed companies as well.

In order to investigate H2, i.e. the influence of gender characteristics of the committee members on the quality of issuance examination, we refer to Lu et al. (2015) and construct Model 2 as follows:

$$change = a_0 + a_1female + control + \sum y ear + \varepsilon \tag{2}$$

In Model 2, $change$ is the proxy variable of performance change before and after listing, and the specific calculation is as follows: $change_{rev1}$ is defined as ($operating revenue in the year after listing – operating revenue in the year before listing$)/$operating revenue in the year before listing$; $change_{income1}$ is defined as ($net profit in the year after listing – net profit in the year before listing$)/$net profit in the year before listing$. For robustness, we also consider the comparison of the two years before and after listing, as was done by Lu et al. (2015). $change_{rev2}$ is defined as ($average operating revenue of two years after listing – average operating revenue of two years before listing$)/$average operating revenue of two years before listing$; $change_{income2}$ is defined as ($average net profit of two years after listing – average net profit of two years before listing$)/$average net profit of two years before listing$. The definition of the main independent variable $female$ is the same as above. If there are women in the Committee, it is 1, otherwise it is 0. If H2 is established, the regression coefficient $a_1$ is expected to be significantly positive, i.e. the performance of the companies approved by the Committee with female members is better than that before listing.

In order to control the impact of industry fluctuation on the performance changes before and after listing, we control the industry performance change ($ind_{change}$). When the dependent variable is $change_{rev1}$, $ind_{change}$ is defined as ($average operating revenue of the industry in the following year – average operating revenue of the previous year$)/$average operating revenue of the industry in the previous year$; when the independent variable is $change_{income1}$, $ind_{change}$ is defined as ($average net profit of the industry in the following year – average net profit of the industry in the previous year$)/$average net profit of the industry in the previous year$. When the company’s performance change observation window is extended to two years, the industry change is also lengthened accordingly. Other control variables include company size ($size$), debt ratio ($leverage$), market to book ratio ($mb$), equity concentration ($bigshare$), and the proportion of independent director ($ind_{dr}$). Like Model 1, we also control whether the chairman of the board is female ($female_{chair}$), the proportion of female
directors in the company’s board of directors (female_board), and whether the CEO is female (female_ceo). Finally, we control the factor of year; considering the industry fluctuations already exist in the control variables, as in the case of Peng Dong et al. (2015), we do not control the dummy variable of industry.

Besides, in order to further investigate H2, we also test it from the perspective of market performance, and construct Model 3 as follows:

\[
BHAR = a_0 + a_1 \text{female} + \text{control} + \sum y ear + \sum i ndustry + \varepsilon
\]

In Model 3, the dependent variable BHAR is used to measure the long-term market performance of the company. According to the different time of investigation, BHAR is defined as the buy and hold abnormal return in 12(24) months after listing respectively (BHAR12 and BHAR24). The definition of the main independent variable female is still the same as above, i.e. if there are women in the Committee, it is 1, otherwise it is 0. If H2 is true that the female committee members are more prudent and strict, the regression coefficient \(a_1\) is expected to be significantly positive, and the post-listing market performance of companies approved by the Committee with female members is better than that of companies approved by the Committee without female members. The specific variable definition is shown in Table 1.

5. Empirical Results

5.1. Descriptive statistics

We collect descriptive statistics on the variables involved in this paper, as is shown in Table 1.

Table 1 suggests that there is a relatively high pass rate of listing application during the sample period and that 85% of the applicant companies can be approved on average. During this period, 56% of the companies applying for listing had been examined by the Committee with female members. This data also supports that female committee members have participated in the issuance examination work widely. When examined by the Committee with female members, nearly 90% of the cases see female full-time committee members (51%/56%); there are relatively few female members with more senior qualifications, and only 40% of them are older than the average of the participating members; nearly 1/4 of the cases see females members from the CSRC; nearly 80% of the cases have female members with accountant background, and 40% of the cases have females members the lawyer background. Furthermore, we have made descriptive statistics on the examination result the with the participation of female committee members, as is shown in Table 2.

The univariate t-test in Table 2 shows that, regardless of other factors, when there are female committee members participating in the examination, the average pass rate decreases by 7%, and is statistically significant. In terms of company characteristics, there are no significant differences in companies approved by the Committee with or without female members in terms of the excess debt ratio, excess profit rate, or whether it is state-owned, which indicates the randomness of whether the female committee member participates in the examination to a certain extent. In contrast, the companies that have female committee members participating in the examination are relatively
### Table 1. Descriptive statistics of variables.

| Var                | Observation | Mean | Min  | P25   | Middle | P75   | Max  |
|--------------------|-------------|------|------|-------|--------|-------|------|
| dependent variable |             |      |      |       |        |       |      |
| pass               | 2235        | 0.85 | 0    | 1     | 1      | 1     | 1    |
| BHAR12             | 1642        | 0.12 | -1.72| -0.27 | -0.06  | 0.30  | 3.28 |
| BHAR24             | 1642        | 0.11 | -0.94| -0.31 | -0.07  | 0.31  | 3.21 |
| change_rev1        | 1642        | 0.82 | -0.29| 0.33  | 0.63   | 1.05  | 3.83 |
| change_income1     | 1642        | 0.37 | -1.58| -0.07 | 0.30   | 0.68  | 3.36 |
| change_rev2        | 1642        | 1.27 | -0.36| 0.37  | 0.73   | 1.33  | 5.76 |
| change_income2     | 1642        | 0.35 | -1.63| -0.12 | 0.28   | 0.68  | 3.36 |
| investigated variables |         |      |      |       |        |       |      |
| female             | 2235        | 0.56 | 0    | 0     | 1      | 1     | 1    |
| female_fulltime    | 2235        | 0.51 | 0    | 0     | 1      | 1     | 1    |
| female_parttime    | 2235        | 0.56 | 0    | 0     | 0      | 0     | 1    |
| female_senior      | 2235        | 0.33 |      |       |        |       |      |
| female_junior      | 2235        | 0.24 |      |       |        |       |      |
| female_ncrc        | 2235        | 0.42 | 0    | 0     | 0      | 1     | 1    |
| female_crsc        | 2235        | 0.14 | 0    | 0     | 0      | 0     | 1    |
| female_nlaw        | 2235        | 0.34 | 0    | 0     | 0      | 0     | 1    |
| female_law         | 2235        | 0.22 | 0    | 0     | 0      | 0     | 1    |
| female_nacct       | 2235        | 0.13 | 0    | 0     | 0      | 0     | 1    |
| female_acct        | 2235        | 0.43 | 0    | 0     | 0      | 1     | 1    |
| other variables    |             |      |      |       |        |       |      |
| m_exp              | 2235        | 3.89 | 0.69 | 3.37  | 4.03   | 4.52  | 5.41 |
| education          | 2235        | 0.33 | 0.00 | 0.14  | 0.29   | 0.43  | 0.86 |
| ab_size            | 2235        | -1.66| -4.22| -2.37 | -1.82  | -1.16 | 3.31 |
| ab_lev             | 2235        | -0.03| -0.60| -0.14 | -0.01  | 0.12  | 0.43 |
| ab_roa             | 2235        | 0.07 | -0.05| 0.04  | 0.08   | 0.13  | 0.34 |
| ab_growth          | 2235        | 0.07 | -1.70| -0.03 | 0.12   | 0.27  | 1.22 |
| ab_vol             | 2235        | -0.02| -0.18| -0.07 | -0.04  | 0.02  | 0.40 |
| Soe                | 2235        | 0.13 | 0    | 0     | 0      | 0     | 1    |
| Cyb                | 2235        | 0.35 | 0    | 0     | 0      | 1     | 1    |
| female_ceo         | 2235        | 0.07 | 0    | 0     | 0      | 0     | 1    |
| female_chair       | 2235        | 0.05 | 0    | 0     | 0      | 0     | 1    |
| female_board       | 2235        | 0.14 | 0    | 0     | 0.11   | 0.22  | 0.50 |
| h_lev              | 2235        | 0.60 | 0    | 0     | 1      | 1     | 1    |
| h_vol              | 2235        | 0.32 | 0    | 0     | 0      | 1     | 1    |
| strict             | 2235        | 0.58 | 0    | 0     | 1      | 1     | 1    |
| Size               | 1642        | 21.21| 19.77| 20.51 | 20.95  | 21.58 | 26.35|
| Lev                | 1642        | 0.30 | 0.03 | 0.15  | 0.27   | 0.43  | 0.81 |
| wbigshare          | 1642        | 0.38 | 0.10 | 0.28  | 0.37   | 0.48  | 0.76 |
| Mb                 | 1642        | 4.06 | 0.46 | 2.18  | 3.39   | 5.04  | 14.22|
| Indep              | 1642        | 0.37 | 0.33 | 0.33  | 0.33   | 0.43  | 0.57 |
| idustry_change1    | 1642        | 0.03 | -0.27| -0.05 | 0.04   | 0.13  | 0.25 |
| idustry_chang2     | 1642        | 0.01 | -0.24| -0.05 | 0.03   | 0.09  | 0.16 |

### Table 2. Grouped T-test table.

| Var      | Obv | Mean | Diff | T value |
|----------|-----|------|------|---------|
| pass     | 983 | 0.89 | 0.01 | 4.72    |
| ab_size  | 983 | -1.55| 0.75 | 2.97    |
| ab_lev   | 983 | -0.04| -0.03| -1.06   |
| ab_roa   | 983 | 0.05 | 0.02 | -0.83   |
| Soe      | 983 | 0.13 | 0.01 | -0.46   |
| Cyb      | 987 | 0.21 | 0.23 | -12.46  |

**Note:** The table represents the results of a T-test comparing two groups (Female = 0 and Female = 1) for various variables in the study.
small in size, which may be due to the high proportion of female committee members in the GEM. As shown in the results of the group T test for the variable cyb, GEM listed companies only account for 21% of the companies approved by the Committee without female members, while GEM listed companies take up 44% of the companies approved by the Committee with female members.

This conclusion preliminarily supports H1, i.e. the participation of female committee members may reduce the pass rate; it also indicates that whether the female committee members participate in the examination may have a weak relationship with the characteristics of the applicant company, which may be a relatively random process. Finally, this result also reminds that female committee members show up more in the GEM, so the impact of different boards on the subsequent test results needs to be considered.

5.2. Regression analysis

In order to test H1, we conduct multiple regression tests on Model 1. In order to control the interference of heteroscedasticity and sequence correlation at the company level on the test results, all regression tests in this paper use robust standard error of corporate clustering. Table 3 reports the regression results.

Column 1 of Table 3 suggests that there is a regression coefficient of −0.3489 between the participation of female committee member (female) and the pass rate (pass) in all samples, and passes the significance test at the level of 5% (T = −2.03). In terms of control variables, there is a significant negative correlation between the average education level of the Committee (m_education) and the pass rate (pass), which indicates that the ability of the Committee to distinguish the applicant company may be restricted by their education level. At the same time, the size of the applicant company relative to the industry (ab_size) pre-listing performance (ab_roa), growth (ab_growth) is significantly positively correlated with the pass rate; the debt ratio relative to the industry (ab_lev) and earnings volatility (ab_vol) are significantly negatively correlated with the pass rate. The proportion of female directors in board of directors of the applicant company (female board) is significantly positively correlated with the pass rate. These results are not only support the previous studies, but also meet the general expectation of the issuance examination work, which demonstrates the rationality of the model setting. The results above show that the probability of rejection of the applicant company examined by the Committee with the participation of female members is 30% higher than that examined by the all-male Committee, which significantly supports H1.

At the same time, in the deduction of H1, we also find that women’s unique attitude to risk aversion is one of the important internal incentives that affect their decision-making. So, we test it again. We compare the performance volatility of the applicant company in the first three years with the average performance volatility of the industry in the same period, and regard it as a measure of the operating risk of the applicant company and the basis of grouping. Column 2 and Column 3 of Table 3 report the test results. In Column 2, when the operating risk of the applicant company is high, the relationship between the participation of female committee members (female) and pass rate (pass) is significantly negative. However, in Column 3, when the operating risk is small, the relationship between the female committee members and the pass rate is not significant. Similarly, we use the comparison of debt ratio and industry average debt ratio as the measurement
Table 3. Pass rate of the examination with the participation of female committee member.

| Dependent var = pass | 1        | 2        | 3        | 4        | 5        |
|----------------------|----------|----------|----------|----------|----------|
|                      | Full sample | h_vol = 1 | h_vol = 0 | h_lev = 1 | h_lev = 0 |
| Female               | -0.3489** | -0.9362*** | -0.1498  | -0.5258** | -0.1217  |
|                      | (-2.03)  | (-2.62)  | (-0.70)  | (-2.19)  | (-0.42)  |
| m_education          | -1.4128***| -2.8099***| -1.1614**| -1.8470***| -1.2257* |
|                      | (-3.79)  | (-3.80)  | (-2.48)  | (-3.80)  | (-1.88)  |
| m_exp                | 0.2928*** | 0.3143*** | 0.2559** | 0.1513    | 0.6242***|
|                      | (3.25)   | (2.08)   | (1.27)   | (1.34)    | (3.59)   |
| ab_size              | 0.7478*** | 0.8995*** | 0.8000***| 0.8119*** | 0.5553***|
|                      | (7.05)   | (3.84)   | (6.13)   | (6.53)    | (2.62)   |
| ab_lev               | -1.9248***| -2.2618** | -1.6054***| -4.4934***| -0.1783  |
|                      | (-3.88)  | (-2.15)  | (-2.69)  | (-5.21)  | (-0.63)  |
| ab_roa               | 0.3028*  | 2.3987    | 0.0584   | -1.5415   | 0.0451   |
|                      | (1.89)   | (1.10)   | (0.26)   | (0.85)    | (0.52)   |
| ab_growth            | 0.1772** | 0.0460    | 0.2726***| 0.1465    | 0.3650*  |
|                      | (2.27)   | (0.23)   | (2.93)   | (1.64)    | (1.75)   |
| ab_vol               | -2.4849***| -4.6505***| 1.9730   | -2.7037***| -1.7266  |
|                      | (-3.69)  | (-3.32)  | (0.71)   | (-3.01)  | (-1.33)  |
| Soe                  | -0.1430  | -0.3264  | -0.1567  | -0.1869   | 0.0823   |
|                      | (-0.57)  | (-0.64)  | (-0.52)  | (-0.58)   | (-0.17)  |
| Cyb                  | 0.1934   | 0.1157   | 0.2638   | -0.0366   | 0.3810   |
|                      | (1.05)   | (0.33)   | (1.15)   | (0.15)    | (1.22)   |
| female_ceo           | -0.3237  | -0.6187  | -0.1690  | -0.7049*  | 0.4419   |
|                      | (-1.09)  | (-1.00)  | (-0.45)  | (-1.65)   | (0.93)   |
| female_chair         | -0.8711**| -1.8844***| -0.6874  | -1.0189***| -1.1985**|
|                      | (-2.54)  | (-3.43)  | (-1.56)  | (-2.04)   | (-2.50)  |
| female board         | 4.6024***| 3.9534***| 5.4136***| 6.8697*** | 2.3967** |
|                      | (6.70)   | (3.39)   | (5.56)   | (6.69)    | (2.30)   |
| Year, Industry, Region |          |          |          |          |          |
| Intercept            | 0.8861   | 1.5643   | 1.2943   | 2.1956*   | -0.5920  |
|                      | (0.93)   | (0.64)   | (1.12)   | (1.84)    | (-0.35)  |
| N                    | 2235     | 674      | 1519     | 1026      | 1124     |
| Pseudo R2            | 0.1807   | 0.3131   | 0.1773   | 0.2367    | 0.2033   |

T values are in the brackets; * , **, and *** means being significant at the level of 10%, 5% and 1% respectively; standard error of firm clustering.

standard of financial risk, and test the role of female committee members under different risk conditions. Columns 4 and Column 5 report the results. In Column 4, when the financial risk of the applicant company is high, female committee members’ participation will have a significant negative impact on the pass rate, but this effect is not significant when the financial risk of the applicant company is low. Columns 2 to 5 show that the risk aversion characteristics of women may be an important mechanism that leads to their influence on the decision-making.

In order to test H2, i.e. whether the companies approved by the Committee with the participation of female members have a better quality, we conduct multiple linear regression on Model 2, as is shown in Table 4.

Column 1 of Table 4 shows there is a regression coefficient of 0.1397 between the participation of female committee members (female) and the change of sales revenue after listing (change_rev1), and T value is 3.44, which was significant at the level of 1%. Column 2 shows that the regression coefficient between female and the change of net profit after listing (change_income1) is 0.0952, which is significant at the level of 5%. Similarly, Column 3 and Column 4 suggest that when the observation window is extended
### Table 4. Influence of female committee members’ participation on the quality of listed companies.

|       | 1         | 2         | 3         | 4         |
|-------|-----------|-----------|-----------|-----------|
|       | change_rev1 | change_income1 | change_rev2 | change_income2 |
| Female | 0.1397***  | 0.0952**  | 0.2157***  | 0.1188**  |
|        | (3.44)     | (2.28)     | (3.66)     | (2.16)     |
| Industry_change | 0.3737***  | 0.7665***  | 0.1530     | 0.3047     |
|        | (2.26)     | (4.51)     | (0.69)     | (1.47)     |
| size   | 0.0798***  | 0.1785***  | 0.0929***  | 0.1546***  |
|        | (3.11)     | (7.21)     | (2.82)     | (5.03)     |
| lev    | 0.0218     | −0.0618    | 0.1033     | −0.0068    |
|        | (0.16)     | (0.53)     | (0.53)     | (−0.04)    |
| mb     | 0.0416***  | 0.0902***  | 0.0692***  | 0.0929***  |
|        | (4.16)     | (8.78)     | (5.10)     | (7.34)     |
| indep  | 0.0149     | −0.4712    | 0.1610     | −0.1074    |
|        | (0.04)     | (−1.17)    | (0.29)     | (−0.21)    |
| bigshare | −0.2144   | −0.1091    | −0.3853*   | −0.2124    |
|        | (−1.49)    | (−0.74)    | (−1.89)    | (−1.12)    |
| female_ceo | 0.1766**  | 0.1576*    | 0.2245*    | 0.1656     |
|        | (2.04)     | (1.77)     | (1.85)     | (1.46)     |
| female_chair | 0.0029    | 0.0229     | 0.0110     | −0.0065    |
|        | (0.03)     | (0.23)     | (0.08)     | (−0.05)    |
| female_board | −0.4047** | −0.5054*** | −0.5529**  | −0.5317**  |
|        | (−2.38)    | (−2.90)    | (−2.20)    | (−2.27)    |
| Year   | control    | control    | control    | control    |
| Intercept | −0.9613*   | −3.5023*** | −0.9556    | −2.8937*** |
|        | (−1.87)    | (−6.65)    | (−1.36)    | (−4.43)    |
| N      | 1642       | 1642       | 1642       | 1642       |
| adj. R-sq | 0.023      | 0.073      | 0.026      | 0.045      |

T values are in the brackets; *, **, and *** means being significant at the level of 10%, 5% and 1% respectively; standard error of firm clustering.
to two years, the results are still consistent. The results indicate that when there are female committee members participating in the examination, the approved companies have better post-listing operating performance than those approved by the all-male Committee.

In the same time, we also pay attention to the post-listing performance of companies. We re-test H2 with Model 3, which is reported in Table 5.

Column 1 of Table 5 reports that there is a regression coefficient of 0.0675 between the participation of female committee members (female) and excess returns of buying and holding in 12 months after listing (BHAR12), and the T value is 0.0675, which is significant at the level of 10%. From column 2, it can be seen that the regression coefficient between whether there are female hair review committee members and bhar24 is 0.797, which is significant at the level of 5%. The results indicate that when there is female committee members participating in the examination, the approved companies have better post-listing operating performance than those approved by the all-male Committee.

The results of Tables 4 and 5 both support H2. Previous research shows that the listed companies in China may modify their statements before listing (Cai et al., 2013; Huang & Xie, 2014; Liu & Lv, 2015; Lu et al., 2015), and the government will offer a lot of subsidies (Wang et al., 2015). If these carefully packed companies are not effectively excluded through the issuance examination process, they will lead to a decline in performance after listing, thus reducing the quality of capital market asset supply. The evidence above

| Table 5. Influence of female committee member’s participation in the examination on companies’ post-listing performance. |
|---------------------------------------------------------------|
|                  | 1             | 2             |
|                  | BHAR12        | BHAR24        |
| female           | 0.0675*       | 0.0797***     |
|                  | (1.87)        | (2.14)        |
| size             | −0.1072***    | −0.1191***    |
|                  | (−5.27)       | (−5.67)       |
| lev              | 1.1570***     | 1.0681***     |
|                  | (8.20)        | (7.34)        |
| roa              | 1.6380**      | 2.2538***     |
|                  | (2.51)        | (3.34)        |
| bigshare         | −0.0002       | −0.0171       |
|                  | (−0.00)       | (−0.15)       |
| mb               | 0.0715***     | 0.0648***     |
|                  | (8.02)        | (7.04)        |
| indep            | −0.1833       | 0.0236        |
|                  | (−0.61)       | (0.08)        |
| female_ceo       | 0.0436        | 0.0530        |
|                  | (0.70)        | (0.83)        |
| female_chair     | 0.0143        | 0.0931        |
|                  | (0.20)        | (1.26)        |
| female_board     | 0.1153        | 0.0942        |
|                  | (0.90)        | (0.71)        |
| Industry, Year   | control       | control       |
| control          | 1.6694***     | 2.2015***     |
|                  | (3.65)        | (4.67)        |
| N                | 1642          | 1642          |
| adj. R-sq        | 0.336         | 0.246         |

T values are in the brackets; *, **, and *** means being significant at the level of 10%, 5% and 1% respectively; standard error of firm clustering.
shows that the companies that have been approved by the Committee with the participation of female members have better performance after listing. Together with H1, which is supported by Test 1, we are convinced that it is the participation of female committee members that excludes some of the lower quality companies, thus improving the quality of the capital market.

5.3. Further test

5.3.1. Impact of female committee members’ relative status on their influence

The test of H1 and H2 forms a self-consistent logic, which shows the important role of female committee members. However, we are still interested in the restrictions on whether the female committee members can play their role. This study is based on the differences in decision-making mechanism caused by gender differences between men and women. However, it also depends on the individual’s discourse power in the organisation to make the his/her opinions affect the final decision-making of an organisation. As for gender issues, a large number of studies have shown that gender discrimination still exists in China (Guo & Yan, 2015; Xu & Huang, 2018). Specifically, as Jin et al. (2015) pointed out, due to gender discrimination, whether women can play a positive role in organisations is also influenced by their relative status. It brings out the question whether there is gender discrimination in the Committee, a highly specialised organisation with high social status, and whether the role played by female members also depends on their relative status.

Therefore, we further investigate the influence of the relative status of female members in the Committee on their effectiveness. Specifically, with Model 1, we investigate the influence of different status of female committee members on the examination results. For the definition of full-time female members (Female_fulltime), if there is one or more full-time female committee member in the participating female committee members, it is 1, otherwise it is 0; for the the definition of part-time female members (Female_parttime), if all the participating female committee members are part-time, it is 1, otherwise it is 0. For the definition of senior member (Female_senior), if the number of times a female member has participated in the examination is higher than the average, otherwise it is 0; for the definition of junior member (Female_junior), if the number of times a female member has participated in the examination is lower than the average, otherwise it is 0. For the definition of committee members from the CRSC (Female_crsc), if there is one or more females in the participating female committee members that has CRSC background, it is 1, otherwise it is 0; for the definition of committee members not from the CRSC (Female_noncrsc), if none of the participating female committee members has CRSC background, it is 1, otherwise it is 0

Each group above is the further division for the variable of female committee member (female. Referring to Chen et al. (2014), we put one group into the same model each time to investigate which characteristics of the female committee members have more significant impact on the examination results. The results are shown in Table 6.

In Column 1 of Table 6, when investigating whether the female committee members are full-time, it shows only full-time female members (Female_fulltime) is negatively correlated with the issuance examination results (pass), which was significant at 5% level. In Column 2, when investigating whether the female committee members are from the CSRC, it shows
only female committee members from the CRSC (female_crsc) have a significant influence on the results. In Column 3, when investigating whether the female committee members are senior, it shows only the senior committee members (female_senior) are significantly negatively correlated with the results. This result clearly suggests that whether the female committee members can have an influence on the examination results also depends on their relative position in the Committee. It also implies that even a professional group like the Committee may still see some gender discrimination, in which women need to obtain a relatively high status to make a difference.

| Table 6. Influence of female committee member’s status on the issuance examination. | 1                | 2                | 3                |
|--------------------------------|------------------|------------------|------------------|
| dependent var = pass            |                  |                  |                  |
| Female_parttime                | 0.4317           | (1.17)           |                  |
|                                | −0.4052**        | (−2.35)          |                  |
| Female_fulltime                | −0.2760          | (−1.53)          |                  |
| Female_ncrsc                   | −0.5248**        | (−2.24)          |                  |
| Female_crsc                    | −0.2249          | (−1.14)          |                  |
| Female_junior                  | −0.4797**        | (−2.45)          |                  |
| m_education                    | −1.2997****      | (−3.43)          | −1.4527****      |
|                                | (−1.4091****)    | (−3.69)          | −1.5027****      |
| m_exp                          | 0.2794****       | (3.18)           | 0.2891****       |
|                                | (0.2504****)     | (2.78)           | (3.31)           |
| ab_size                        | 0.7564****       | (7.09)           | 0.7434****       |
|                                | (0.7504****)     | (7.50)           | (7.00)           |
| ab_lever                       | −1.9166****      | (−3.85)          | −1.8964****      |
|                                | (−1.9178****)    | (−4.34)          | (−3.82)          |
| ab_roa                         | 0.3191**         | (2.02)           | 0.2978*          |
|                                | (0.3016)         | (0.99)           | (1.86)           |
| ab_growth                      | 0.1694**         | (2.21)           | 0.1744**         |
|                                | (0.1755****)     | (2.66)           | (2.17)           |
| ab_vol                         | −2.4613****      | (−3.65)          | −2.4902****      |
|                                | (−2.4700****)    | (−3.87)          | (−3.68)          |
| Soe                            | −0.1400          | (−0.55)          | −0.1205          |
|                                | (−0.1487)        | (−0.63)          | (−0.48)          |
| Cyb                            | 0.1572           | (0.85)           | 0.2037           |
|                                | (0.1133)         | (0.59)           | (1.11)           |
| female_ceo                     | −0.3241          | (−1.09)          | −0.3434          |
|                                | (−0.3209)        | (−1.10)          | (−1.15)          |
| female_chair                   | −0.8584**        | (−2.48)          | −0.8620**        |
|                                | (−0.8849****)    | (−2.75)          | (−2.50)          |
| female_board                   | −4.6283****      | (6.72)           | −4.6594****      |
|                                | (4.6473****)     | (7.15)           | (6.77)           |
| Year, Industry, Region control | control          | control          | control          |
| Intercept                      | 0.8823           | (0.92)           | 0.8609           |
|                                | 1.0964           | (1.13)           | (0.90)           |
| N                              | 2235             | 2235             | 2235             |
| Pseudo R2                      | 0.184            | 0.181            | 0.182            |

T values are in the brackets; *, **, and *** means being significant at the level of 10%, 5% and 1% respectively; standard error of firm clustering.
5.3.2. Impact of female committee members’ professional background on their influence

Chen et al. (2014) investigated the influence of the social connection characteristics of the committee members on the issuance examination results, and found that their professional background will affect their decision-making to a certain extent. Specifically, they found that when distinguishing the committee members with lawyer background from those with accountant background, the latter are more likely to be affected by the ‘social connection’, while the former are not significantly affected. This result, on one hand, suggests that the professional background may be a factor to be considered. On the other hand, it also brings some challenges to us. Given all or most of the female committee members studied in this paper are not professional accountants, the findings of this paper may be due to the fact that the female committee members, with non-accountant background, which are less affected by the ‘social connection’. It may be their professional background that leads to the low pass rate of the examination with the participation of female committee members, rather than the female characteristics themselves.

Therefore, referring to Chen et al. (2014), we further distinguish the professional background of female committee members. As is done before, we further classify the female committee members. First of all, for the variable of female committee members with lawyer background female (Female_law), when the participating female committee member is a lawyer, it is 1, otherwise it is 0; for the variable of female committee members with non-lawyer background female (Female_nlaw), when the participating female committee member is not a lawyer, it is 1, otherwise it is 0. These two variables further distinguish the female committee member in the dimension of lawyer background. As the previous studies show that the committee members with lawyer background are not significantly affected by the ‘social connection’, we hope that female committee members with or without lawyer background will both have a significant impact on the results.

Similarly, we further classify the female committee members in the dimension of accountant background. For the variable of female_acct, when the female committee members are accountants, it is 1, otherwise it is 0; for the variable of female_nacct, 1 when the female committee members are not accountants, it is 1, otherwise it is 0. If the alternative hypothesis above is tenable, i.e. the reason why the female committee members’ participation lowers the pass rate is that most or all of them are not professional accountants and are less affected by the characteristics of social connection. Then, the female committee members with non-accountant background should be significantly negatively correlated with the pass rate, while the female committee members with accountant background will not affect the pass rate or even have a positive impact due to social connection. In order to exclude this alternative hypothesis, we would like to find female committee members with non-accountant background (female_nacct) have no significant influence on the examination, while the participation of female committee members with accountant background participated (female_acct) will significantly lower the pass rate. The test results are shown in Table 7.

Column 1 of Table 7 suggests there is a significant negative correlation between the proxy variable of female committee member with lawyer background (female_law) and the pass rate (pass), with the regression coefficient of −0.4141 and T value of −1.99. There was a significant negative correlation between the proxy variable of female committee member with non-lawyer background and the pass rate as well, with the regression
It suggests female committee members with the professional background as lawyer may make a greater difference. In Column 1 of Table 7, when distinguishing the professional background or female committee members in the dimension of accountant, only the female committee member with accountant background (female_acct) is significantly negatively correlated with the pass rate (pass), which suggests it is the female committee member with accountant background who can significantly lower the pass rate. It excludes the alternative hypothesis that the female committee members may be all or most of them non accountants, so they are less affected by social connections, and thus lead to a lower pass rate when there are female IEC members. It further demonstrates that women’s own gender characteristics lead to more stringent decision-making.

Table 7. Impact of female committee members’ professional background on their influence.

| Variable                  | 1            | 2            |
|---------------------------|--------------|--------------|
| Female_nlaw               | −0.3008      |              |
|                           | (−1.61)      |              |
| Female_law                | −0.4141**    | −0.1377      |
|                           | (−1.99)      | (−0.54)      |
| Female_nacct              |              | −0.3998**    |
|                           |              | (−2.25)      |
| Female_acct               |              |              |
| m_exp                     | 0.2918***    | 0.3050***    |
|                           | (3.32)       | (3.44)       |
| m_education               | −1.4041***   | −1.3347***   |
|                           | (−3.75)      | (−3.45)      |
| ab_size                   | 0.7467***    | 0.7516***    |
|                           | (7.05)       | (7.05)       |
| ab_lev                    | −1.9213***   | −1.9306***   |
|                           | (−3.87)      | (−3.87)      |
| ab_roa                    | 0.3032*      | 0.3006*      |
|                           | (1.89)       | (1.86)       |
| ab_growth                 | 0.1762**     | 0.1765**     |
|                           | (2.27)       | (2.37)       |
| ab_vol                    | −2.5000***   | −2.4679***   |
|                           | (−3.70)      | (−3.65)      |
| Soe                       | −0.1463      | −0.1424      |
|                           | (−0.58)      | (−0.57)      |
| Cyb                       | 0.2150       | 0.1760       |
|                           | (1.14)       | (0.96)       |
| female_ceo                | −0.3228      | −0.3321      |
|                           | (−1.08)      | (−1.11)      |
| female_chair              | −0.8667**    | −0.8733**    |
|                           | (−2.53)      | (−2.53)      |
| female_board              | 4.6075***    | 4.5984***    |
|                           | (6.68)       | (6.71)       |
| Industry, Year, Region    | control      | control      |
| Intercept                 | 0.8389       | 0.7582       |
|                           | (0.88)       | (0.78)       |
| N                         | 2235         | 2235         |
| pseudo R-sq               | 0.181        | 0.181        |

T values are in the brackets; *, **, and *** means being significant at the level of 10%, 5%, and 1% respectively; standard error of firm clustering.
5.3.3. Impact of ownership difference on female committee members’ influence
The literature shows that there may be ownership discrimination in the issuance examination, i.e. under the same conditions, state-owned enterprises may be more easily approved (Zhu & Lu, 2012). In this paper, we argue that the gender characteristics of female committee members will affect their decision-making, thus affecting the examination results. Then, we are concerned about whether the influence of female committee members will be different in the face of enterprises with different ownership. The results are shown in Table 8.

Column 1 and 2 of Table 8 show that the participation of female committee members has great influence on both state-owned enterprises and non state-owned enterprises, with no significant difference.

5.3.4. Robustness test
5.3.4.1. Linear index measurement. In the tests above, we adopt the dummy variable of whether there are female committee members participating in the examination (female), which helps a clear division of variables in further tests to investigate the role of female committee members with different characteristics. In the robustness test, we measure the proportion of female members of the Committee (female_ratio) an alternative to retest H1 and H2. The results are shown in Table 9.

| Table 8. Impact of applicant companies’ nature of property rights on female committee members’ influence. |  |  |
|---|---|---|
| | 1 | 2 |
| female | −1.4438*** | −0.2886* |
| m_exp | 0.7051** | 0.2640*** |
| m_education | −1.0054 | −1.6995*** |
| ab_size | 1.8398*** | 0.7209*** |
| ab_leve | −4.4501*** | −1.9843*** |
| ab_roa | 0.7517 | 0.3666 |
| ab_growth | 0.0528 | 0.2711*** |
| ab_vol | −6.5833** | −2.6919*** |
| cyb | 1.4283 | 0.1532 |
| female_ceo | 1.0669 | −0.2884 |
| female_chair | −3.5224 | −0.9731*** |
| female_board | 8.5608** | 4.5626*** |
| Industry, Year, Region control | control |
| Intercept | 1.5511 | 0.7052 |
| N | 323 | 1912 |
| pseudo R-sq | 0.445 | 0.187 |

T values are in the brackets; *, **, and *** means being significant at the level of 10%, 5%, and 1% respectively; standard error of firm clustering.
Table 9. Influence of the proportion of participating female committee members on the examination.

| Dependent var = pass | coefficient | T  |
|----------------------|-------------|----|
| Female_ratio         | -1.0583**   | -1.97|
| m_exp                | 0.2834***   | 3.21|
| m_education          | -1.4324***  | -3.85|
| ab_size              | 0.7540***   | 7.31|
| ab_lev               | -2.0447***  | -3.83|
| ab_roa               | 0.0180      | 0.59|
| ab_growth            | 0.1711**    | 2.32|
| ab_vol               | -2.6115***  | -3.94|
| Soe                  | -0.1602     | -0.64|
| Cyb                  | 0.1470      | 0.82|
| female_ceo           | -0.3482     | -1.19|
| female_chair         | -0.8729**   | -2.54|
| female_board         | 4.6321***   | 6.68|
| Industry, Year, Region | control   |     |
| _cons                | 0.8911      | 0.94|
| N                    | 2235        |     |
| pseudo R-sq          | 0.180       |     |

T values are in the brackets; *, **, and *** means being significant at the level of 10%, 5% and 1% respectively; standard error of firm clustering.

Table 9 shows that when using the proportion of participating female committee members as the main independent variable, the regression coefficient of female_ratio and the pass rate (pass) is still negative and is significant at the level of 5%.

5.3.4.2. Influence of board. The descriptive statistics shows that companies listed in GEM take up the majority of the companies reviewed by the female committee members. This leads to a possible alternative hypothesis that the examination of GEM is more strict and the pass rate is lower. Given there are more female committee members for GEM examination, the findings of this paper may be a result of different boards instead of gender characteristics. To solve this problem, we control the variable cyb in the regression above to alleviate the influence of board differences. In the robustness test, we further test this issue. Specifically, we first examine the pass rate of companies listed in GEM and that of companies listed in the Main Board without considering the gender of the committee members; then, we construct a cross item (female*cyb) between the female committee members and the GEM, so as to investigate whether the impact of the female committee member on the examination differs in different boards. There is no difference in the impact. The results are shown in Table 10.

Column 1 of Table 10 reports that when gender factor is not considered, the regression coefficient between indicator variable of GEM (cyb) and the pass rate is positive, but not significant. This result shows that, in general, there is no significant difference in the pass rate between GEM and the Main Board. In Column 2 of Table 10, when considering the cross term between female committee members and GEM, the regression coefficient of female is still negative, and it is also significant. The regression coefficient of the cross item (female*cyb) is 0.6299, which is significant at the level of 5%. The results show that the influence of female committee members is slightly smaller in the issuance examination of GEM than that for the the Main Board.
Table 10. Influence of the board on the examination.

|            | 1          | 2          |
|------------|------------|------------|
| cyb        | 0.1279     | -0.2252    |
|            | (0.70)     | (−0.85)    |
| female     | -0.5835*** | (−2.85)    |
| Female*cyb | 0.6299**   | (2.08)     |
| m_exp      | 0.3241***  | 0.2694***  |
|            | (3.78)     | (3.09)     |
| m_education| −1.3978*** | −1.4184*** |
|            | (−3.74)    | (−3.78)    |
| ab_size    | 0.7477***  | 0.7550***  |
|            | (7.01)     | (7.10)     |
| ab_lev     | −1.9191*** | −1.9030*** |
|            | (−3.89)    | (−3.80)    |
| ab_roa     | 0.2998*    | 0.2949*    |
|            | (1.87)     | (1.82)     |
| ab_growth  | 0.1793**   | 0.1746***  |
|            | (2.31)     | (2.23)     |
| ab_vol     | −2.5135*** | −2.4453*** |
|            | (−3.73)    | (−3.62)    |
| Soe        | −0.1520    | −0.1462    |
|            | (−0.60)    | (−0.58)    |
| female_ceo | −0.3213    | −0.3183    |
|            | (−1.09)    | (−1.08)    |
| female_chair| −0.8591** | −0.8818**  |
|           | (−2.49)    | (−2.57)    |
| female_board| 4.5389*** | 4.6318***  |
|            | (6.58)     | (6.75)     |

Industry, Year, Region control
| Intercept | 0.5416     | 1.0040     |
|           | (0.57)     | (1.05)     |
| N         | 2235       | 2235       |
| pseudo R-sq | 0.178   | 0.183      |

T values are in the brackets; *, **, and *** means being significant at the level of 10%, 5%, and 1% respectively; standard error of firm clustering.

The regression results of Column 1 and Column 2 show that the examination of no more strict than that of the Main Board, and the female committee members’ influence in the examination of GEM is even slightly smaller than that of the Main Board. This also excludes the alternative hypothesis that the examination for the GEM is more strict, and there are more female committee members in the GEM, so the results of the main test is brought by board differences rather than the fact that the participation of female committee members has lowered the pass rate.

5.3.4.3. **Strictness of the issuance control.** Another challenge that the conclusions of this paper may face is that due to the changes of factors like policy and market, the strictness of issuance control varies significantly in different years. Then, there is the possibility that in the years when the issuance control is strict and the overall pass rate is low, the participation of female committee members is more common. It means the results of this paper may be affected by the strictness of issuance control, and cannot be interpreted as female committee members’ influence. In order to exclude this hypothesis, we use the annual overall pass rate to measure the strictness of the control, and conduct a group test on the impact of female committee members’
participation on the results of issuance examination. Specifically, we set the variable *strict*. For *strict*, when the overall pass rate of the year is lower than the median annual pass rate, it is 1, suggesting the regulation of the year is more strict; otherwise it is 0, suggesting the regulation of the year is relatively loose. The regression results are shown in Table 11.

As shown in Table 11, in Column 1, when *strict* is 0, the overall pass rate is high and the regulation is loose, there is a significant negative correlation between female committee members (*female*) and the pass rate (*pass*). In Column 2, when *strict* is 1 and the overall pass rate is low, there is still a negative correlation between *female* and *pass*, but it is no longer significant. This result shows that female committee members can make a greater difference when the overall regulation is relatively loose. This excludes the previous alternative hypothesis, i.e. it happens that there are more women in the Committee when the regulation is strict, so the pass rate is lower. In fact, this result supports the theoretical logic of this paper. As mentioned earlier, the unique role of female committee members may be due to their greater diligence and prudence, thus excluding some relatively poor companies. When the control is strict and the overall pass rate is low, it is hard for these companies to pass the examination, regardless of whether there are female committee members participating in the examination. Therefore, it is

| Table 11. Influence of female committee members under issuance control with different strictness. |
|--------------------------------------------------------------------------------------------------|
| Dependent var = *pass*                                                                                     |
|                                                                                                            |
| Strict = 0                                                                                                  |
| Strict = 1                                                                                                  |
| Female                                                                                                     -0.3926*                                                                                         -0.2339 |
|                                                             (-1.77)                                                                                      (-0.74) |
| m_education                                                                                               -1.6731***                                                                            -1.4695 |
|                                                             (-3.58)                                                                                      (-1.40) |
| m_exp                                                                                                     0.3045***                                                                            0.1810 |
|                                                           (2.88)                                                                                       (0.72) |
| ab_size                                                                                                   0.8030***                                                                            0.8379*** |
|                                                           (6.57)                                                                                       (3.40) |
| ab_lev                                                                                                    -2.3671***                                                                            -1.6025 |
|                                                           (-3.79)                                                                                      (-1.64) |
| ab_roa                                                                                                    0.3926*                                                                            1.1869 |
|                                                           (1.86)                                                                                       (0.45) |
| ab_growth                                                                                                 0.2591**                                                                            1.0200 |
|                                                           (2.06)                                                                                       (1.51) |
| ab_vol                                                                                                    -3.3883***                                                                            -1.8688 |
|                                                           (-4.50)                                                                                      (-1.17) |
| Soe                                                                                                       -0.3435                                                                            0.3358 |
|                                                           (-1.07)                                                                                      (0.76) |
| Cyb                                                                                                       -0.0477                                                                            0.4553 |
|                                                           (-0.20)                                                                                      (1.17) |
| female_ceo                                                                                                 0.0460                                                                            -0.8440 |
|                                                           (0.12)                                                                                       (-1.62) |
| female_chair                                                                                              -0.4658                                                                            -1.3179** |
|                                                           (-1.00)                                                                                      (-2.46) |
| female_board                                                                                              5.1428***                                                                            3.4326*** |
|                                                           (5.77)                                                                                       (2.87) |
| Industry, Year, Region control                                                                             15.2396***                                                                            19.8227*** |
|                                                           (15.59)                                                                                      (6.39) |
| N                                                                                                         1315                                                                                       920 |
| pseudo R-sq                                                                                                0.206                                                                                       0.212 |

T values are in the brackets; *, **, and *** means being significant at the level of 10%, 5% and 1% respectively; standard error of firm clustering.
difficult to show the difference resulted from female committee members’ participation. However, when the regulation is loose and the overall pass rate is high, compared with the less-demanding men, the female committee members are more likely to refuse those relatively poor companies out of prudence, thus lowering the pass rate.

5.3.4.4. Probability of violation after listing. Whether a company violates the rules after listing is also an important dimension to examine the quality of listed companies. Therefore, we test whether the participation of female committee members affects the probability of violation after listing. Specifically, we examine the violations within three years after listing, and investigate whether the female committee members have screened out better companies. Referring to Dai et al. (2017), we take fictitious profits, false listing of assets, false records, delayed disclosure, and major omissions as the definition of company violations. For the variable violate, if the company has such violations within three years after listing, it is 1, otherwise it is 0. The corresponding regression results are as follows.

Table 12 reports there is a significant negative correlation between female committee members’ participation and whether there are violations within three years of listing. Once again, it supports the view of this paper that the female committee members have more strictly reviewed the applicant companies, which contributes to the higher quality of the listed companies.

5.3.4.5. Discussion on endogeneity. In the previous research on gender differences, one of the main endogenous problems is that the female directors and senior executives may be a self-selection process, leading to endogeneity of the conclusion (Chen et al., 2017; Ma et al., 2018). For this paper, as is repeatedly mentioned before, the existing institutional arrangements has a certain randomness, as there is no clear provision for the selection of the committee members for each examination and the participants change each time, so it may be less endogenous. However, for the sake of preciseness, we still

| Dependent var = violate | Coefficient | T |
|-------------------------|-------------|---|
| female                  | -0.4445**   | -2.17 |
| size                    | -0.2965**   | -2.40 |
| lev                     | 0.8880      | 1.11 |
| roa                     | -9.0800**   | -2.11 |
| bigshare                | -0.5988     | -0.97 |
| mb                      | -0.0955     | -1.51 |
| indep                   | 1.8759      | 1.16 |
| female_ceo              | 0.2491      | 0.78 |
| female_chair            | 0.2227      | 0.61 |
| female_board            | 0.0621      | 0.09 |
| industry, year          | control     |     |
| Intercept               | 4.8716*     | 1.73 |
| N                       | 1642        |     |
| Pseudo R-sq             | 0.102       |     |

T values are in the brackets; *, **, and *** means being significant at the level of 10%, 5% and 1% respectively; standard error of firm clustering.
Table 13. Whether there are female committee members.

| Dependent var = female | coefficient | T     |
|------------------------|-------------|-------|
| Size                   | -0.0980     | -1.60 |
| Lev                    | 0.1912      | 0.46  |
| Soe                    | 0.2572      | 1.44  |
| Roa                    | 1.2624      | 0.93  |
| growth                 | 0.2658      | 1.14  |
| Goods                  | -0.5495     | -0.99 |
| op_cash                | -1.0153     | -1.06 |
| Fix                    | -0.3464     | -0.85 |
| bigshare               | 0.1407      | 0.47  |
| Industry, Year         | control     |       |
| Intercept              | 1.4845      | 1.07  |
| N                      | 2235        |       |
| Pseudo R²              | 0.2374      |       |

T values are in the brackets; *, **, and *** means being significant at the level of 10%, 5%, and 1% respectively; standard error of firm clustering.

make PSM on whether there will be female committee members. Table 13 shows the regression results of the first step, i.e. the determinants of whether there are female examination committee members.

Table 13 suggest that whether there are female committee members and related variables are not significant, only significantly related to industry and year, which are not listed in the table. We are more convinced that the selection of members present at each examination may be a random process. Further, Table 14, Table 15 and Table 16 report the regression results based on the matching in Table 13.

The results above suggest that after controlling the possible endogeneity with PSM, the relevant conclusions remain robust.

Table 14. Examination participated by female committee members based in PSM.

| Dependent var = female | coefficient | T     |
|------------------------|-------------|-------|
| female                 | -0.3516**   | -2.18 |
| m_education            | -1.6231***  | -3.08 |
| m_exp                  | 0.3337***   | 2.93  |
| ab_size                | 0.8193***   | 6.40  |
| ab_lev                 | -1.5808**   | -2.29 |
| ab_roa                 | 0.3682**    | 2.04  |
| ab_growth              | 0.1939***   | 3.01  |
| ab_vol                 | -2.9589***  | -3.35 |
| Soe                    | -0.3422     | -1.06 |
| Cyb                    | -0.0665     | -0.26 |
| female_ceo             | -0.2437     | -0.68 |
| female_chair           | -0.7003     | -1.53 |
| female_board           | 5.1823***   | 5.48  |
| Industry, Year, Region | control     |       |
| Intercept              | 0.8181      | 0.72  |
| N                      | 1966        |       |
| Pseudo R²              | 0.260       |       |

T values are in the brackets; *, **, and *** means being significant at the level of 10%, 5%, and 1% respectively; standard error of firm clustering.
Table 15. Post-listing performance of companies approved by female committee members based on PSM.

|                | (1)          | (2)          | (3)          | (4)          |
|----------------|--------------|--------------|--------------|--------------|
|                | change_rev1  | change_income1 | change_rev2  | change_income2 |
| female         | 0.1504***    | 0.0907***    | 0.2142***    | 0.1051*      |
|                | (4.55)       | (2.74)       | (3.62)       | (1.90)       |
| Industry_change| 0.4553***    | 0.6549***    | 0.1841       | 0.2958       |
|                | (3.39)       | (4.87)       | (0.83)       | (1.43)       |
| size           | 0.0930***    | 0.1476***    | 0.1061***    | 0.1652***    |
|                | (4.73)       | (7.50)       | (3.19)       | (5.32)       |
| lev            | −0.1063      | −0.0273      | 0.0708       | −0.0016      |
|                | (−0.95)      | (−0.24)      | (0.37)       | (−0.01)      |
| mb             | 0.0421***    | 0.0738***    | 0.0720***    | 0.0941***    |
|                | (5.20)       | (9.12)       | (5.31)       | (7.42)       |
| indep          | 0.0128       | −0.3087      | 0.2073       | −0.1029      |
|                | (0.04)       | (−0.97)      | (0.38)       | (−0.20)      |
| bigshare       | −0.2683**    | −0.1205      | −0.4201**    | −0.2584      |
|                | (−2.27)      | (−1.02)      | (−2.04)      | (−1.34)      |
| female_ceo     | 0.1885***    | 0.1661**     | 0.2487**     | 0.1845       |
|                | (2.67)       | (2.35)       | (2.04)       | (1.62)       |
| female_chair   | 0.0116       | 0.0516       | 0.0218       | 0.0018       |
|                | (0.15)       | (0.67)       | (0.16)       | (0.01)       |
| female_board   | −0.3377**    | −0.3922***   | −0.5524**    | −0.5316**    |
|                | (−2.44)      | (−2.83)      | (−2.20)      | (−2.26)      |
| Year           |              |              |              |              |
| Intercept      | −1.2225***   | −2.8811***   | −1.2419*     | −3.0995***   |
|                | (−2.92)      | (−6.89)      | (−1.76)      | (−4.69)      |
| N              | 1214         | 1214         | 1214         | 1214         |
| adj. R-sq      | 0.044        | 0.082        | 0.030        | 0.047        |

T values are in the brackets; *, **, and *** means being significant at the level of 10%, 5% and 1% respectively; standard error of firm clustering.
6. Conclusions and implications

The listing qualification control characterised by issuance examination is the basic feature of China’s capital market, which not only existed for a long time in the past, but also continues in the ongoing pilot registration system. Under this system, the individual decision-making of the committee determines the supply quality of capital market assets to a certain extent. However, in the previous research, there are few studies on how to make individual decisions and what factors affect the decision-making mechanism of the committee members, and most of them focus on the member’s social connection characteristics. Based on the Prospect Theory proposed by Hambrick and Mason (1984), we empirically investigate the impact of gender characteristics on the issuance examination efficiency audit by taking the gender differences of committee members as a starting point.

The results show that the participation of female committee members will reduce the pass rate of applicant companies by 30%, which is more significant in high-risk companies’ application. At the same time, the reduction of the pass rate is accompanied by better financial performance and market performance of the companies that have passed the examination. These two basic findings convince us that the female committee member may reject some of the applicant companies with poor quality, which improves the quality of asset supply in the capital market. Furthermore, we find that this effect is more obvious when the female committee members have a higher relative status and the professional background as accountant.
The findings above expand the understanding of the individual decision-making mechanism of the committee members. Also, due to the randomness of the composition and the professionalism of the committee members, the study of gender differences is less affected by endogenous interference, which may provide more robust evidence for the research on women’s role in organisational decision-making.

Finally, the policy implications of this paper are limited but clear. On one hand, the natural individual characteristics of the committee members will affect the decision-making, and then affect the supply quality of the capital market. It means that as long as the regulation of issuance examination continues, the asset supply in the capital market will inevitably be affected by the individual characteristics of the regulator. Therefore, in the further reform of registration system, it may be necessary and reasonable to loosen the regulation, reduce the interference of human factors and leave the resource allocation to the market. On the other hand, women’s participation can improve the decision-making efficiency of the organisation to a certain extent. It means in the current society with gender discrimination, it is necessary to create a better environment to improve women’s participation and let them play a unique role.

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### Appendix 1 Variable Definition

| Variable | Variable Name | Definition |
|----------|---------------|------------|
| pass     | Whether it passes the examination | If the application is approved, it is 1, otherwise it is 0. |
| female   | Female committee member | If there are female committee members participating in the issuance examination, it is 1, otherwise it is 0. |
| female_ratio | Proportion of female committee member | Proportion of female committee members participating in the insurance examination |
| female_fulltime | Part-time female committee member | If the female committee member participating in the insurance examination is full time, it is 1, otherwise it is 0. |
| female_parttime | Full time female committee member | If the female committee member participating in the insurance examination is part time, it is 1, otherwise it is 0. |
| female_senior | Senior female committee member | If the insurance examination experience of the participating female committee member is greater than the average value, it is 1, otherwise it is 0. |
| female_junior | Junior female committee member | If the insurance examination experience of the participating female committee member is smaller than the average value, it is 1, otherwise it is 0. |
| female_ncrsc | Female committee member from the CRSC | If the participating female committee member is from the CRSC, it is 1, otherwise it is 0. |
| female_crrsc | Female committee member not from the CRSC | If the participating female committee member is not from the CRSC, it is 1, otherwise it is 0. |
| female_law | Female committee members with lawyer background | If the participating female of committee member has the lawyer background, it is 1, otherwise it is 0. |
| female_ncrsc | Female committee members without lawyer background | If the participating female of committee member has no lawyer background, it is 1, otherwise it is 0. |
| female_nacct | Female committee members with accountant background | If the participating female of committee member has the accountant background, it is 1, otherwise it is 0. |
| female_acct | Female committee members without accountant background | If the participating female of committee member has no accountant background, it is 1, otherwise it is 0. |
| m_exp | Average insurance examination experience of participating committee members | The average value of natural logarithm of the number of times the committee members participating in the insurance examination |
| education | Average education level of participating committee members | The average education level of participating committee members: for each member, if he/she has Bachelors degree or above, it is 1, otherwise it is 0. |
| ab_size | Size | The natural logarithm of the average total assets of the company in the three years before listing minus the industry average value in the corresponding year |

(Continued)
| Variable   | Variable Name                           | Definition                                                                                                                                 |
|------------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| ab_lev     | Debt ratio                             | The average total liabilities divided by average total assets minus the industry average value in the three years before listing             |
| ab_roa     | Probability                            | The average net profit of the three years before listing divided by the average total assets minus the industry average value of the corresponding year |
| ab_growth  | Growth                                 | The average growth rate of operating revenue in the three years before listing minus the industry average value of corresponding years          |
| ab_vol     | Earnings volatility                    | The standard deviation of the company’s earnings in the three years before listing divided by the average value minus the average value of the corresponding year |
| Soe        | Nature of property rights              | If the actual controller is state-owned, it is 1, otherwise it is 0.                                                                     |
| cyb        | Growth Enterprise Market               | If the company is listed on the GEM, it is 1 m otherwise it is 0.                                                                       |
| H_vol      | High operating risk                    | If the standard deviation of the main business income of the applicant company in the past three years is greater than the median of the listed companies, it is 1, otherwise it is 0 |
| Strict     | Generally strict issuance examination  | If the total pass rate of the year is greater than the median, it is one, otherwise it is 0.                                              |
| BHAR12     | Excess returns of buying and holding in 12 months | The company’s accumulated income of 12 months after the listing minus the accumulated market income of the corresponding period          |
| BHAR24     | Excess returns are buying and holding in 24 months | The company’s accumulated income of 24 months after the listing minus the accumulated market income of the corresponding period          |
| wbigshare  | Shareholding ratio of major shareholders | The number of shares held by major shareholders divided by the total number of shares in the company                                      |
| mb         | Market to book ratio                   | Market value divided by book value                                                                                                     |
| indep      | Proportion of independent directors    | The number of Independent Directors divided by the number of board of directors                                                          |
| change_rev1| Changes of operating revenue in one year before and after listing | (Operating income of the year after listing – operating income of the year before listing)/operating revenue of the year before listing |
| change_income1 | Changes of net income in one year before and after listing | (Net income of the year after listing – net income of the year before listing)/net income of the year before listing |
| change_rev2| Changes of operating revenue in two years before and after listing | (Operating income of two years after listing – operating income of two years before listing)/operating revenue of two years before listing |
| change_income2 | Changes of net income in two years before and after listing | (Net income of two years after listing – net income of two years before listing)/net income of two years before listing |
| industry_change1 | Changes of operating income of industry | (Average operating income of the industry in the current year – average operating income of the industry in the previous year)/average operating income of the industry in the previous year |
| industry_change2 | Changes of net income of industry       | (Average net income of the industry in the current year – average net income of the industry in the previous year)/average net income of the industry in the previous year |