

**Courtesy calls for reciprocity: Evidence from the effect of unqualified independent
directors in China**

Yanlin Li^a, Jiawei Liu^b, Gary Gang Tian^a, Xin Wang^{b*}

a. Department of Applied Finance, Macquarie University, Australia

b. School of Accounting, Southwestern University of Finance and Economics, China

Abstract:

Some independent directors are recently described as “rubber stamps” in academic and practical circles, one potential explanation is that they may realise a benefit-exchange with firm insiders, but existing research fail to provide clear and direct evidence about the reciprocity relationship. Based on the qualification regulation in China, we complement existing studies by examining a more explicit reciprocity norm between unqualified independent directors (UIDs) and insiders, and find that UIDs are less likely to cast a dissenting vote, and the firms with UIDs have more expropriation and information opacity, suggesting that UIDs become less independent due to the exchange for valuable board seats and a threat from the breakdown of reciprocity norm. We further find these effects are more pronounced in firms with powerful controlling shareholders and when the external governance environment is weak. These results are still robust when we perform alternative explanation analysis, subsample and endogeneity tests.

Keywords: Unqualified independent directors; Reciprocity; Board voting

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*Yanlin Li's email address is yanlin.li@students.mq.edu.au, Gary Tian's email is gary.tian@mq.edu.au, Jiawei Liu email is 15802847066@163.com and Xin Wang's email address is yourwangxin@163.com..

1. Introduction

The independence is regarded as a primary quality for independent directors to stand for the interest of minority shareholders. Although Fama and Jensen (1983) have emphasised the significance of independent reputation in enabling directors to exert sufficient monitoring duty on firm management, some independent directors described as a “rubber stamp” sit more board seats during recent years (Adams et al., 2010). The extent studies document that the low independence of these directors can be explained by a mutual rent-seeking under a reciprocity norm¹ between insiders and independent directors (O’Reilly et al., 1988; Fich and White, 2005; Brick et al., 2006; Fiss, 2006; Boivie et al., 2015). In particular, consistent with Shivdasani and Yermack (1999), the likelihood of CEO interlock² is higher when the CEO is in the board nomination committee, resulting in negative market reaction (Lorsch and Young, 1990; Fich and White, 2005); Moreover, several studies find that director compensation and CEO pay are positively connected, indicating that board directors believe that it is fair enough to increase their own salaries when they have supported the increase of CEO compensation (O’Reilly et al., 1988; Brick et al., 2006; Fiss, 2006; Boivie et al., 2015). However, these studies only provide simple correlation among key variables rather than clear evidence reflecting the specific mechanism of reciprocity, and how the reciprocity affect board independence.

Some other studies document that there might be reciprocal exchanges between independent directors and insiders in ID nomination process. Researchers find that independent directors or the chair of compensation committee who are employed later than CEOs are positively associated with CEO compensation (Wade et al., 1990; Main et al., 1995), and that the dissenting votes of independent directors are positively associated with the departure of

¹ Ekeh (1974) describes the reciprocity norm among individuals as “an individual feels obligated to reciprocate another’s action, not by directly rewarding his benefactor, but by benefiting another actor implicated in a social exchange situation with his benefactor and himself”. In addition, the social exchange theory mentioned in some studies is the same as the reciprocity theory (Westphal and Clement, 2008).

² CEO interlock means a CEO in firm A is employed as an independent director in firm B whose CEO is also sitting on the board in firm A.

board chairs who have employed them (Ma and Khanna, 2016). The reason behind it may be that the indebtedness of independent directors to CEOs arising from the admitted access to board leads to less board independence (Stern and Westphal, 2010; Park et al., 2011). However, these studies only describe the psychological obligation of independent directors to insiders, and fail to present the real benefits and costs for both parties in the reciprocity norm, which insufficiently supports their arguments and findings. In addition, several studies mention that the CEO-director social connection enables independent directors to be more “friendly” to affiliated CEOs in compensation decisions (Westphal and Zajac, 1995; Hwang and Kim, 2009; Bruynseels and Cardinaels, 2013). Except for Gibbons (2004) who conjecture that the intimate friendship may also arouse the feelings of reciprocity, all the other studies do not explicitly link their research with reciprocity. In this study, we shed new light on how the reciprocity theory explains board independence by capturing a more explicit reciprocity norm between independent directors and insiders in China where officially unqualified independent directors (UIDs) compromise their monitoring duty for return the favour that the insiders allow them to gain board seats.

We explore the general question of how the reciprocity relationship between independent directors and insiders affects board independence by using Chinese data. Firstly, the relationship-based Chinese economy provides us an ideal environment to examine a more explicit reciprocity norm in which the real benefits and costs of the reciprocity for both parties exist. According to the Implementation Rules for Independent Directors Training of Listed Companies established in 2005, the China Securities Regulatory Commission (CSRC) regulated that all candidates for independent directors have to be qualified in the training class held by the Shanghai and Shenzhen Stock Exchanges before their first recruitment, or alternatively to be qualified in their first recruitment term. UIDs are not supposed to be recruited due to the lack of official qualification and the supply of qualified independent

directors who can provide more professional service for listed firms. Given the unique regulation background, we are able to explore whether the recruitment of UID leads to the change of board independence. Secondly, we can obtain the unique voting data in China rather than other countries. Since 2004, CSRC enforced all listed firms to release the voting records of all directors in board meetings, which could be used to open the “black box”³ on the board and investigate how UID specifically act on voting issues under the reciprocity norm with the insiders.

We use the reciprocity theory to explain the mechanism of UID recruitment, and propose that UID leads to a reciprocity norm with insiders. We explore the validity of prior argument by employing various empirical tests. In particular, we only focus on the independent directors who are employed for the first time, and find that, firstly, compared with the counterparts, UID are less likely to cast a dissenting vote and challenge firm management after they are admitted onto the board by insiders, which is more pronounced in firms with weak internal (higher concentrated ownership) and external governance environment. Secondly, we confirm that UID are positively associated with the expropriation of insiders, resulting in a higher ratio of other receivables in total assets and more related party transactions. Thirdly, UID are positively correlated with information opacity measured by earnings management. In addition, we rule out two alternative explanations, ID ability and social tie between independent directors and insiders, which are not able to drive our main results. In the robustness test, we obtain additional evidence that UID suffer shorter tenure from objecting insiders in voting issues. Our findings are still robust even when we perform subsample analysis and alleviate endogenous problems by employing difference-in-difference tests, instrument variable analysis and PSM test. Therefore, the empirical analysis in our paper

³ Adam et al. (2010) and Ma and Khanna (2016) describe the board as the “black box” because investors are not able to observe directors’ specific behaviour except that related information is disclosed by media coverage or lawsuits.

sufficiently supports the reciprocity argument that UIDs play a weak monitoring for returning the favour to insiders who has provided a valuable board seat to UIDs.

Our paper contributes to corporate governance studies in several ways. Firstly, this paper provides a more explicit reciprocity norm between UIDs and insiders than previous studies in which the reciprocal relationships are relatively vague and indirect. Some researchers find that the investors devalue CEO interlock when CEOs sit in the nomination committee (Lorsch and Young, 1990; Fich and White, 2005). The support from independent directors on increasing CEO compensation is exchanged for more director salaries (Fiss et al., 2006; Boivie et al., 2015). Some other papers also indicate that there might be some reciprocal exchanges in ID nomination process as independent directors would be obliged to insiders who may have a great impact on their successful recruitment (Wade et al., 1990; Main et al., 1995; Ma and Khanna, 2016), or that the social ties between independent directors and CEOs are positively associated with the growth of CEO pay, which may need further explanation in terms of reciprocity (Hwang and Kim, 2009). However, these related studies fail to present a more explicit reciprocity norm in which the exchange of interests can be clearly recognised. Our paper addresses this issue by identifying a more obvious reciprocity norm that the recruitment for UIDs is exchanged for more compliance in monitoring issues for insiders, which greatly extends reciprocity theory and prior studies.

Secondly, our paper complements existing literature regarding how the external regulations on ID nomination affect board independence. Prior studies document that CEOs have a significant impact on the selection of board candidates, resulting in more grey directors and less independent directors (Lorsch and Young, 1990; Shivdasani and Yermack, 1999). In post-SOX (Sarbanes–Oxley Act) period, SEC mandated that independent directors must comprise majority of board in all listed firms, which significantly improve the board independence, in particular when insiders extract more interests from shareholders (Linck et

al., 2008), and when the cost of acquiring information is low (Duchin et al., 2010). However, the evidence of how the establishment and enforcement of rules regarding the qualification of independent directors impact on board independence is still absent in previous studies. By using unique Chinese context where ID qualification is officially regulated, we find that UIDs are less likely to give a dissenting vote than their counterparts, which suggests that the mutual rent-seeking behaviour of independent directors and insiders arises from the imperfect legal enforcement of ID qualification rules, resulting in less board independence.

The remainder of the paper is constructed as follows. In Section 2, we introduce the general institutional background regarding rules of ID recruitment in China, and develop our hypotheses. In Section 3, we illustrate our data sources, descriptive analysis, and the construction of empirical models. In Section 4, we show our empirical results and explain them in detail. In Section 5, we check the robustness of empirical findings in this paper. In Section 6, we present our conclusions.

2. Institutional Background and Hypothesis Development

2.1 Institutional Background

The recruitment of independent directors was officially enforced according to the Guidelines for Introducing Independent Directors to the Board of Directors of Listed Companies (“Guidelines” for short) by CSRC in 2001, which aims to set up independent directors on the board to protect the interest of shareholders, especially minority shareholders in China where the second type of agency problem is more serious. Regarding the identity qualifications, the nominated independent directors and their relatives are not allowed to be employed in listed firms as well as subsidiaries, nor can they possess more than 1% of total shares; Moreover, they are not permitted to be the personnel providing financial, legal, and consulting services to listed companies or their affiliated companies. In addition, independent

directors are only required to participate in the training organised by CSRC and its authorised institutions, but the Guidelines did not specify how to implement this rule.

In 2005, CSRC further established the Implementation Rules for Independent Directors Training of Listed Companies that specifically mandated all independent directors to be qualified in the training class in the Shanghai and Shenzhen Stock Exchanges before they enter into the labour market, which fundamentally aims to make ID candidates aware of responsibility and norms when they are employed, instead of increasing their specific monitoring ability. In the training, firstly, they need to learn the code of conduct for independent directors, and further to recognise the importance of independence and obligation in their service; Moreover, they need to understand the general knowledge of operation principle, management strategy and capital operation in listed firms, and finally get qualification after passing the training test.

Due to the early development of the system of independent directors and limited opportunity of the registration for training (4 times per year), the qualified ID candidates may be in an undersupply for all listed firms⁴. Thus the rules also permit that ID candidates can be employed without the qualification, but they have to commit to be qualified in the latest training class within their first recruitment, and the information of obtaining qualification for UIDs should be disclosed in time⁵. UIDs who have been employed also face the reputation and dismissal risks. In particular, listed firms with UIDs have to report the status of whether UIDs have been qualified or not to the Stock Exchange and public⁶, a long-term failure of acquiring

⁴ Before 2005, ID qualification was not systematically enforced. By the time when Implementation Rules for Independent Directors Training of Listed Companies was announced, massive independent directors who were seating on the board were not qualified, they needed to participate to the training and obtain the qualification within current recruitment period, which was one reason why some candidates can be employed before getting the qualification.

⁵ See an example from Nan Shan (Stock code: 002314), source access: <http://www.cfi.net.cn/p20180914000557.html>

⁶ For instance, Pan Gang and Zhong Run Resource (Stock code: 000629 and 000506, respectively) were required to disclose the firm response to the concerning letter from Shenzhen Stock Exchange regarding the qualification status of UIDs. Source access: <http://money.163.com/07/0824/04/3MKQ79GP00251RJ2.html>, http://vip.stock.finance.sina.com.cn/corp/view/vCB_AllBulletinDetail.php?stockid=sz000506&id=4105959.

ID qualification may have a negative impact on director reputation and market reaction for the stock price. Moreover, UIDs who fail to realise their commitment can be legally dismissed by listed firms⁷, and they are no longer permitted to have any directorships in the future unless they obtain the qualification.

2.2 Hypothesis Development

Reciprocity norm has a universal code of moral conduct or interest exchange, individuals receiving benefits from others usually feel indebted, and not only help their benefactors to gain more interests, but also avoid taking actions that the benefactors averse (Westphal and Clement, 2008). Prior studies propose that the reciprocity relationship between independent directors and insiders exists, in particular, independent directors will be compromised in monitoring intensity to pay insiders back for the offered recruitment, which is insufficiently supported by vague and indirect evidence (Lorsch and Young, 1990; Main et al., 1995; Boivie et al., 2015; Ma and Khanna, 2016). While the Chinese context provide us an opportunity to clearly examine the real exchanged benefits under the reciprocity norm between independent directors and insiders. Ideally, all candidates for independent directors should be officially qualified by Shanghai and Shenzhen Stock Exchanges before they step into the labour market, but some unqualified candidates can still be permitted to be employed in listed firms. From the perspective of UIDs, compared with qualified independent directors, UIDs are less competent to have a position on the board because they are unqualified, and listed firms should consider primarily hiring qualified independent directors to avoid excessive attention from external investors and potentially negative market reaction. UIDs are supposed to have less opportunities to be hired than qualified directors. Thus, the recruitment onto the board could be regarded as a great kindness and value to UIDs from insiders. From the perspective of

⁷ See an example from Zhong Se (Stock code: 000758), source access: <http://stock.stockstar.com/notice/JC2014042400001251.shtml>

insiders, due to the dominant agency conflict between controlling and minority shareholders in China (Jiang et al., 2010), insiders are more likely to prefer “friendly” independent directors to avoid being intensively monitored. They may be benefited from the compliance of UIDs who feel indebted for being offered a valuable job opportunity. Therefore, this explicit reciprocity enables UIDs to be less independent.

In addition, we argue that the low independence of UIDs also could be explained by a threat from the breakdown of reciprocity norm. Ma and Khanna (2016) document that independent directors more possibly provide a dissenting vote when the end of reciprocity norm is clearly perceived. Inspired by this evidence, we conjecture that the recruitment of UIDs is extremely unstable because insiders can terminate their service at any time when they are not qualified according to the rules. If UIDs give a dissenting vote to challenge insiders and destroy the reciprocity norm, insiders are more likely to dismiss these UIDs by using legitimate reasons, such as the absence of official qualification.

Therefore, in accordance with the arguments of benefit-exchange between UIDs and insiders, and a threat from the breakdown of reciprocity norm, we assume that UIDs are more likely to lose their independence, and develop Hypotheses 1 as follows:

Hypotheses 1: Compared with qualified independent directors, UIDs are less independent after they are recruited.

3. Research Design

3.1 Sample

Our sample consists of non-financial listed firms in the Shanghai and Shenzhen Stock Exchanges from 2008 to 2016. The sample starts from 2008 because the information regarding ID qualification is incomplete before 2008. We hand-collected ID qualification data from the website disclosing the information of new independent directors in the Shanghai and Shenzhen Stock Exchanges and the announcement of ID recruitment in listed firms. Moreover, we hand-collected the voting records of all independent directors from board resolution report. Other

variables are from the CSMAR database. In order to get accurate results, we only keep the sample when the independent directors are employed for the first time. We ultimately obtain 15799 firm year-level and 33847 director year-level observations.

3.2 Unqualified Independent Directors

According to the Implementation Rules for Independent Directors Training of Listed Companies in China, all independent directors are required to be qualified in the training class in the Shanghai and Shenzhen Stock Exchanges and obtain the certification of ID qualification before their first recruitment, or commit to be qualified in the latest training class after they are employed for the first time. We construct three variables to measure the absent qualification of independent directors: (1) a dummy variable (UNQ_DUMMY), which equals 1 if a firm employs at least one UID, and 0 otherwise; (2) the number of UIDs (UNQ_NUMBER); and (3) the percentage of UIDs among all directors (UNQ_RATIO).

3.3 Voting of Independent Directors

Since 2004, Chinese listed firms are forced to disclose the voting information for each director in their board resolution report, which helps us to explore the specific voting behaviour in board meetings, and the voting data is currently unavailable in any other countries. Following Jiang et al. (2016) and Zhu et al. (2016), we construct the voting variable (DISSENT), which measures the disagreement of independent directors. In particular, DISSENT equals 1 when the vote belongs to one of the following six types, (1) an objection, (2) a reservation, (3) not voting for certain reasons (e.g. insufficient information), (4) a demurral, (5) an abstention, and (6) others, and 0 otherwise. Although the dissenting votes may not substantially prevent the passage of bad proposal in board meetings, they could be regarded as some bad signals in the management, and disseminate important information to outside investors in the market, resulting in intensive external monitoring to these firms.

3.4 Model Construction

We build models 1 and 2 to test Hypotheses 1, using the sample at director level and firm level respectively:

$$DISSENT = \alpha_0 + \alpha_1 UNQ_DUMMY + \sum \beta_i CONTROLS_i + \varepsilon \quad (1)$$

In model 1, the dependent variable is DISSENT; the independent variable is UNQ_DUMMY, which equals 1 if one independent directors is unqualified in his/her first recruitment, and 0 otherwise. Following prior research (Jiang et al., 2016; Ma and Khanna, 2016; Zhu et al., 2016), control variables consist of firm size (SIZE), return on net assets (ROE), the leverage ratio (LEVERAGE), CEO duality (DUAL), the number of directors on the board (BOARD), operating income growth rate (INCOME_RATIO), number of committees (COMMITTEE), the sum of share ratio from 2nd to 10th largest shareholders (TOP210), nature of enterprise (SOE), the gender of directors (GENDER), the age of directors (AGE), the educational background of directors (EDU), the compensation of one independent director (COMPENSATION), and the year-, industry- and director- fixed effects. See Appendix for definitions of variables as mentioned.

$$OTHER_REC / TRANSACTION_VARIABLES / ABSDA = \alpha_0 + \alpha_1 UNQ_VARIABLES + \sum \beta_i CONTROLS_i + \varepsilon \quad (2)$$

Model 2 is built to explore the impacts of UIDs on corporate governance. The dependent variables are other receivables (OTHER_REC), transaction variables (TRAN_NUMBER and TRAN_AMOUNT), and absolute earning management (ABSDA). In particular, OTHER_REC is proxied by the percentage of other receivables in total assets; TRAN_NUMBER and TRAN_AMOUNT stand for the number of related party transactions

and the logarithm of annual amount (RMB) of related party transactions; ABSDA is the absolute value of discretionary accruals estimated by adjusted Jones model. The independent variables are UNQ_DUMMY, UNQ_NUMBER and UNQ_RATIO. Following Jiang et al. (2010) and Zhu et al. (2016), model 2 includes the same control variables at the firm level as model 1.

4. Empirical Results

4.1 Descriptive Statistics

Panel A of Table 2 shows the descriptive results of the sample at firm level. In average, the other receivables account for 2% in total assets. 66.8% of firms have employed UIDs in our sample. Similar to the medians, the means of SIZE, ROE, LEVERAGE and BOARD are 21.91, 6.9%, 45% and 8.856, respectively. 27.7% of sample firms are controlled by the government. In Panel B, we report the descriptive analysis at director level. Roughly 10% of independent directors have given dissenting votes to insiders. The average ratio of female directors is 16.9%. A majority of independent directors have postgraduate degrees.

Table 1 Descriptive statistics

Panels A and B illustrate the descriptive statistics of variables at firm level and director levels, respectively.

Panel A: The sample at firm level						
Variable	N	Mean	S.D.	25th percentile	Median	75th percentile
OTHER_REC	15799	0.020	0.027	0.006	0.01	0.021
TRAN_NUMBER	15799	27.26	36.51	6	15	35
TRAN_AMOUNT	15799	44.84	79.30	20	22.80	38.30
ABSDA	15799	0.085	0.086	0.033	0.061	0.104
UNQ_DUMMY	15799	0.668	0.471	0	1	1
UNQ_NUMBER	15799	1.158	1.086	0	1	2

UNQ_RATIO	15799	0.133	0.125	0	0.111	0.222
SIZE	15799	21.91	1.248	21.03	21.77	22.64
ROE	15799	0.069	0.131	0.028	0.072	0.122
LEVERAGE	15799	0.450	0.223	0.274	0.443	0.617
DUAL	15799	0.231	0.421	0	0	0
BOARD	15799	8.856	1.761	8	9	9
INCOME_RATIO	15799	0.517	1.608	-0.040	0.134	0.451
COMMITTEE	15799	3.853	0.442	4	4	4
TOP210	15799	21.49	13.03	10.64	20	30.61
SOE	15799	0.277	0.447	0	0	1

Panel B: The sample at director level

DISSENT	33847	0.101	0.301	0	0	0
GENDER	33847	0.169	0.374	0	0	0
AGE	33847	52.79	9.795	46	51	60
EDU	33847	3.722	1.137	3	4	5
COMPENSATION	33847	9.982	0.281	9.750	9.946	10.18

4.2 Univariate Analysis

Table 2 presents the results of univariate analysis. Panel A demonstrates the comparison of dependent variables and main control variables between two groups divided by the value of UNQ_DUMMY. The results illustrate that firms with UNQs have more other receivables, related party transactions and earnings management, risky leverage and less minority shareholders. In Panel B at director level, UNQs are less likely to oppose to insiders, and they are relatively older and more compensated.

Table 2 Univariate statistics

This table presents the univariate results for dependent and some control variables. Panels A and B, respectively, show the univariate analysis at firm level and director levels. ***, ** and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Univariate analysis at firm level						
	UNQ_DUMMY=1		UNQ_DUMMY=0		Difference	
	(n=10560)		(n=5239)		Mean	Median
	Mean	Median	Mean	Median	T value	Z value
OTHER_REC	0.021	0.012	0.017	0.008	0.004*** (9.84)	0.004*** (24.47)
TRAN_NUMBER	28.001	16	25.758	15	2.243*** (3.64)	1 (1.14)
TRAN_AMOUNT	53.298	25.93	27.799	5.79	25.499*** (19.25)	20.14*** (64.22)
ABSDA	0.089	0.065	0.075	0.051	0.014*** (9.34)	0.014*** (17.56)
SIZE	21.925	21.764	21.891	21.776	0.034* (1.60)	-0.012 (-0.18)
ROE	0.068	0.073	0.069	0.069	-0.001 (-0.15)	0.004** (2.21)
LEVERAGE	0.460	0.459	0.429	0.412	0.031*** (8.21)	0.047*** (8.41)
TOP210	20.74	19.145	23.011	21.56	-2.271*** (-10.35)	-2.415*** (-10.84)
SOE	0.332	0	0.165	0	0.167*** (22.53)	0.000*** (22.18)

Panel B: Univariate analysis at director level						
	UNQ_DUMMY=1		UNQ_DUMMY=0		Difference	
	(n=18337)		(n=15510)		Mean	Median
	Mean	Median	Mean	Median	T value	Z value

DISSENT	0.086	0	0.113	0	-0.027*** (-8.29)	-0.000*** (-8.28)
GENDER	0.162	0	0.176	0	-0.014*** (-3.47)	-0.000*** (-3.47)
AGE	53.673	52	51.754	50	1.919*** (18.05)	2*** (16.85)
EDU	3.691	4	3.758	4	-0.067*** (-5.42)	-0.000*** (-5.76)
COMPENSATI ON	10.011	10.027	9.948	9.946	0.063*** (20.65)	0.081*** (23.71)

4.3 Multivariate Analysis

4.3.1 The Voting Behaviour of UIDs

In this section, we employ a multivariate analysis to examine the voting pattern of UIDs. In Table 3, the coefficient of UNQ_DUMMY in the full sample is -0.103, and significant at the 10% level (t-value is -1.82), which suggests that compared with qualified independent directors, UIDs are less likely to issue a dissenting vote, and exhibit more compliance with firm insiders under a reciprocity norm. The result is also economically significant. In particular, one standard deviation increase in UNQ_DUMMY is associated with a 5.1% decrease in DISSENT relative to the mean.

We further conduct a cross-sectional analysis by dividing the full sample into several groups with different levels of severity of agency problem and external institutional environment. The results in columns 2 and 3 shows that the negative relationship between UNQ_DUMMY and DISSENT is only significant when controlling shareholders have dominant shares and the conflict between controlling and minority shareholders is serious, and the difference test of coefficient is also significant at the 5% level. Using the marketization

index in Fan et al. (2011)⁸ to measure the quality of external institutional environment, we find that the withdrawal of issuing dissenting votes in UIDs is more pronounced in areas with weak external governance, the Chi-square value for the difference test of the coefficient of UNQ_DUMMY is 7.82, and the significance is at the 1% level. Thus, we conjecture that the reciprocity norm between UIDs and insiders is more likely to be built when controlling shareholders gain more power or the external monitoring is weak, resulting in lower probability of giving a dissenting vote by UIDs.

Table 3 Voting record analysis: unqualified independent directors

This table shows the logit regression of dissenting votes on UNQ_DUMMY. We explore this relationship by using the full sample in columns 1, the sample with high and low shares of controlling shareholder in columns 2 and 3, and the sample with high and low market development in columns 4 and 5, respectively. We also test the differences of UNQ_DUMMY coefficient between columns 2 and 3, and columns 4 and 5, respectively. The t-statistics are in parenthesis. Standard errors are robust to heteroscedasticity and firm level clustering. See Appendix for definitions of variables. ***, ** and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively.

		DISSENT				
		Full sample	High top share	Low top share	Low market development	High market development
UNQ_DUMMY		-0.103*	-0.195**	-0.014	-0.233***	-0.002
		(-1.82)	(-2.49)	(-0.18)	(-2.86)	(-0.02)
SIZE		0.062*	0.169***	0.001	0.101**	0.013
		(1.95)	(4.03)	(0.02)	(2.40)	(0.30)
ROE		-0.077*	-0.099	-0.053	-0.297***	-0.037
		(-1.94)	(-1.63)	(-1.25)	(-3.15)	(-0.77)
LEVERAGE		0.008	0.035***	-0.024	-0.032	0.004
		(0.85)	(8.31)	(-1.07)	(-0.47)	(0.48)

⁸ See Fan, G., Wang, X., and Zhu, H. 2011. The marketization index of China: the process of regional marketization report 2011, Beijing: Press of Economic Science [in Chinese]. We expand the index to 2016 in the latest edition.

DUAL	-0.151*	-0.236**	-0.048	-0.205**	-0.088
	(-1.86)	(-2.07)	(-0.44)	(-1.96)	(-0.73)
BOARD	0.074***	0.055**	0.081***	0.028	0.115***
	(3.48)	(2.03)	(2.64)	(1.06)	(3.87)
INCOME_RATIO	0.041**	0.032	0.052**	0.039	0.039*
	(2.52)	(1.54)	(2.19)	(1.53)	(1.81)
COMMITTEE	-0.012	0.005	0.008	0.024	-0.027
	(-0.18)	(0.05)	(0.08)	(0.28)	(-0.28)
TOP210	-0.010***	-0.017***	-0.012***	-0.013***	-0.006
	(-3.68)	(-3.73)	(-3.51)	(-3.37)	(-1.64)
SOE	0.378***	0.587***	0.269**	0.651***	0.124
	(4.06)	(4.59)	(2.20)	(4.58)	(1.04)
GENDER	0.059	0.074	0.026	0.065	0.022
	(0.98)	(0.83)	(0.31)	(0.75)	(0.27)
AGE	-0.021***	-0.019***	-0.022***	-0.018***	-0.024***
	(-7.91)	(-4.78)	(-6.21)	(-4.80)	(-6.55)
EDU	-0.103***	-0.115***	-0.088***	-0.110***	-0.099***
	(-4.44)	(-3.26)	(-2.88)	(-3.32)	(-3.00)
COMPENSATION	-0.092	0.103	-0.301	-0.027	-0.167
	(-0.74)	(0.63)	(-1.59)	(-0.14)	(-1.02)
Cons	-0.591	-4.768**	2.740	-1.766	1.027
	(-0.41)	(-2.54)	(1.29)	(-0.82)	(0.52)
YEAR_DUMMY				yes	
INDUSTRY_DUMMY				yes	
DIRECTOR_FIXED_EFFECT				yes	
UNQ_DUMMY coefficient difference test					
				(3)–(4)	(5)–(6)
Chi-square				4.83**	7.82***
P value				0.028	0.005
N	33847	16923	16924	16923	16924

pseudo R ²	0.106	0.121	0.108	0.114	0.109
LR Chi2	1471	1277	1248	892	646

According to the rules, any directors have to make a commitment that they promise to be qualified in the latest training held by Shanghai or Shenzhen Stock Exchange when they are recruited. There might be a more compact reciprocal relationship between UIDs and insiders if UIDs continue to stay on the board without honouring their commitment, because they are more likely to contribute compliance for paying back to insiders who further make a concession to keep these UIDs employed longer. To test this prediction, we only focus on the UID sample and construct UNCOMMIT that equals 1 if one UID is not qualified in the latest training class, and 0 otherwise, and explore its relationship with DISSENT.

In Table 4, the coefficients of UNCOMMIT in columns 1 and 2 are -0.438 and -0.330, respectively, both of which are significant at the 1% level. This finding suggests that UIDs who fail to realise the promise of being qualified in the latest training after their recruitment are less likely to dissent insiders and become less independent, because they feel more indebted to insiders for being permitted on the board seat longer. The results provide additional evidence confirming that a strong reciprocal relationship between UIDs and insiders is built.

Table 4 Voting record analysis: Unsuccessful commitment of gaining ID qualification

Panel A shows the univariate analysis of DISSENT in two different groups (UNCOMMIT equals 0 and 1), and Panel B illustrates the logit regression of dissenting votes on UNCOMMIT only in UID sample. We hand-collect UNCOMMIT which equals 1 if one UID is not qualified in the latest training class, and 0 otherwise. Control variables are absent in column 1, but they are included in column 2. The t-statistics are in parenthesis. Standard errors are robust to heteroscedasticity and firm level clustering. See Appendix for definitions of variables. ***, ** and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Univariate analysis

	UNCOMMIT=1	UNCOMMIT=0	Difference	
	(n=12607)	(n=5730)	Mean	Median

	Mean	Median	Mean	Median	T value	Z value
DISSENT	0.106	0	0.128	0	-0.022*** (-4.324)	-0.000*** (-4.322)

Panel B: Dissent and unsuccessful commitment of ID qualification

	DISSENT	
UNCOMMIT	-0.438*** (-5.75)	-0.330*** (-4.25)
SIZE		0.044 (1.06)
ROE		-0.115 (-1.60)
LEVERAGE		-0.003 (-0.29)
DUAL		-0.234* (-1.85)
BOARD		0.091*** (3.25)
INCOME_RATIO		0.021 (0.99)
COMMITTEE		0.047 (0.56)
TOP210		-0.014*** (-3.97)
SOE		0.426*** (3.63)
GENDER		0.082 (1.03)
AGE		-0.018*** (-5.03)
EDU		-0.063*

			(-1.95)
			0.098
COMPENSATION			(0.68)
		-0.859***	-2.776
Cons		(-3.51)	(-1.64)
<hr/>			
YEAR_DUMMY		yes	
INDUSTRY_DUMMY		yes	
DIRECTOR_FIXED_EFFECT		yes	
<hr/>			
N		18337	18337
pseudo R ²		0.110	0.133
LR Chi2		873	974
<hr/>			

4.3.2 UID and Tunnelling Effect

We further consider the impact of UID recruitment on corporate governance at the firm level. Prior studies find that controlling shareholders can expropriate minorities by using intercorporate loans which is measured by the ratio of other receivables in total assets (Jiang et al., 2010), or by propping up the scale of related party transaction to transfer valuable assets to the firm controlled by themselves (Cheung et al., 2006; Jian and Wong, 2010). In particular, we explore whether the presence of UIDs enhances the tunnelling effect of insiders proxied by the ratio of other receivables (OTHER_REC), the number and amount of related party transactions (TRAN_NUMBER and TRAN_AMOUNT).

In Panel A of Table 5, we find that all UID variables are significantly positive with tunnelling variables. In particular, the coefficients of UNQ_DUMMY in columns 1, 4 and 7 are 0.003, 2.955 and 24.753, respectively, with the significance at the 1% level. Panel B presents the results at the director level, and the presence of UID significantly increases OTHER_REC, TRAN_NUMBER and TRAN_AMOUNT by 0.002, 3.154 and 25.231, respectively. These results suggest that the compliance of UIDs has weakened the monitoring

effect on the tunnelling behaviour of insiders, resulting in more other receivables and larger scale of related party transactions.

Table 5 UID and tunnelling effect

Panel A presents OLS regression results at the firm level to test how the presence of UIDs affects the tunnelling behaviour of insiders, in particular, the dependent variables in columns 1 to 3, 4 to 6 and 7 to 9 are OTHER_REC, TRAN_NUMBER and TRAN_AMOUNT, respectively. The independent variables consist of UNQ_DUMMY, UNQ_NUMBER and UNQ_RATIO. Panel B shows the regression at director level, and there is only one independent variable (REC_DUMMY). The t-statistics are in parenthesis. Standard errors are robust to heteroscedasticity and firm level clustering. See Appendix for definitions of variables. ***, ** and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Tunnelling analysis at the firm level									
	OTHER_REC			TRAN_NUMBER			TRAN_AMOUNT		
UNQ_DUMMY	0.003***			2.955***			24.753***		
	(4.57)			(3.11)			(13.72)		
UNQ_NUMBER		0.001***			1.951***			9.144***	
		(2.83)			(3.50)			(8.92)	
UNQ_RATIO			0.007***			15.845***			81.176***
			(2.78)			(3.76)			(10.07)
SIZE	-	-	-	12.381***	12.318***	12.324***	35.411***	35.402***	35.370***
	0.003***	0.003***	0.003***	(16.70)	(16.89)	(16.81)	(17.90)	(17.93)	(17.93)
	(-7.19)	(-7.13)	(-7.13)						
ROE	-	-	-	-6.648**	-6.339**	-6.397**	-24.148***	-23.466***	-23.535***
	0.011***	0.011***	0.011***	(-2.25)	(-2.16)	(-2.17)	(-4.15)	(-3.99)	(-4.01)
	(-3.69)	(-3.69)	(-3.70)						
LEVERAGE	0.029***	0.029***	0.029***	33.910***	34.244***	34.193***	29.677***	30.814***	30.750***
	(10.71)	(10.74)	(10.73)	(15.11)	(15.28)	(15.26)	(6.55)	(6.85)	(6.82)
DUAL	-0.001	-0.001	-0.001	-4.330***	-4.340***	-4.310***	0.851	0.535	0.716
	(-1.06)	(-1.13)	(-1.11)	(-5.31)	(-5.33)	(-5.29)	(0.53)	(0.34)	(0.45)
BOARD	0.000	0.000	0.000	0.443	0.322	0.595*	0.481	-0.034	1.308*
	(0.80)	(0.60)	(1.14)	(1.30)	(0.97)	(1.71)	(0.63)	(-0.04)	(1.71)
INCOME_RATIO	0.001**	0.001**	0.001**	-0.125	-0.137	-0.139	0.680	0.599	0.587
	(2.40)	(2.35)	(2.34)	(-0.76)	(-0.83)	(-0.84)	(1.52)	(1.31)	(1.29)
COMMITTEE	-0.002*	-0.002**	-0.002**	0.542	0.493	0.497	-0.190	-0.661	-0.634
	(-1.91)	(-1.98)	(-1.98)	(0.57)	(0.52)	(0.52)	(-0.08)	(-0.28)	(-0.27)
TOP210	-0.000	-0.000	-0.000	-0.165***	-0.162***	-0.163***	0.065	0.066	0.063
	(-1.28)	(-1.33)	(-1.35)	(-4.60)	(-4.50)	(-4.55)	(0.74)	(0.75)	(0.71)
SOE	-	-	-	0.514	0.599	0.622	-4.629**	-4.554**	-4.362**

	0.003***	0.003***	0.003***						
	(-2.92)	(-2.94)	(-2.93)	(0.47)	(0.55)	(0.57)	(-2.28)	(-2.22)	(-2.13)
Cons	0.096***	0.098***	0.097***	-269.292***	-267.570***	-269.882***	-764.289***	-750.420***	-762.200***
	(8.94)	(9.12)	(8.98)	(-15.59)	(-15.75)	(-15.62)	(-18.12)	(-17.83)	(-18.04)
YEAR_DUMMY				yes					
INDUSTRY_DUMMY				yes					
N	15799	15799	15799	15799	15799	15799	15799	15799	15799
R ²	0.134	0.132	0.132	0.314	0.315	0.315	0.369	0.364	0.365
F	12.72	12.15	12.11	32.84	33.78	33.12	25.14	22.67	22.90

Panel B: Tunnelling analysis at the director level

	OTHER_REC	TRAN_NUMBER	TRAN_AMOUNT
UNQ_DUMMY	0.002*** (3.30)	3.154*** (3.25)	25.231** (2.45)
SIZE	-0.002*** (-4.01)	14.447*** (13.79)	75.690*** (5.04)
ROE	-0.002*** (-2.70)	-1.437** (-2.57)	-144.418 (-1.00)
LEVERAGE	0.001 (1.44)	1.790*** (3.67)	8.555* (1.93)
DUAL	-0.001* (-1.71)	-4.947*** (-4.84)	-41.832 (-1.34)
BOARD	0.000 (1.61)	0.729* (1.78)	-2.185 (-0.75)
INCOME_RATIO	0.001** (2.44)	0.320 (1.58)	-5.884 (-1.33)
COMMITTEE	-0.001 (-1.32)	1.598 (1.43)	0.543 (0.02)
TOP210	-0.000*** (-4.25)	-0.246*** (-5.92)	-1.404 (-1.62)
SOE	-0.003** (-2.27)	1.177 (0.95)	-97.878 (-1.53)
GENDER	-0.000	-1.985**	-29.727

	(-0.78)	(-2.48)	(-1.23)
AGE	-0.000*	-0.025	-0.530
	(-1.87)	(-0.51)	(-0.66)
EDU	-0.000*	-0.603*	-16.091
	(-1.88)	(-1.69)	(-1.14)
COMPENSATION	0.000	-0.282	20.290
	(0.23)	(-0.20)	(0.92)
Cons	0.072***	-297.452***	-1568.223***
	(3.97)	(-9.92)	(-4.06)
YEAR_DUMMY		yes	
INDUSTRY_DUMMY		yes	
DIRECTOR_FIXED_EFFECT		yes	
N	33847	33847	33847
R ²	0.094	0.284	0.005
F	7.79	18.84	5.42

4.3.3 UID and Earnings Quality

In this section, we explore UIDs' monitoring on earnings statement. Based on reciprocity theory, UIDs are more likely to realise an interest exchange with insiders, in which UIDs will be more compliant to insiders as a payback for being admitted onto the board, and weaken the supervising power in the quality of earnings statement. Following Dechow et al. (2010) and Chen et al. (2011), we calculate the absolute value of discretionary accruals estimated by adjusted Jones model, which is defined as earnings management (ABSDA) to measure the earnings quality in financial report.

The results in Table 6 show that UNQ_DUMMY is significantly positive with ABSDA both at the firm and director level, which suggests that the presence of UIDs on the board has weakened the monitoring power in manipulating earning numbers by insiders, resulting in low quality of information disclosure. Moreover, we find that this negative relationship is more

pronounced in firms with more dominance of controlling shareholders, and in areas with weaker external monitoring power, which supports the reciprocity hypotheses between UIDs and insiders.

Table 6 UID and earnings management

This table shows the results of the relationship between UIDs and earnings management. The dependent variable is ABSDA, measured by the absolute value of discretionary accruals estimated by adjusted Jones model. The independent variables, in particular, are UNQ_DUMMY, UNQ_NUMBER and UNQ_RATIO in columns 1 to 3 at the firm level, respectively, and only UNQ_DUMMY in columns 4 to 8. Columns 4 and 5 represent the results of the sample with large and low equity holdings of controlling shareholders, and columns 6 and 7 represent the results of the sample with weak and strong external governance environment. Column 8 shows the regression results at the director level. The t-statistics are in parenthesis. Standard errors are robust to heteroscedasticity and firm level clustering. See Appendix for definitions of variables. ***, ** and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively.

	ABSDA							
	Firm level					Director level		
	Full sample		HTS	LTS	LMD	HMD		
UNQ_DUMMY	0.009*** (5.04)		0.016*** (6.71)	0.002 (0.74)	0.013*** (5.36)	0.004* (1.80)	0.006** (2.09)	
UNQ_NUMBER	0.003*** (3.95)							
UNQ_RATIO		0.025*** (3.95)						
SIZE	-0.005*** (-5.41)	-0.005*** (-5.39)	-0.005*** (-5.39)	-0.005*** (-3.98)	-0.008*** (-5.40)	-0.005*** (-3.84)	-0.005*** (-4.30)	-0.002 (-0.92)
ROE	-0.006 (-0.70)	-0.006 (-0.69)	-0.006 (-0.69)	0.023* (1.77)	-0.032*** (-2.65)	0.012 (0.73)	-0.017* (-1.67)	0.018 (0.69)
LEVERAGE	0.059*** (10.54)	0.059*** (10.61)	0.059*** (10.61)	0.052*** (7.15)	0.070*** (9.04)	0.061*** (7.31)	0.061*** (8.42)	0.009** (2.47)
DUAL	0.003 (1.60)	0.003 (1.53)	0.003 (1.56)	0.001 (0.25)	0.003 (1.29)	0.003 (1.01)	0.002 (0.81)	0.012** (2.10)
BOARD	-0.002*** (-4.17)	-0.002*** (-4.45)	-0.002*** (-3.62)	-0.001** (-2.17)	-0.002*** (-3.05)	-0.002** (-2.11)	-0.002*** (-3.55)	-0.003** (-2.14)
INCOME_RATIO	0.006***	0.006***	0.006***	0.007***	0.005***	0.006***	0.006***	0.015***

	(7.21)	(7.18)	(7.17)	(5.72)	(4.43)	(4.93)	(5.44)	(3.93)
COMMITTEE	-0.000	-0.000	-0.000	0.001	-0.002	0.002	-0.002	0.000
	(-0.15)	(-0.25)	(-0.25)	(0.60)	(-0.79)	(1.16)	(-0.83)	(0.03)
TOP210	0.000***	0.000***	0.000***	0.000***	0.000***	0.000	0.000***	0.001**
	(3.24)	(3.22)	(3.21)	(3.23)	(4.72)	(0.60)	(3.58)	(2.35)
SOE	-0.006**	-0.006**	-0.006**	-0.005	-0.008**	-0.007**	-0.004	-0.006
	(-2.50)	(-2.51)	(-2.48)	(-1.62)	(-2.48)	(-2.01)	(-1.22)	(-1.13)
GENDER								-0.000
								(-0.14)
AGE								-0.000**
								(-2.02)
EDU								-0.003*
								(-1.86)
COMPENSATION								-0.009
								(-1.12)
Cons	0.189***	0.194***	0.190***	0.170***	0.241***	0.216***	0.199***	0.274***
	(9.28)	(9.59)	(9.36)	(6.38)	(8.04)	(6.94)	(7.45)	(3.43)
YEAR_DUMMY					yes			
INDUSTRY_DUMMY					yes			
DIRECTOR_FIXED_EFFECT	-	-	-	-	-	-	-	yes
					UNQ_DUMMY coefficient difference test			
					(4)-(5)	(6)-(7)		
Chi-square					23.35***	8.51***		
P value					0.000	0.004		
N	15799	15799	15799	7899	7900	7899	7900	33847
R ²	0.086	0.085	0.085	0.089	0.106	0.092	0.089	0.045
F	20.54	19.64	19.54	21.83	26.65	13.64	10.28	5.86

4.3.4 Alternative Explanation: ID Ability

Previous findings show that the unqualified identity of independent directors is associated with a lower likelihood of issuing a dissenting vote, which may be potentially explained by the factor of ID ability. In particular, UNQs may consist of the candidates with lower ability, and they are not able to dissent from bad proposals due to the lack of strong working ability, we doubt that our results may be driven more by low ID ability rather than by

the reciprocal needs of UIDs and insiders. To address this problem, we create ABILITY to measure the ability of independent directors, which is 2 when an independent director holds a senior job title⁹ and a postgraduate degree, 1 when only one type is held, and 0 otherwise, and test whether the voting behaviour of UIDs is significantly changed in different ability groups.

In Table 7, we regress the model using the sample when ABILITY equals 2 and 0, and show the results at columns 1 and 2, respectively. The results show that the relationship between UIDs and the likelihood of issuing a dissenting vote is still significantly negative, and there is not any significant difference in UNQ_DUMMY coefficient between two groups (0.332 as the P-value in the difference test). Moreover, we equally divide the sample into 3 groups based on the order of ABILITY, the results of top and bottom ability groups in columns 3 and 4 are similar to previous findings, which suggests that our main hypothesis is not explained by ID ability.

Table 7 ID ability analysis

This table shows the voting behaviour of UIDs in different ability groups. We create ABILITY to measure the ability of independent directors, which is 2 when an independent director holds a senior job title and a postgraduate degree, 1 when only one type is held, and 0 otherwise. We regress the model using the sample when ABILITY equals 2 and 0, and show the results at column 1 and 2, respectively. Meanwhile, we equally divide the sample into 3 groups based on the order of ABILITY, columns 3 and 4 show the results of top and bottom ability groups. The t-statistics are in parenthesis. Standard errors are robust to heteroscedasticity and firm level clustering. See Appendix for definitions of variables. ***, ** and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively.

	DISSENT			
	ABILITY=2	ABILITY=0	high ability	Low ability
UNQ_DUMMY	-0.261** (-2.35)	-0.148* (-1.65)	-0.216** (-2.38)	-0.158* (-1.89)
SIZE	0.053	-0.005	0.040	-0.003

⁹ A senior job title here may be a professor, a senior statistician or a senior economist etc. that represents people with superior ability in different industries.

	(0.99)	(-0.11)	(0.93)	(-0.06)
ROE	-0.232	0.043	-0.093	0.001
	(-1.27)	(0.74)	(-1.30)	(0.01)
LEVERAGE	0.066	-0.004	0.021***	0.004
	(0.63)	(-0.29)	(2.66)	(0.38)
DUAL	-0.097	-0.057	-0.187	-0.069
	(-0.68)	(-0.52)	(-1.53)	(-0.68)
BOARD	0.060*	0.087***	0.078***	0.087***
	(1.83)	(2.64)	(2.86)	(2.85)
INCOME_RATIO	0.096***	-0.004	0.076***	0.004
	(3.98)	(-0.12)	(3.62)	(0.15)
COMMITTEE	-0.116	0.098	-0.119	0.089
	(-0.99)	(0.97)	(-1.26)	(0.94)
TOP210	-0.014***	-0.011***	-0.011***	-0.008**
	(-2.94)	(-2.69)	(-2.79)	(-2.21)
SOE	0.431***	0.425***	0.398***	0.454***
	(2.80)	(3.01)	(3.13)	(3.52)
GENDER	-0.017	-0.035	0.078	0.016
	(-0.12)	(-0.34)	(0.71)	(0.16)
AGE	-0.028***	-0.011***	-0.027***	-0.012***
	(-3.74)	(-3.01)	(-5.18)	(-3.41)
COMPENSATION	-0.158	-0.277	-0.124	-0.326*
	(-0.66)	(-1.40)	(-0.69)	(-1.73)
Cons	0.256	1.634	0.123	2.051
	(0.10)	(0.74)	(0.06)	(0.99)
YEAR_DUMMY			yes	
INDUSTRY_DUMMY			yes	
DIRECTOR_FIXED_EFFECT			yes	
UNQ_DUMMY coefficient difference test				
	(1)–(2)		(3)–(4)	

Chi-square	0.94		0.33	
P value	0.332		0.563	
N	7793	9834	11282	11283
pseudo R ²	0.108	0.103	0.110	0.102
LR Chi2	531	3110	691	1258

4.3.5 Alternative Explanation: Social Tie

In this section, we rule out another alternative explanation, the effect of social affiliation between UIDs and insiders. Previous studies indicate that independent directors become less independent when they are socially affiliated with CEOs or other executives, resulting in more CEO compensation and worse performance (Hwang and Kim, 2009; Fracassi and Tate, 2012). We suspect that our results are interrupted by personal ties as the lower possibility of dissenting vote and more expropriation may be driven much by the personal connections between UIDs and insiders rather than by their reciprocity exchange. Therefore, we construct three variables to measure various personal ties between UIDs and insiders: (1) WORK_TIE, equals 1 if one independent director has worked together with the CEO or the chairman, and 0 otherwise; POLITICAL_TIE, equals 1 if one independent director has been politically affiliated with the CEO or the chairman, and 0 otherwise; (3) ALUMNI, equals 1 if one independent director has the same educational experience with the CEO or the chairman, and 0 otherwise.

In Table 8, we find that UNQ_DUMMY is still significant in all columns when WORK_TIE, POLITICAL_TIE and ALUMNI are either individually or collectively controlled in our model, which suggests that our explanation of reciprocity effect is not significantly interrupted by the personal ties between UIDs and insiders.

Table 8 Personal tie analysis

This table shows the results when various personal ties are considered in the regression. We construct three variables to measure various personal ties between UIDs and insiders: (1) WORK_TIE, equals 1 if one independent director has worked together with the CEO or the chairman, and 0 otherwise; POLITICAL_TIE,

equals 1 if one independent director has been politically affiliated with the CEO or the chairman, and 0 otherwise;

(3) ALUMNI, equals 1 if one independent director has the same educational experience with the CEO or the chairman, and 0 otherwise. We perform the main regressions when WORK_TIE, POLITICAL_TIE and ALUMNI are either individually or collectively controlled in our model. The t-statistics are in parenthesis. Standard errors are robust to heteroscedasticity and firm level clustering. See Appendix for definitions of variables. ***, ** and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively.

	DISSENT			
UNQ_DUMMY	-0.104*	-0.104*	-0.103*	-0.105*
	(-1.84)	(-1.83)	(-1.81)	(-1.85)
WORK_TIE	-1.216***			-1.216***
	(-3.53)			(-3.53)
POLITICAL_TIE		-1.740*		-1.743*
		(-1.86)		(-1.87)
ALUMNI			0.308	0.303
			(0.46)	(0.45)
SIZE	0.061*	0.063**	0.062*	0.062*
	(1.92)	(1.96)	(1.95)	(1.93)
ROE	-0.077**	-0.076*	-0.077*	-0.077*
	(-1.96)	(-1.94)	(-1.94)	(-1.96)
LEVERAGE	0.007	0.008	0.008	0.007
	(0.82)	(0.85)	(0.85)	(0.83)
DUAL	-0.149*	-0.150*	-0.151*	-0.148*
	(-1.84)	(-1.85)	(-1.86)	(-1.84)
BOARD	0.075***	0.074***	0.074***	0.075***
	(3.53)	(3.47)	(3.48)	(3.52)
INCOME_RATIO	0.041**	0.040**	0.041**	0.040**
	(2.53)	(2.49)	(2.51)	(2.50)
COMMITTEE	-0.013	-0.011	-0.012	-0.012
	(-0.19)	(-0.16)	(-0.18)	(-0.18)
TOP210	-0.010***	-0.010***	-0.010***	-0.010***

	(-3.60)	(-3.69)	(-3.68)	(-3.62)
SOE	0.378***	0.379***	0.378***	0.379***
	(4.06)	(4.07)	(4.06)	(4.07)
GENDER	0.063	0.058	0.059	0.062
	(1.05)	(0.97)	(0.99)	(1.04)
AGE	-0.020***	-0.021***	-0.021***	-0.020***
	(-7.73)	(-7.87)	(-7.91)	(-7.69)
EDU	-0.102***	-0.103***	-0.103***	-0.102***
	(-4.40)	(-4.44)	(-4.44)	(-4.41)
COMPENSATION	-0.090	-0.091	-0.092	-0.089
	(-0.73)	(-0.74)	(-0.74)	(-0.72)
Cons	-0.603	-0.606	-0.589	-0.617
	(-0.42)	(-0.42)	(-0.41)	(-0.43)
YEAR_DUMMY			yes	
INDUSTRY_DUMMY			yes	
DIRECTOR_FIXED_EFFECT			yes	
N	33847	33847	33847	33847
pseudo R ²	0.107	0.106	0.106	0.107
LR Chi2	1400	1420	1471	1439

5. Robustness Test

5.1 The Threat from the Breakdown of Reciprocity Norm

Apart from the benefit effect of the reciprocity norm, we would like to see whether the low independence of UIDs is driven by the threat from the breakdown of reciprocity relationship between UIDs and insiders. Due to the unqualified identity, we assume that insiders can dismiss UIDs at any time if they encounter some challenges from authorities, thus, UIDs are less likely to show a disagreement in board meetings. In order to provide some convincing evidence to the threat argument, we examine the variation of tenure when UIDs or

some of them who fail to realise the commitment provide a dissenting vote. The dependent variable is TENURE, and independent variables are AFTER_DISSENT, UNQ_DUMMY, UNCOMMIT and their interactions, AFTER_DISSENT here equals 1 if one independent director has given a dissenting vote from the time of being hired to the sample year, and 0 otherwise.

In the columns 1 and 2 of Table 9, we regress the model by using the full sample at the director level, and find that if UIDs have given a dissenting vote, their tenure will be significantly shortened, which is supported by the significantly negative coefficient of the interaction of UNQ_DUMMY and AFTER_DISSENT. Similarly, we only pick up the UID sample in columns 3 and 4, and find that UIDs who fail to realise the qualification commitment suffer much shorter tenure from proposing a dissenting vote. Prior findings indicate that under the threat of breakdown of reciprocity norm, UIDs are more compliant to insiders, which is consistent with the evidence in Ma and Khanna (2016) and greatly support our argument.

Table 9 The threat analysis

This table tends to test the effect of a threat from the breakdown of reciprocity norm between UIDs and insiders. In particular, we examine the variation of tenure when UIDs or some of them who fail to realise the commitment provide a dissenting vote. The dependent variable is TENURE, and independent variables are AFTER_DISSENT, UNQ_DUMMY, UNCOMMIT and their interactions, AFTER_DISSENT here equals 1 if one independent director has given a dissenting vote from the time of being hired to the sample year, and 0 otherwise. Columns 1 and 2 present the results using the full sample, while column 3 and 4 show the results using UID sample. The t-statistics are in parenthesis. Standard errors are robust to heteroscedasticity and firm level clustering. See Appendix for definitions of variables. ***, ** and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively.

	TENURE			
AFTER_DISSENT	0.132** (2.13)	0.152** (2.44)	0.158*** (3.20)	0.192*** (3.88)
UNQ_DUMMY	1.481***	1.419***		

	(31.35)	(29.97)		
UNQ_DUMMY*AFTER_DISSENT	-0.239***	-0.231***		
	(-3.01)	(-2.86)		
UNCOMMIT			1.146***	1.089***
			(30.23)	(28.49)
UNCOMMIT*AFTER_DISSENT			-0.189***	-0.172***
			(-3.10)	(-2.83)
SIZE		-0.049***		-0.078***
		(-2.90)		(-6.38)
ROE		-0.003		0.022
		(-0.18)		(0.98)
LEVERAGE		-0.003		-0.002
		(-0.61)		(-0.70)
DUAL		0.057		0.030
		(1.51)		(0.90)
BOARD		-0.002		-0.028***
		(-0.18)		(-3.64)
INCOME_RATIO		-0.019*		-0.025***
		(-1.90)		(-2.75)
COMMITTEE		-0.063		-0.104***
		(-1.57)		(-3.73)
TOP210		-0.002		-0.000
		(-1.20)		(-0.10)
SOE		-0.039		-0.022
		(-0.84)		(-0.70)
GENDER		-0.055		-0.049
		(-1.36)		(-1.37)
AGE		0.030***		0.025***
		(17.24)		(17.72)
EDU		0.073***		0.074***

		(4.89)		(5.77)
COMPENSATION		0.116*		0.011
		(1.91)		(0.16)
Cons	-0.004	-1.510**	0.484***	1.253*
	(-0.03)	(-2.13)	(4.63)	(1.68)
<hr/>				
YEAR_DUMMY			yes	
INDUSTRY_DUMMY			yes	
DIRECTOR_FIXED_EFFECT			yes	
<hr/>				
N	33847	33847	18337	18337
R ²	0.178	0.198	0.223	0.239
F	110.38	86.90	249.31	187.93
<hr/>				

5.2 Subsample Analysis

Our previous findings are based on the full sample which includes the firms without UID recruitment. Following Lennox et al. (2014), the results would be more precise if we directly compare the voting behaviour between UIDs and non-UIDs only in firms with UID recruitment. We repeat our regression by using the subsample to explore whether the results are robust.

Table 10 shows that the coefficients of UNQ_DUMMY in two columns are -0.377 and -0.353, respectively, the significance of which is stable at the 1% level, suggesting that our results are robust in subsample test.

Table 10 Subsample tests for firms with UID recruitment

This table shows the logit regression of dissenting votes on UNQ_DUMMY in subsample that consists of UIDs and non-UIDs only in firms with UID recruitment. Control variables are not included in column1, but presented in column 2. The t-statistics are in parenthesis. Standard errors are robust to heteroscedasticity and firm level clustering. See Appendix for definitions of variables. ***, ** and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively.

DISSENT

UNQ_DUMMY	-0.377*** (-5.91)	-0.353*** (-5.47)
SIZE		0.051 (1.39)
ROE		-0.114* (-1.74)
LEVERAGE		0.007 (0.83)
DUAL		-0.198** (-1.98)
BOARD		0.070*** (2.93)
INCOME_RATIO		0.038** (2.08)
COMMITTEE		0.021 (0.27)
TOP210		-0.012*** (-3.89)
SOE		0.388*** (3.76)
GENDER		0.055 (0.81)
AGE		-0.021*** (-6.98)
EDU		-0.086*** (-3.21)
COMPENSATION		0.150 (1.13)
Cons	-0.657*** (-3.39)	-2.697* (-1.71)

YEAR_DUMMY		yes
INDUSTRY_DUMMY		yes
DIRECTOR_FIXED_EFFECT		yes
N	24213	24213
pseudo R ²	0.089	0.108
LR Chi2	1009	1040

5.3 A Shock from the Exodus of Independent Directors

Our findings show that the reciprocity norm between UIDs and insiders is built in the process when UIDs are recruited by insiders, resulting in poor monitoring and corporate governance, while, this conclusion may suffer the endogeneity problem that the likelihood of UID recruitment may be higher in firms with poor corporate governance. Using an exogenous shock can significantly alleviate this problem, which has been applied in many studies (Gormley et al., 2013; Chen et al., 2015; Li and Zhang, 2015). In 2013, the Central Organization Department of the CPC issued the Rule No.18¹⁰ which stipulated that the cadres are no longer permitted being recruited as an independent director on the board, and it was suddenly announced to the public. This shock ideally prevents the resource based reciprocity in which firms prefer to do a favour to some UIDs who are politically connected in order to get the access to valuable resources from the government (Fan et al., 2007; Wang, 2015), while politically connected UIDs are not necessarily compliant to insiders as they bring substantial benefit from government to firms. Therefore, the social exchange based reciprocity between insiders and UIDs became significant after Rule No.18 was enforced, and UIDs can only provide their compliance to insiders as the exchanged benefit. We predict that UIDs are less likely to give a dissenting vote after the shock.

¹⁰ The full name of Document No.18 is "Rules on Further Standardizing the Part-time Recruitment of Party and Government Leading Cadres".

We construct a variable, POST, to measure the shock of Rule No.18, it equals 1 if the sample year is 2013 or after, and 0 otherwise. The treatment and control group consist of UID sample and qualified independent director sample, respectively. In Table 11, we use the difference-in-difference estimation to further address the endogeneity problem. In particular, columns 1 and 2 present the results with the full sample. In columns 3 and 4, we match the sample in treatment and control groups by using PSM method, and show the results with the PSM sample. We find that the coefficient of the interaction of UNQ_DUMMY and POST is consistently negative with DISSENT in all columns, which suggests that compared with the sample in control group, the reciprocity effect is more pronounced after the shock in the treatment group (UID sample). We also exploit a placebo test to examine whether the results from DID method would be changed if we choose a different year to measure the post effect, thus, we create a new variable, POST_PLACEBO, to be 1 if the sample year is 2012 or after, and 0 otherwise. In unreported table, we find that the interaction of UNQ_DUMMY and POST_PLACEBO is insignificant with DISSENT, which proves that our prior DID analysis is effective.

Table 11 Difference-in-difference analysis

This table presents the results when we use the DID method to release the endogeneity problem. In 2013, the Central Organization Department of the CPC issued the Rule No.18, which could be a shock in the DID analysis. We construct a variable, POST, to measure the shock of Rule No.18, it equals 1 if the sample year is 2013 or after, and 0 otherwise. The treatment and control group consist of UID sample and qualified independent director sample, respectively. Columns 1 and 2 present the results with the full sample. Columns 3 and 4 show the results with the PSM sample. The t-statistics are in parenthesis. Standard errors are robust to heteroscedasticity and firm level clustering. See Appendix for definitions of variables. ***, ** and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively.

	DISSENT			
	Full sample		PSM sample	
UNQ_DUMMY	-0.021	0.005	-0.055	-0.028

	(-0.29)	(0.07)	(-0.70)	(-0.35)
	-2.039 ^{***}	-1.703 ^{***}	-2.126 ^{***}	-1.782 ^{***}
POST	(-17.68)	(-12.28)	(-16.15)	(-11.23)
	-0.235 ^{**}	-0.273 ^{***}	-0.193 [*]	-0.235 ^{**}
UNQ_DUMMY*POST	(-2.25)	(-2.60)	(-1.76)	(-2.13)
		0.063 ^{**}		0.053
SIZE		(1.97)		(1.60)
		-0.076 ^{**}		-0.087 ^{**}
ROE		(-1.96)		(-2.00)
		0.008		0.005
LEVERAGE		(0.87)		(0.55)
		-0.151 [*]		-0.164 ^{**}
DUAL		(-1.86)		(-1.97)
		0.074 ^{***}		0.072 ^{***}
BOARD		(3.51)		(3.61)
		0.041 ^{**}		0.034 [*]
INCOME_RATIO		(2.54)		(1.88)
		-0.011		-0.058
COMMITTEE		(-0.16)		(-0.84)
		-0.010 ^{***}		-0.009 ^{***}
TOP210		(-3.75)		(-3.40)
		0.376 ^{***}		0.353 ^{***}
SOE		(4.04)		(3.65)
		0.057		0.024
GENDER		(0.96)		(0.34)
		-0.021 ^{***}		-0.022 ^{***}
AGE		(-7.90)		(-7.38)
		-0.104 ^{***}		-0.102 ^{***}
EDU		(-4.46)		(-4.05)
COMPENSATION		-0.093		-0.075

		(-0.75)		(-0.57)
	-0.898***	-0.686	-0.682***	-0.180
Cons	(-4.49)	(-0.48)	(-3.07)	(-0.12)
<hr/>				
YEAR_DUMMY			yes	
INDUSTRY_DUMMY			yes	
DIRECTOR_FIXED_EFFECT			yes	
<hr/>				
N	33847	33847	26450	26450
pseudo R ²	0.089	0.107	0.079	0.095
LR Chi2	1289	1472	1058	1164
<hr/>				

5.4 Instrument Variable Analysis

In this section, we use the legal environment index and the supply of local candidates as two instrument variables to perform a 2SLS analysis to address the endogeneity problem. We believe that unqualified variables could be affected by the supply of ID candidates and the legal environment, while these two instrument variables are not correlated with the management behaviour in a specific firm. The legal environment index (LAW_INDEX) is from China Judicial Civilization Index Report¹¹. We hand-collect the supply of ID candidates (ID_SUPPLY) from the Shanghai and Shenzhen Stock Exchanges and calculate the number of registered independent directors on a provincial scale for each year.

Table 12 presents the results of instrument variable analysis. In column 1, we perform the first stage regression of endogenous variable (UNQ_DUMMY) on two instrument variables (LAW_INDEX and ID_SUPPLY), the coefficient of which are -0.123 and 0.342, respectively, and significant at the 5% level. The 2SLS test is also effective in F test of excluded instruments, Hansen over-identification test and Cragg-Donald weak-identification test. In columns 2 to 4, we use predicted UNQ_DUMMY from the first stage regression to estimate OTHER_REC,

¹¹ This report is published by China Judicial Civilization Collaborative Innovation Center which conducts an extensive survey to the legal departments in all provinces in China.

TRAN_AMOUNT and ABSDA at the second stage. We find that adjusted UNQ_DUMMY is still positively associated with all dependent variables. These findings imply that UIDs are more likely to be employed and an implicit reciprocity norm between UIDs and insiders is more easily constructed when the legal environment is weak. In addition, we also find that the likelihood of employing UIDs increases when the supply of local candidates is large, which may contradict some existing studies indicating that board independence is positively associated with ID supply (Masulis et al., 2012; Knyazeva et al., 2013). We conjecture this different result may be driven by serious agency problem and weak external governance in emerging countries including China (Du et al., 2018). Controlling shareholders have a significant impact on ID recruitment, and are more likely to pick up more compliant candidates, such as UIDs, when ID supply is enormous. Therefore, the board independence may be reduced under a weak governance environment even though more ID candidates are provided in the labour market.

Table 12 Instrument variable analysis

This table presents the results when we use 2SLS method to address the endogeneity problem in our model. The first instrument variable is LAW_INDEX which is derived from China Judicial Civilization Index Report. The second instrument variable is ID_SUPPLY, which is measured by the number of registered independent directors on a provincial scale in the Shanghai and Shenzhen Stock Exchanges. We report the first stage regression in column 1 for estimating UNQ_DUMMY by LAW_INDEX and ID_SUPPLY. The 2SLS results at the second stage are demonstrated from columns 2 to 4. The t-statistics are in parenthesis. Standard errors are robust to heteroscedasticity and firm level clustering. See Appendix for definitions of variables. ***, ** and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively.

	The first stage		The second stage	
	UNQ_DUMMY	OTHER_REC	TRAN_AMOUNT	ABSDA
LAW_INDEX	-0.123** (-2.39)			
ID_SUPPLY	0.342**			

	(1.97)			
UNQ_DUMMY		0.048***	99.423***	0.050*
		(3.70)	(3.07)	(1.78)
SIZE	0.137***	-0.005***	33.470***	-0.006***
	(3.72)	(-7.42)	(15.96)	(-5.08)
ROE	-0.335*	-0.008**	-18.899***	-0.003
	(-1.66)	(-2.55)	(-2.96)	(-0.36)
LEVERAGE	-0.234	0.031***	32.603***	0.061***
	(-1.24)	(10.90)	(7.01)	(10.41)
DUAL	-0.098	0.000	2.691	0.004**
	(-1.32)	(0.38)	(1.42)	(1.98)
BOARD	0.025	-0.000	0.116	-0.002***
	(1.16)	(-0.19)	(0.15)	(-4.34)
INCOME_RATIO	-0.013	0.001***	0.865*	0.006***
	(-0.79)	(2.89)	(1.83)	(7.32)
COMMITTEE	-0.131	-0.001	1.465	0.001
	(-1.59)	(-0.85)	(0.61)	(0.37)
TOP210	-0.006**	0.000	0.166*	0.000***
	(-2.35)	(0.79)	(1.69)	(3.44)
SOE	-0.161	-0.002	-2.394	-0.005*
	(-1.58)	(-1.49)	(-1.03)	(-1.87)
Cons	1.267	0.072***	-803.983***	0.167***
	(1.28)	(5.83)	(-17.06)	(6.75)
YEAR_DUMMY			yes	
INDUSTRY_DUMMY			yes	
Cragg–Donald Wald F statistic	65.506***			
Hansen over–identification test	0.273			
F test of excluded instruments	36.28***			
N	15799	15799	15799	15799
R ²		0.134	0.352	0.084

pseudo R ²	0.099			
F		11.75	21.21	19.52
LR Chi2	852			

5.5 PSM analysis

In this section, we address the endogeneity problem by using propensity score matching (PSM) method. Following Lennox et al. (2011), we perform a logit regression of UNQ_DUMMY on all control variables, and obtain 9900 and 26450 matching samples at the firm and director levels by using nearest neighbour matching. In Panel A of Table 13, we find that the differences of control variables between matching samples have been decreased compared with the results in the full sample, and in Panel B and C, we get the similar results with respect to previous findings.

Table 13 PSM test

Panel A presents the difference results of control variables in treatment group and control group. Panel B and C shows the regression results at the firm and director level, respectively. The t-statistics are in parenthesis. Standard errors are robust to heteroscedasticity and firm level clustering. See Appendix for definitions of variables. ***, ** and * indicate two-tailed significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Difference analysis of control variables between treatment group and control group						
\	UNQ_DUMMY=1		UNQ_DUMMY=0		Difference	
	(n=4950)		(n=4950)		Mean	Median
	Mean	Median	Mean	Median	T value	Z value
SIZE	21.949	21.799	21.919	21.808	0.030 (1.20)	-0.009 (-0.316)
ROE	0.066	0.069	0.068	0.069	-0.002 (-0.83)	0.000 (0.02)
LEVERAGE	0.446	0.440	0.434	0.417	0.012*** (2.75)	0.023*** (2.77)
DUAL	0.253	0	0.257	0	-0.004 (-0.42)	-0.000 (-0.42)
BOARD	8.759	9	8.688	9	0.071** (2.08)	0.000 (0.56)
INCOME_RATIO	0.540	0.144	0.540	0.149	-0.000	-0.005

					(-0.03)	(-0.30)
					-0.023***	-0.000***
COMMITTEE	3.859	4	3.882	4	(-2.81)	(-2.80)
					-0.666***	-0.470***
TOP210	21.892	20.52	22.558	20.99	(-2.56)	(-2.74)
					0.032***	0.000***
SOE	0.206	0	0.174	0	(4.07)	(4.07)

Panel B: PSM test at the firm level

	OTHER_REC			TRAN_NUMBER			TRAN_AMOUNT			ABSDA		
UNQ_DUMMY	0.003***			2.771***			25.627***			0.009***		
	(4.39)			(2.80)			(13.44)			(4.79)		
UNQ_NUMBER		0.001***			1.913***			10.459***			0.004***	
		(3.38)			(3.16)			(10.18)			(4.44)	
UNQ_RATIO			0.009***			14.628***			91.199***			0.032***
			(3.33)			(3.24)			(11.27)			(4.26)
SIZE	-0.003***	-0.003***	-0.003***	12.453***	12.417***	12.423***	35.262***	35.170***	35.159***	-0.007***	-0.007***	-0.007***
	(-5.57)	(-5.58)	(-5.58)	(17.22)	(17.31)	(17.27)	(18.00)	(17.90)	(17.95)	(-5.82)	(-5.87)	(-5.86)
ROE	-0.010**	-0.010**	-0.010**	-7.322**	-7.023**	-7.085**	-21.025***	-19.848***	-19.910***	-0.000	0.000	-0.000
	(-2.47)	(-2.45)	(-2.45)	(-2.12)	(-2.05)	(-2.07)	(-3.42)	(-3.22)	(-3.23)	(-0.04)	(0.01)	(-0.00)
LEVERAGE	0.027***	0.027***	0.027***	37.370***	37.643***	37.616***	39.048***	40.559***	40.597***	0.062***	0.063***	0.063***
	(9.36)	(9.44)	(9.44)	(15.35)	(15.49)	(15.47)	(8.73)	(9.06)	(9.06)	(8.92)	(9.03)	(9.02)
DUAL	-0.000	-0.000	-0.000	-4.625***	-4.621***	-4.596***	1.384	1.501	1.640	0.004*	0.004*	0.004*
	(-0.55)	(-0.53)	(-0.52)	(-5.02)	(-5.01)	(-4.99)	(0.74)	(0.81)	(0.88)	(1.75)	(1.76)	(1.79)
BOARD	0.000	-0.000	0.000	0.509	0.423	0.622*	0.660	0.202	1.379	-0.002***	-0.002***	-0.001**
	(0.17)	(-0.07)	(0.54)	(1.39)	(1.17)	(1.67)	(0.77)	(0.23)	(1.61)	(-2.74)	(-3.07)	(-2.26)
INCOME_RATIO	0.000*	0.000*	0.000*	-0.121	-0.141	-0.143	0.618	0.519	0.490	0.006***	0.006***	0.006***
	(1.94)	(1.89)	(1.88)	(-0.57)	(-0.66)	(-0.67)	(1.04)	(0.86)	(0.81)	(6.01)	(5.98)	(5.97)
COMMITTEE	-0.002*	-0.002*	-0.002*	1.124	1.037	1.048	-0.289	-0.963	-0.922	0.001	0.001	0.001
	(-1.84)	(-1.91)	(-1.91)	(1.01)	(0.94)	(0.95)	(-0.12)	(-0.39)	(-0.37)	(0.56)	(0.45)	(0.46)
TOP210	-0.000	-0.000	-0.000	-0.118***	-0.115***	-0.117***	0.097	0.109	0.105	0.000***	0.000***	0.000***
	(-0.30)	(-0.26)	(-0.28)	(-3.11)	(-3.02)	(-3.06)	(1.13)	(1.26)	(1.21)	(4.16)	(4.22)	(4.19)

SOE	-0.004***	-0.004***	-0.004***	0.947	1.007	0.988	-6.052**	-5.813**	-5.867**	-0.006*	-0.006*	-0.006*
	(-2.78)	(-2.76)	(-2.77)	(0.77)	(0.82)	(0.80)	(-2.45)	(-2.32)	(-2.34)	(-1.90)	(-1.88)	(-1.89)
Cons	0.085***	0.087***	0.086***	-276.244***	-275.140***	-276.705***	-765.929***	-753.761***	-763.918***	0.219***	0.223***	0.220***
	(7.42)	(7.60)	(7.47)	(-16.30)	(-16.41)	(-16.33)	(-18.04)	(-17.75)	(-17.95)	(8.47)	(8.68)	(8.51)
YEAR_DUMMY							yes					
INDUSTRY_DUMMY							yes					
N	9900	9900	9900	9900	9900	9900	9900	9900	9900	9900	9900	9900
R ²	0.116	0.115	0.115	0.317	0.318	0.318	0.387	0.380	0.381	0.094	0.093	0.093
F	9.34	8.87	8.82	29.31	29.39	29.12	23.75	22.09	22.36	14.10	13.39	13.32

Panel C: PSM test at the director level

	DISSENT	OTHER_REC	TRAN_NUMBER	TRAN_AMOUNT	ABSDA
UNQ_DUMMY	-0.126** (-2.12)	0.002*** (3.27)	2.717*** (2.80)	23.316* (1.68)	0.005* (1.80)
SIZE	0.053 (1.60)	-0.002*** (-3.53)	14.674*** (14.56)	66.814*** (5.01)	-0.002 (-0.90)
ROE	-0.087** (-1.97)	-0.004*** (-2.85)	-2.043*** (-2.92)	-247.381 (-1.00)	0.009 (0.40)
LEVERAGE	0.005 (0.56)	0.001 (1.30)	1.666*** (3.94)	7.313* (1.71)	0.009** (2.26)
DUAL	-0.165** (-1.98)	-0.001 (-1.17)	-4.930*** (-4.29)	-38.458 (-1.04)	0.013** (2.12)
BOARD	0.072*** (3.59)	0.000** (2.09)	0.807** (1.99)	-0.864 (-0.37)	-0.002 (-1.54)
INCOME_RATIO	0.034* (1.85)	0.001** (2.21)	0.434** (1.96)	-7.112 (-1.13)	0.015*** (4.04)
COMMITTEE	-0.059 (-0.85)	-0.002 (-1.47)	1.816 (1.58)	3.052 (0.13)	0.001 (0.30)
TOP210	-0.009*** (-3.35)	-0.000*** (-4.17)	-0.234*** (-5.39)	-1.341 (-1.30)	0.001** (2.36)
SOE	0.352*** (3.64)	-0.002** (-2.05)	1.908 (1.49)	-95.660 (-1.19)	-0.002 (-0.38)
GENDER	0.026 (0.37)	-0.001 (-0.89)	-2.255*** (-2.60)	-34.627 (-1.11)	-0.004 (-1.61)
AGE	-0.021*** (-7.32)	-0.000** (-2.14)	-0.065 (-1.32)	-0.751 (-1.07)	-0.000** (-2.44)
EDU	-0.101*** (-4.02)	-0.001** (-2.30)	-0.880** (-2.20)	-16.940 (-0.99)	-0.003** (-2.10)
COMPENSATION	-0.071 (-0.54)	0.001 (0.33)	-0.063 (-0.05)	26.645 (1.07)	-0.017** (-2.30)
Cons	-0.148 (-0.10)	0.069*** (3.78)	-302.866*** (-10.80)	-1469.240*** (-3.74)	0.348*** (3.91)
YEAR_DUMMY			yes		

INDUSTRY_DUMMY			yes		
DIRECTOR_FIXED_EFFECT			yes		
N	26450	26450	26450	26450	26450
R ²		0.087	0.284	0.006	0.048
pseudo R ²	0.095				
F		7.00	18.02	6.10	5.84
LR Chi2	1157				

6. Conclusion

Based on Chinese ID qualification context, this paper explicitly shows the real benefit-exchange under the reciprocity norm between UIDs and firm insiders, and explores how this reciprocity affects the quality of corporate governance. We ultimately find that this explicit reciprocity has weakened the independence of UIDs. In particular, compared with the counterparts, UIDs contribute more compliance in voting issues, which aims to pay back to insiders for reciprocating the valuable access to the board, this result is more pronounced in firms where the internal and external governance are weak. We further find that, in the UID sample, independent directors who haven't realised the qualification commitment are more reluctant to show a dissenting vote. Regarding the consequences at the firm level, the results indicate that UIDs are positively associated with the expropriation behaviours, resulting in more other receivables and related party transactions. The weak monitoring of UIDs leads to higher information opacity measured by earnings management. Moreover, we rule out two alternative explanations, ID ability and social ties between independent directors and insiders, that might intervene our argument in explaining the results. In the robustness test, additional evidence that UIDs' dissenting vote significantly impairs their tenure supports our threat argument, and our findings are still robust even when we perform subsample analysis, difference-in-difference test, instrument variable analysis and PSM test. In summary, the independence of UIDs has been greatly compromised due to the reciprocal incentive.

Our study complements prior literature by identifying a more explicit reciprocity norm between UIDs and insiders, which leads to a loss of independence of UIDs in the personal trade. We expect this study can stimulate more assessment regarding ID qualification and high threshold of the access to ID labour market to prevent the negative effect of reciprocity.

Appendix

Dependent Variables	Definition
DISSENT	It is valued as 1 when the director's vote is one of the following six types, (1) an objection, (2) a reservation, (3) not voting for certain reason (e.g. insufficient information), (4) a demurral over certain concerns, (5) an abstention, and (6) others, but not an affirmative vote; and 0 otherwise
OTHER_REC	It is proxied by the percentage of other receivables in total assets
TRAN_NUMBER	The number of related party transactions
TRAN_AMOUNT	The logarithm of annual amount (RMB) of related party transactions
ABSDA	The absolute value of discretionary accruals estimated by adjusted Jones model
TENURE	The number of years since an independent director is employed
Independent Variables	
UNQ_DUMMY	It equals 1 if a firm recruits at least one UID, and 0 otherwise
UNQ_NUMBER	the number of UIDs
UNQ_RATIO	the percentage of UIDs among all directors
Control Variables	
SIZE	The logarithm of asset value
ROE	Return on net assets
LEVERAGE	The ratio of the total liability to total assets
DUAL	Indicator variable that equals 1 when CEO is the chairman of board, and 0 otherwise
BOARD	The total number of directors on the board
INCOME_RATIO	The growth rate of operating income
COMMITTEE	The number of committees in a firm, such as strategy and budget, nomination, audit and compensation, which may have some positive influence on the improvement of corporate governance
TOP210	The sum of share ratio from second to 10 th largest shareholders

SOE	Indicator variable that equals 1 when the firm is owned by government, and 0 otherwise
GENDER	It equals 1 if one independent director is female, and 0 otherwise
AGE	The exact age of an independent director
EDU	The index of evaluation of a director's educational background, the lowest score being 1, indicating that this director graduated from special secondary school, 2 represents the director graduates from junior college, 3 represents the director holds a bachelor degree, 4 represents the director holds a master's degree, while 5 is the highest, and shows that this director has received a doctoral degree with relatively higher educational experience
COMPENSATION	The logarithm of total compensation of an independent director

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