

# Independent Director Dissent and Large Shareholder Tunneling

Zixuan Yang

School of International Business, Dongbei University of Finance and Economics, Dalian 116000, China  
ciciyangzixuan@outlook.com

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**Abstract:** In recent years, with tightening capital market regulations and ongoing optimizations in corporate governance structures, the monitoring role of independent directors has garnered increasing attention. Using data from A-share listed firms in China from 2007 to 2024, this study examines the impact of independent director dissent on large shareholder tunneling behavior. The findings indicate that independent director dissent significantly curbs tunneling activities, a conclusion that remains robust after a battery of rigorous tests. Heterogeneity analysis reveals that the inhibitory effect is more pronounced in firms characterized by "excessive board appointments" and when dissent pertains specifically to "connected transactions." Mechanism analysis suggests that such dissent activates external governance mechanisms by triggering negative media coverage and enhancing information transparency, thereby amplifying market monitoring pressure to constrain tunneling. These results align with the governance logic that independent directors utilize signaling to activate external oversight and raise the costs of expropriation. This paper offers significant implications for refining the independent director system, preventing large shareholder entrenchment, and strengthening the protection of minority investors.

**Keywords:** Independent Director Dissent, Large Shareholder Tunneling, External Governance, Media Attention.

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## 1. Introduction

China's decades-long rapid economic growth are inseparable from the stable operation of its capital markets, which in turn relies on the continuous improvement of corporate governance mechanisms. Reports from the 20th National Congress of the Communist Party of China and the Central Economic Work Conferences have repeatedly emphasized "improving capital market functions and increasing the proportion of direct financing," while also pointing out the need to "standardize and guide the healthy development of capital in accordance with the law." Against this macro backdrop, the independent director system, as the cornerstone of corporate governance, has been placed on high expectations. As early as 2001, the China Securities Regulatory Commission (CSRC) issued the *Guidelines on Establishing an Independent Director System in Listed Companies*, mandating that independent directors constitute at least one-third of the board to curb insider control and protect minority investors (Fama and Jensen, 1983). However, a significant gap exists between the original design intentions of the system and its actual operational effects. From the long-standing academic and industry skepticism regarding the "vaseification" of independent directors (Ye Kangtao et al., 2011) to the resignation wave triggered by the Kangmei Pharmaceutical case where independent directors faced joint liability for compensation, the dilemma of institutional implementation is evident: Can independent directors maintain their independence and perform supervisory duties when facing the strong will of large shareholders? Particularly against the backdrop of relatively concentrated ownership structures in China, the second type of agency problem—the conflict of interest between large shareholders and minority shareholders—is particularly prominent. Large shareholders persistently engage in expropriation through control rights despite repeated regulatory bans (Johnson et al., 2000). Facing frequent tunneling chaos, can independent directors

truly make a difference? Based on this, this paper attempts to move beyond static descriptions of independent director background characteristics and directly investigates whether and how "independent director dissent"—a specific act of duty performance—can inhibit large shareholder tunneling.

Theoretically, the independent director system was introduced precisely to solve the problems of insider control and large shareholder tunneling. Existing literature has explored the governance effects of independent directors from multiple angles. For instance, Ye Kangtao (2007) found that the system improved internal governance mechanisms; Du Xingqiang (2017) pointed out that dissent is the most direct manifestation of supervision; and Hao Ying (2022) confirmed that dissent effectively restrains inefficient corporate investment. However, although existing studies confirm the corrective effect of dissent on internal decision-making, there is no consensus on whether it can directly act on the most hidden and harmful "tunneling" behavior, and there is a lack of systematic testing of its underlying mechanisms. Based on this, this paper attempts to clarify the relationship between independent director dissent and large shareholder tunneling.

Regarding this relationship, the theoretical community first proposed a pessimistic prediction based on the "Symbolic Governance Hypothesis." Under China's special institutional background, the appointment mechanism of independent directors is often dominated by large shareholders or management, leading to inherent deficiencies in independence and making them prone to becoming "rubber-stamp directors" (Kesner et al., 1986). In this context, expressing dissent is not out of a willingness to actively supervise but rather a passive defensive strategy based on personal career risks and legal liability considerations. As Fan Hejun and Wang Siyu (2021) noted, dissent is often a disclaimer used by independent directors to cut off their own responsibilities in pre-risk events and avoid potential litigation. This formalistic performance lacks actual control

over the company and is destined to be unable to touch the existing interest structure of large shareholders. Worse still, public opposition may send negative signals to the market that corporate governance is deadlocked or internal conflicts are intense, which in turn weakens investor confidence and the effectiveness of external supervision. When the market interprets dissent as a sign of governance failure, information asymmetry is exacerbated, allowing large shareholders to conduct more concealed expropriation under the guise of chaos, leading to insignificant or even negative inhibitory effects of dissent on tunneling.

In contrast, according to the "Monitoring and Checks-and-Balances Hypothesis," independent director dissent should be regarded as an effective governance mechanism that substantially curbs large shareholder tunneling. This hypothesis holds that the original intention of the independent director system is to introduce external professionals to break the closed loop of insider control (Fama and Jensen, 1983). When independent directors express dissent on a proposal, it is not merely a simple negation of a management or large shareholder proposal, but a strong negative signal released to the capital market (Gao et al., 2021). This signal has strong externality: it immediately attracts media attention, triggers analyst downgrades and tracking investigations, and even directly leads to inquiry letters or special inspections from exchanges and regulatory agencies. This "spotlight effect" ignited by dissent can quickly activate external governance pressure, forcing internal corporate rectification. From a cost-benefit perspective, dissent increases the risk of regulatory penalties and causes impacts such as rising financing costs and falling stock prices, significantly increasing the political and economic costs of large shareholders engaging in tunneling. When the expected cost of violation far exceeds the benefits of tunneling, rational large shareholders will be forced to restrain their encroachment. Therefore, based on the logic of monitoring and checks-and-balances, independent director dissent should effectively inhibit large shareholder tunneling by raising the cost of violation.

To clarify the above theoretical divergence and restore the real picture of the governance function of independent directors, this paper attempts to cut into the micro-perspective of behavioral governance. Using massive panel data of Chinese A-share listed companies from 2007 to 2024, this paper conducts a rigorous empirical test on the causal relationship between independent director dissent and large shareholder tunneling. Different from previous literature focusing on the background characteristics of independent directors, such as academic background (Dou Chao et al., 2022) or political connections (Zhou Zejiang et al., 2017), this paper focuses on "dissent"—the most conflictual and explicit act of duty performance—regarding it as direct evidence of independent directors daring to break the silence and face governance ills. The benchmark regression results strongly support the "Monitoring and Checks-and-Balances Hypothesis": independent director dissent significantly inhibits large shareholder tunneling. More importantly, considering potential endogenous disturbances such as sample selection bias and reverse causality, this paper comprehensively uses advanced econometric strategies including Propensity Score Matching (PSM), the Heckman two-step method, and Instrumental Variable (IV) estimation. The core conclusions remain highly robust after correcting these potential biases, providing solid causal identification evidence for the governance value of independent director

dissent. On this basis, this paper further opens the "black box" of how independent director supervision works. Mechanism analysis shows that independent director dissent does not directly block tunneling within the board but mainly achieves checks and balances by activating external governance mechanisms. Specifically, dissent, as a negative signal, can trigger a wave of negative media reports and significantly reduce stock price synchronicity (SYN), meaning that firm-specific information is more incorporated into stock prices, improving information disclosure quality and market transparency. This ripple effect from the inside out significantly raises the political and economic costs for large shareholders to implement expropriation. Furthermore, heterogeneity analysis reveals the boundary conditions of this effect: under the scenario of excessive board appointments by large shareholders, the inhibitory effect of dissent is more prominent, indicating that "speaking up" is particularly critical when the governance environment deteriorates; meanwhile, when dissent directly targets connected transactions—the main channel for tunneling—its governance efficacy reaches its strongest. These findings jointly outline the complete logical chain by which independent directors leverage market power to constrain large shareholders through voicing dissent.

The possible contributions of this paper are as follows: First, it expands research on the economic consequences of independent director dissent. Existing studies mostly focus on its impact on investment decisions (Gao Hao et al., 2025) or earnings management (Zhang Tao, 2020). This paper extends it to the more core agency problem of large shareholder tunneling, enriching the evidence on the effectiveness of independent director supervision. Second, it enriches the literature on the influencing factors of large shareholder tunneling. Existing discussions on influencing factors mostly concentrate on equity structure, such as ownership concentration (Tang Qingquan et al., 2005) and pyramid layers (Wang Junqiu and Zhang Qifeng, 2007), or macro-institutional environments, such as the rule of law and marketization process (Luo Danglun and Tang Qingquan, 2007), with less attention paid to specific supervisory behaviors within the board. Starting from the micro-perspective of independent director "dissent," this paper confirms that specific supervisory actions are important forces in inhibiting tunneling, providing new micro-evidence for research on influencing factors. Third, it reveals the pathway of "signaling-external governance." Unlike previous studies focusing on the veto power within the board, this paper explains from the perspective of external pressure how independent directors leverage media and regulatory forces to constrain large shareholders through "voicing." Fourth, it has distinct policy implications, providing empirical support for regulatory authorities to further strengthen the performance requirements for independent directors and refine the disclosure rules for dissent.

The structure of this paper is arranged as follows: Part 2 is a literature review and theoretical hypotheses; Part 3 is research design; Part 4 presents empirical results and analysis; Part 5 covers mechanism and heterogeneity tests; and Part 6 concludes.

## 2. Literature Review

### 2.1. Research on Independent Director Dissent

The core of the independent director system lies in

introducing external professionals to supervise management and large shareholders, resolving principal-agent problems (Li Shigang et al., 2025). Among these, independent director dissent refers to the expression of objections by independent directors to specific proposals during board meetings, representing the most direct and intense way for them to perform their supervisory duties (Du Xingqiang, 2017). Since the CSRC mandated the independent director system in 2001, dissent has become a key indicator for measuring the effectiveness of board supervision.

Overall, dissent has been scarce since the introduction of the system. In most cases, independent directors do not publicly question management behavior and even play a decorative role (Ye Kangtao, 2011). Especially when seniority prevails within the company, the probability and quantity of independent directors expressing dissent are extremely low (Du Xingqiang, 2017). The likelihood of independent directors expressing dissent is significantly positively correlated with their tenure (Jiang et al., 2016), and those in their second term are more likely to object than those in their first term (Zhi Xiaoqiang and Tong Pan, 2005). Independent directors in companies with multiple large shareholders checking each other are more likely to object than those in companies controlled by a single large shareholder. At the institutional level, after the new *Securities Law* strengthened legal liabilities, the tendency of independent directors to express dissent due to avoidance motives increased significantly (Hu Shiyang, 2023). Overall, independent director dissent improves the internal governance mechanism of companies to a certain extent (Ye Kangtao, 2007).

Existing research on the economic consequences of independent director dissent mainly focuses on changes in internal corporate governance. Studies show that dissent can effectively perform supervisory functions and restrain inefficient corporate investment, alleviating underinvestment in high-growth industries and curbing overinvestment in low-growth industries (Hao Ying, 2022). In addition, independent directors with financial backgrounds can object to management's abuse of accounting policies and unreasonable selection of accounting methods to manipulate earnings, playing a good supervisory role (Zhang Tao, 2020). Independently, independent directors can also use their macro-cognitive abilities and risk-prudent attitudes to exercise inspection and supervision powers, independently judge and evaluate the behavior of management and other directors, raise objections where unreasonable, reduce decision-making errors, and help companies avoid debt default phenomena (Dou Chao, 2022). Dissent also prompts management to improve the quality of information disclosure, enhance the readability and transparency of annual reports, and promote the improvement of internal checks and balances within the board, reducing the risk of "one-man rule." Overall, this strand of research generally believes that independent director dissent has a substantial impact on corporate governance efficiency and strategic decisions through the "internal constraint-behavior correction" path.

## 2.2. Research on Large Shareholder Tunneling

In the study of the second type of agency problem, Claessens et al. (1999) pointed out that the ownership structure of concentrated shareholding by large shareholders may produce two different effects. The incentive effect suggests that large shareholders have the power and motivation to actively manage the company, having a positive

impact. However, the "entrenchment effect" points out that when the control power of large shareholders is too large, they may abuse power for personal gain, damaging the interests of the company. Long-term occupation of funds by large shareholders leads to insufficient operating cash flow, difficulties in capital turnover, increases the difficulty of operations, and forces enterprises to rely heavily on external financing, increasing financial expenses (Ye Kangtao, 2007). Under the market environment of concentrated ownership in China, measures of large shareholder tunneling mainly include direct fund occupation (Jiang et al., 2010), other receivables, and related-party transactions.

Existing research on the influencing factors of large shareholder tunneling is usually divided into macro-institutional environmental factors and micro-corporate governance factors based on different levels of action. From a macro perspective, studies show that in regions with lower marketization and stronger government intervention, it is more difficult to restrict controlling shareholders' "tunneling" (Luo Danglun, 2007). Gao Lei et al. (2006) found that government intervention significantly reduces the level of investor protection and exacerbates controlling shareholders' "tunneling"; competition in the product market effectively improves investor protection, and companies operating in industries protected by the government suffer more severe "tunneling." At the regulatory level, Jiang et al. (2010) pointed out that strengthening the jurisdiction of market regulators over holding entities is particularly important for inhibiting tunneling. Meanwhile, media supervision (Li Ming et al., 2016) and analyst coverage (Gao et al., 2021), as external governance mechanisms, can also compress the space for large shareholder tunneling through public opinion pressure and information mining. It can be seen that the macro-institutional environment constitutes a basic constraint on large shareholder tunneling by shaping the trade-off framework of "institutional cost-tunneling revenue."

At the micro-corporate governance level, ownership structure is the decisive factor. Tang Qingquan et al. (2005) found that the higher the ownership concentration, the more severe the tunneling. The degree of tunneling by the largest shareholder increases with the increase in shareholding ratio, while equity checks and balances—the ability of the second to fifth largest shareholders to check and balance the largest shareholder—can effectively inhibit tunneling. Stronger managerial independence is more conducive to curbing large shareholder tunneling (Liu Shaobo et al., 2016). Fried et al. (2020) found that granting minority shareholders veto rights over related-party transactions can inhibit controllers from tunneling the company through executive compensation. Regarding the economic consequences of tunneling, research consistently agrees that it reduces firm value, exacerbates stock price crash risk, leads to rising corporate financing costs, and even triggers financial distress.

## 2.3. Literature Review and Research Entry Point

In summary, existing literature has conducted relatively in-depth research on independent director dissent and large shareholder tunneling respectively. Scholars generally believe that independent director dissent is a key behavior reflecting the effective functioning of their supervisory functions, which can affect internal corporate governance and external market reactions through signaling and risk deterrence mechanisms. Regarding large shareholder

tunneling, studies point out that it is constrained by both macro-institutional environments and micro-corporate governance structures, exhibiting covert forms and path-dependent characteristics. However, most existing studies place independent director dissent and large shareholder tunneling in relatively independent analytical frameworks, with little exploration of whether and how dissent directly affects tunneling behavior. Therefore, this paper attempts to establish an empirical link between the two, revealing the actual governance effectiveness of board supervision in the second type of agency problem by examining the inhibitory effect of dissent on tunneling and its pathways, thereby enriching academic understanding of the interaction between supervision mechanisms and controlling shareholder behavior in the field of corporate governance.

### 3. Research Hypotheses and Empirical Design

#### 3.1. Research Hypotheses

Independent director dissent, as a supervisory behavior in corporate governance where independent directors express objections to major decisions such as related-party transactions, equity pledges, and executive compensation (Liu Linchen et al., 2019), is characterized by supervisory checks and balances and signaling warnings. From a supervisory perspective, it is a key measure for independent directors to fulfill their fiduciary duties and restrain insider opportunism (Du Xingqiang, 2017); from a signaling perspective, it transmits warning information about potential corporate governance risks to the market. Theoretically, independent director dissent can activate external governance pressure by causing external shareholder supervision, analyst tracking, and audit scrutiny, thereby inhibiting large shareholder tunneling. However, in weak governance environments, dissent may be reduced to symbolic governance or risk-cutting disclaimers, failing to effectively constrain tunneling (Zhi Xiaoqiang and Tong Pan, 2005).

When independent director dissent is expressed, its signaling nature triggers responses from external governance mechanisms: On one hand, institutional investors and minority shareholders will strengthen supervision over the company based on risk aversion motives, demanding more information disclosure or adjustments to decisions (Li Xuejing, 2024); on the other hand, analysts will increase tracking and analysis of corporate earnings forecasts and governance risks due to the risk signals of dissent, amplifying risk information through research reports (Gao et al., 2021); simultaneously, auditors will increase the rigor of audit procedures due to governance defects implied by dissent, and administrative regulators will initiate compliance reviews due to dissent (Luo Jie, 2024). The activation of these external governance forces essentially breaks the information black box of "insider control," allowing external entities to perceive governance risks and intervene in supervision. Therefore, independent director dissent can activate external pressure by triggering external shareholder supervision, analyst condemnation, audit scrutiny, and administrative regulation.

The activated external pressure raises the cost and risk of large shareholder tunneling from multiple dimensions: external shareholder supervision increases the "probability of detection" of tunneling, subjecting large shareholders to pressure from equity dilution and reputation loss; analyst condemnation expands negative public opinion on tunneling

through media dissemination, increasing the social reputation cost of large shareholders (Gao et al., 2021); stricter audit scrutiny compresses the space for large shareholders to cover up tunneling using financial fraud, increasing the operational difficulty of tunneling; administrative regulatory intervention will directly increase the legal risk of tunneling through fines, trading restrictions, and other means (Huang Jianqiao, 2024). Once the compliance pressure and reputational risk formed by external supervision exceed the private benefits brought by tunneling, rational large shareholders will actively restrain their encroachment, or even completely abandon tunneling attempts when costs outweigh benefits, achieving effective containment at the governance level. Accordingly, we propose Hypothesis 1:

H1: Independent director dissent has an inhibitory effect on large shareholder tunneling.

In institutional contexts characterized by weak corporate governance and absent supervisory checks and balances, the nature and function of independent director dissent may become alienated, shifting from substantive supervisory behavior to tools for risk avoidance (Tang Qingquan, 2005), disclaimers, or compliant "vases." Specifically, in environments with highly concentrated ownership, severe insider control, and soft external constraints, independent directors may lack true independence (e.g., influenced by nominations or incentives from large shareholders or management) and selectively vote against specific issues. Their motive is not to fulfill supervisory obligations but to cut off their own responsibilities and avoid legal or reputational risks in the event of potential future corporate risk incidents (Fan Hejun and Wang Siyu, 2021). At this time, the expression of dissent is not based on substantive questioning of opportunistic behaviors like tunneling but serves as a disclaimer or compliance performance. This alienated dissent, due to its lack of intrinsic supervisory motivation and formalistic characteristics, releases weak and distorted risk signals, failing to effectively trigger alerts and responses from external governance entities such as external shareholders, analysts, auditors, and regulators. External governance entities may either identify its performative nature or lack the ability and willingness to intervene in supervision due to overall governance failure. Therefore, under conditions where the governance environment is weak and the motivation for dissent is alienated, dissent cannot effectively activate external pressure.

When independent director dissent fails to activate substantial external pressure due to the aforementioned reasons, the external constraint environment faced by large shareholder tunneling does not change. On one hand, external shareholders, analysts, auditors, and regulators fail to receive credible and strong risk warning signals, thus failing to launch targeted investigations, reviews, public opinion pressure, or regulatory actions, maintaining the concealment of tunneling behavior (Luo Danglun and Tang Qingquan, 2007). On the other hand, the formalization of independent director dissent may even be interpreted by the market as evidence of governance failure and ineffective supervision mechanisms, which may weaken external entities' trust and attention to corporate governance, forming a "chilling effect" of supervision (Wu Qi, 2017). In this scenario, the expected costs for large shareholders to implement tunneling—such as the probability of being discovered, economic penalties, and reputational losses—do not increase significantly due to the emergence of dissent, and the benefit-cost ratio of tunneling

remains favorable. Lacking the implementation costs and risks raised by external pressure, tunneling behavior cannot be effectively curbed. Therefore, dissent cannot inhibit large shareholder tunneling through the path of activating external pressure. Accordingly, we propose Hypothesis 2:

H2: Independent director dissent has no effect on large shareholder tunneling.

### 3.2. Empirical Design

To test the inhibitory effect of independent director dissent on large shareholder tunneling, referring to the research paradigms of Du Xingqiang (2017), Hao Ying (2022), and Gao et al. (2021), this paper sets the following benchmark regression model:

$$\text{Tunnel}_{i,t} = \alpha + \beta \text{DIF}_{i,t} + \gamma' \text{Control}_{i,t} + \sum \text{Year} + \sum \text{Industry} + \varepsilon_{i,t}$$

Where  $\text{Tunnel}_{i,t}$  represents the degree of large shareholder tunneling. Existing literature considers the measurement of tunneling mainly from the dimensions of "fund occupation" and "related-party transactions." Although some scholars use "other receivables" or "illegal guarantee amounts" as proxy variables for tunneling (Jiang et al., 2010), given that related-party transactions are the most concealed channel for large shareholders to transfer benefits, and normal business-related transactions are often mixed with abnormal transactions for tunneling purposes, direct measurement tends to produce noise. Therefore, referring to the practice of Zheng Zhigang et al. (2022), this paper adopts abnormal related-party transactions to measure large shareholder tunneling.

Specifically, this paper first uses model regression to eliminate the portion of related-party transactions required for normal operations, taking the absolute value of the residual term as the explained variable Tunnel. A larger value of this indicator indicates more severe resource encroachment by large shareholders through abnormal related-party transactions.

$\text{DIF}_{i,t}$  represents independent director dissent. Referring to existing literature (Ye Kangtao, 2011; Dou Chao et al., 2022), this paper uses a dummy variable (DIF) as a proxy for independent director performance behavior. If the independent directors of the company published opposing, abstaining, or questioning opinions in the board meeting minutes in that year, it takes the value of 1; otherwise, it takes 0. This paper focuses on the estimated value of the regression coefficient  $\beta$ . If its estimated value is significantly negative, it indicates that independent director dissent can effectively inhibit large shareholder tunneling behavior, supporting Hypothesis H1.

$\text{Control}_{i,t}$  represents a series of control variables, including firm size (Size), leverage ratio (Leverage), return on assets (ROA), board size (Boardsize), independent director ratio (IndRate), the shareholding ratio of the largest shareholder (Top1), Tobin's Q (TobinQ), management shareholding ratio (Mshare), and firm age (FirmAge). Year and Industry indicate that this paper controls for year and industry fixed effects. To control for potential cross-sectional correlation issues, all regressions in this paper apply clustering of standard errors at the firm level. Detailed variable definitions are shown in Table 1.

**Table 1.** Variable Definitions and Construction

Variable Symbol	Variable Name	Variable Construction Description
DIF	Independent Director Dissent	Dummy variable for dissent. Takes 1 if independent directors issue "reserved opinions," "opposing opinions," "inability to issue opinions," "abstentions," "objections," or "other" opinions; otherwise 0.
Tunnel	Large Shareholder Tunneling	Proportion of year-end other receivables to total assets.
Size	Firm Size	Natural logarithm of total assets at year-end.
Leverage	Leverage Ratio	Total liabilities at year-end divided by total assets.
ROA	Return on Assets	Net profit divided by total assets at year-end.
Boardsize	Board Size	Total number of directors on the board.
IndRate	Independent Director Ratio	Ratio of independent directors to total board members at year-end.
Top1	Shareholding of Largest Shareholder	Number of shares held by the largest shareholder divided by total outstanding shares at year-end.
TobinQ	Tobin's Q	Market value of the firm divided by the replacement cost of assets.
Mshare	Management Shareholding Ratio	Number of shares held by executives divided by total outstanding shares.
FirmAge	Firm Age	Ln (Observation year - Listing year + 1).

### 3.3. Data Sources

This paper takes A-share market listed companies as the research object and conducts research based on financial data and related corporate governance data of A-share listed companies from 2007 to 2024. All data in this paper come from the CSMAR database. To eliminate interference from outliers and ensure the robustness of empirical results, the

sample data was processed as follows: ST, \*ST stocks, and samples of financial industry listed companies were excluded; observations with missing values in key variables such as large shareholder tunneling and independent director dissent were excluded. After screening, a total of 48,517 valid observations were obtained; to prevent extreme values from affecting regression results, all continuous variables were winsorized at the 1% level (top and bottom).

### 3.4. Descriptive Statistics

**Table 2.** Descriptive Statistics Results

VARIABLES	(1) N	(2) mean	(3) sd	(4) min	(5) max
Tunnel	48,517	-0.031	0.212	-0.722	0.960
DIF	48,517	0.013	0.115	0.000	1.000
Size	48,517	22.190	1.281	19.870	26.190
Leverage	48,517	0.426	0.205	0.055	0.891
ROA	48,517	0.033	0.064	-0.245	0.194
Boardsize	48,517	2.119	0.201	1.609	2.708
IndRate	48,517	0.377	0.053	0.333	0.571
Top1	48,517	0.335	0.148	0.081	0.740
TobinQ	48,517	2.013	1.254	0.838	8.223
Mshare	48,517	0.132	0.192	0.000	0.680
FirmAge	48,517	2.942	0.344	1.946	3.611

Table 2 shows the descriptive statistics of the main variables. The mean of Tunnel is -0.0311, and the standard deviation is 0.212, indicating significant differences in the degree of large shareholder tunneling among different companies, and some companies have extreme fund occupation situations. The mean of DIF is 0.0134, indicating that only about 1.34% of sample companies received dissent from independent directors in that year, which is consistent

with the phenomenon of "independent director vase theory" pointed out by Ye Kangtao (2011), showing that dissent is a rare event in reality. The distribution of control variables is basically consistent with existing literature.

## 4. Empirical Results and Analysis

### 4.1. Benchmark Regression Results Analysis

**Table 3.** Benchmark Regression Results

VARIABLES	(1) Tunnel	(2) Tunnel	(3) Tunnel	(4) Tunnel
DIF	-0.104*** (-9.759)	-0.096*** (-8.831)	-0.104*** (-9.927)	-0.095*** (-8.893)
Size			-0.005** (-2.365)	-0.001 (-0.473)
Leverage			-0.037*** (-3.073)	-0.048*** (-3.648)
ROA			-0.055** (-2.045)	-0.094*** (-3.470)
Boardsize			-0.011 (-0.817)	-0.014 (-1.039)
IndRate			-0.071* (-1.729)	-0.078* (-1.925)
Top1			0.170*** (11.004)	0.183*** (11.460)
TobinQ			-0.000 (-0.016)	-0.000 (-0.245)
Mshare			-0.103*** (-10.914)	-0.112*** (-11.614)
FirmAge			0.018*** (3.289)	0.033*** (4.603)
Constant	-0.030*** (-12.899)	-0.033 (-1.127)	0.057 (1.064)	-0.071 (-1.082)
Observations	48,517	48,517	48,517	48,517
R-squared	0.003	0.023	0.025	0.049
IndustryFE	NO	YES	NO	YES
YearFE	NO	YES	NO	YES

\*Note: Robust t-statistics in parentheses. \*\* $p < 0.01$ ,  $p < 0.05$ , \* $p < 0.1$

Table 3 reports the benchmark regression results. Column (1) only controls for industry and year effects, showing that the coefficient of DIF is -0.104, significant at the 1% level.

Column (4) adds all control variables and controls for two-way fixed effects, showing that the coefficient of DIF remains significantly negative (-0.095). This indicates that, ceteris paribus, after independent directors express dissent, the degree of large shareholder tunneling significantly decreases

by about 9.5 percentage points. This result strongly supports Hypothesis H1, indicating that independent director dissent plays a substantial supervisory governance role, effectively curbing large shareholder encroachment.

## 4.2. Robustness Tests

Although the benchmark regression results show that independent director dissent significantly inhibits large shareholder tunneling, the above results may still be accidental due to variable measurement errors, sample selection bias, and endogeneity issues. To ensure the reliability of the research conclusions, this paper sequentially conducts a series of robustness tests including replacing the explained variable, replacing the explanatory variable, Propensity Score Matching (PSM), and Instrumental Variable methods. The test results show that the coefficient direction and significance level of the core explanatory variable did not change substantially, verifying the robustness of the conclusions in this paper.

## 4.3. Replacing the Explained Variable

Table 4. Replacing the Explained Variable

VARIABLES	(1) AC4	(2) AC5
DIF	-0.004*** (-5.002)	-0.007** (-2.176)
Size	0.000 (0.103)	0.003*** (3.063)
Leverage	0.015*** (11.649)	-0.001 (-0.160)
ROA	-0.048*** (-14.853)	-0.277*** (-20.216)
Boardsize	-0.002 (-1.267)	-0.011** (-2.067)
IndRate	-0.001 (-0.215)	-0.010 (-0.669)
Top1	-0.010*** (-7.138)	-0.043*** (-8.242)
TobinQ	0.001*** (5.326)	0.004*** (5.750)
Mshare	-0.002** (-2.455)	-0.007** (-2.202)
FirmAge	0.001* (1.886)	0.006** (2.487)
Constant	0.027*** (3.407)	0.039 (1.390)
Observations	48,497	48,494
R-squared	0.163	0.191
IndustryFE	YES	YES
YearFE	YES	YES

\*Note: Robust t-statistics in parentheses. \*\*p<0.01, p<0.05, \* p<0.1

Considering the diversity of manifestations of large shareholder tunneling behavior, using only "Other Receivables/Total Assets" may not fully cover all means of encroachment. Referring to existing literature, this paper uses

"Other Receivables as a Percentage of Total Assets (AC4)" and "Other Receivables as a Percentage of Operating Revenue (AC5)" as alternative indicators for large shareholder tunneling for regression. As shown in Table 4, the results in columns (1) and (2) show that the coefficients of DIF are -0.004 and -0.007, respectively, both significantly negative at the 1% or 5% level. This indicates that regardless of the measurement method, independent director dissent can significantly inhibit large shareholder expropriation, proving the universality of the benchmark results.

## 4.4. Replacing the Explanatory Variable

Table 5. Replacing the Explanatory Variable

VARIABLES	(1) Tunnel	(2) Tunnel
Dissent Count	-0.019*** (-5.275)	
Narrow Dissent		-0.154*** (-6.832)
Leverage	-0.048*** (-3.635)	-0.049*** (-3.683)
ROA	-0.093*** (-3.420)	-0.094*** (-3.482)
Boardsize	-0.014 (-1.059)	-0.014 (-1.046)
IndRate	-0.079* (-1.938)	-0.077* (-1.892)
Top1	0.184*** (11.510)	0.183*** (11.470)
TobinQ	-0.000 (-0.261)	-0.000 (-0.268)
Mshare	-0.112*** (-11.545)	-0.112*** (-11.532)
FirmAge	0.033*** (4.589)	0.033*** (4.631)
Constant	-0.078 (-1.193)	-0.088 (-1.336)
Observations	48,517	48,517
R-squared	0.047	0.047
IndustryFE	YES	YES
YearFE	YES	YES

\*Note: Robust t-statistics in parentheses. \*\*p<0.01, p<0.05, \* p<0.1

To avoid noise caused by overly broad definitions of the explanatory variable, this paper defines "independent director dissent" more finely. As shown in Table 5, column (1) uses "Number of Dissent Opinions" as a continuous variable for regression, and column (2) uses the stricter "Narrow Dissent" (referring only to explicit opposition rather than abstention) for regression. The results show that the regression coefficients of both alternative indicators are significantly negative, indicating that the higher the frequency and intensity of independent director dissent, the stronger the inhibitory effect on large shareholder tunneling, further consolidating the causal relationship of the main hypothesis.

## 4.5. Propensity Score Matching (PSM)

Table 6. Propensity Score Matching

VARIABLES	(1) Tunnel	(2) Tunnel	(3) Tunnel	(4) Tunnel
DIF	-0.113*** (-8.196)	-0.114*** (-7.771)	-0.115*** (-8.477)	-0.118*** (-8.118)
Size			-0.004 (-0.483)	-0.006 (-0.643)
Leverage			-0.054 (-1.208)	-0.060 (-1.134)
ROA			-0.214* (-1.700)	-0.247* (-1.731)
Boardsize			0.046 (0.961)	0.036 (0.687)
IndRate			0.047 (0.284)	0.051 (0.286)
Top1			0.226*** (4.414)	0.216*** (3.761)
TobinQ			-0.000 (-0.012)	0.003 (0.418)
Mshare			-0.132*** (-3.293)	-0.139*** (-3.046)
FirmAge			0.046** (2.324)	0.059** (2.260)
Constant	-0.021** (-2.342)	0.021 (0.292)	-0.214 (-1.104)	-0.153 (-0.652)
Observations	1,291	1,291	1,291	1,291
R-squared	0.050	0.100	0.078	0.127
IndustryFE	NO	YES	NO	YES
YearFE	NO	YES	NO	YES

\*Note: Robust t-statistics in parentheses. \*\*p<0.01, p<0.05, \* p<0.1

Since whether independent directors express dissent is not a random event, there may be sample self-selection bias, meaning that companies with severe tunneling are more likely to receive dissent, leading to biased benchmark regression results. To this end, this paper uses the Propensity Score Matching (PSM) method to find control groups with similar characteristics for the treatment group (companies issuing dissent). Table 6 shows that after eliminating differences in observable variables, the coefficient of DIF remains significantly negative. This indicates that after controlling for basic company characteristics, the inhibitory effect of dissent on tunneling still exists, ruling out the competitive explanation that only "bad" companies are supervised.

## 4.6. Endogeneity Tests

Although the previous sections alleviated omitted variable problems as much as possible by controlling fixed effects and conducting various robustness tests, there may still be endogenous biases caused by reverse causality or sample self-selection between independent director dissent and large shareholder tunneling. On one hand, companies with severe tunneling are more likely to trigger independent director dissent (reverse causality); on the other hand, companies publishing dissent may have inherently poor governance environments (sample selection bias). To address this, referring to the processing methods of Ye Kangtao (2011) and Huang Jianqiao (2024), this paper uses the Heckman two-step method and Instrumental Variable (IV) method to further

handle endogeneity issues.

### 4.6.1. Heckman Two-Step Method

To address sample self-selection bias, this paper uses the Heckman two-step method for correction. The first stage constructs a Probit model, selecting the average proportion of independent director dissent in other companies within the same industry-year excluding the focal firm as the exclusive restriction variable (Instrument), to predict whether the company will have independent director dissent (DIF). The second stage substitutes the Inverse Mills Ratio (IMR) from the first stage into the benchmark regression model. Table 7 shows that after controlling for self-selection bias, the coefficient of DIF remains significantly negative at the 1% level, and the IMR coefficient is not significant, indicating that the core conclusion of this paper still holds after correcting for sample selection bias.

**Table 7.** Heckman Two-Step Method

VARIABLES	(1)	(2)
DIF		-0.095***
		(-8.966)
IMR		0.305
		(1.590)
Size	-0.049***	-0.015
	(-2.592)	(-1.645)
Leverage	0.151	-0.006
	(1.434)	(-0.211)
ROA	-0.679**	-0.280**
	(-2.481)	(-2.341)
Boardsize	0.158	0.030
	(1.501)	(0.972)
IndRate	-0.269	-0.153**
	(-0.703)	(-2.478)
Top1	-0.593***	0.018
	(-4.673)	(0.173)
TobinQ	0.028*	0.007
	(1.907)	(1.445)
Mshare	-0.517***	-0.256***
	(-4.313)	(-2.818)
FirmAge	0.007	0.035***
	(0.107)	(4.811)
Constant	0.146	-0.219*
	(0.278)	(-1.948)
Observations	48,517	48,517
R-squared		0.049
IndustryFE	YES	YES
YearFE	YES	YES

\*Note: z-statistics in parentheses. \*\*p<0.01, p<0.05, \* p<0.1

#### 4.6.2. Instrumental Variable Approach

To further alleviate endogeneity caused by reverse causality, referring to the practice of Gao et al. (2021), this paper selects the average proportion of independent director dissent in other companies within the same province and year as the instrumental variable for DIF. This variable satisfies the conditions of relevance (similar corporate governance atmosphere in the same region) and exogeneity (does not affect the tunneling decisions of the focal firm). Table 8 shows that the first-stage F-value is greater than 10, rejecting the weak instrument hypothesis; in the second-stage regression, the coefficient of DIF is significantly negative at the 1% level. This confirms the causal inference validity found in the benchmark regression, indicating that independent director dissent is indeed one of the driving forces inhibiting large shareholder tunneling.

**Table 8.** Instrumental Variable Approach

VARIABLES	(1)	(2)
iv	0.999***	
	(10.611)	
DIF		-0.192***
		(-2.689)
		(-0.534)
Leverage	0.004	-0.048***
	(0.875)	(-3.610)
ROA	-0.026**	-0.097***
	(-2.349)	(-3.559)
Boardsize	0.004	-0.013
	(1.087)	(-1.004)
IndRate	-0.009	-0.079*
	(-0.769)	(-1.939)
Top1	-0.014***	0.181***
	(-3.630)	(11.319)
TobinQ	0.001**	-0.000
	(2.124)	(-0.164)
Mshare	-0.012***	-0.113***
	(-4.285)	(-11.641)
FirmAge	-0.001	0.033***
	(-0.600)	(4.589)
Constant	0.039	-0.052
	(1.582)	(-0.778)
Observations	48,517	48,517
R-squared	0.060	0.046
IndustryFE	YES	YES
YearFE	YES	YES

\*Note: Robust t-statistics in parentheses. \*\*p<0.01, p<0.05, \* p<0.1

## 5. Further Analysis

### 5.1. Heterogeneity Analysis

Table 9. Heterogeneity Analysis

	(1)	(2)
VARIABLES	Tunnel	Tunnel
DIF	-0.087***	-0.034*
	(-7.480)	(-1.682)
DIF×Excessive Board Appointments	-0.061***	
	(-2.689)	
Excessive Board Appointments	-0.009*	
Related Transaction Opposition	(-1.650)	
DIF×Related Transaction Opposition		-0.106***
		(-4.651)
Size	-0.001	-0.001
	(-0.491)	(-0.485)
Leverage	-0.048***	-0.048***
	(-3.642)	(-3.629)
ROA	-0.093***	-0.093***
	(-3.442)	(-3.443)
Boardsize	-0.013	-0.014
	(-1.012)	(-1.044)
IndRate	-0.077*	-0.079*
	(-1.892)	(-1.954)
Top1	0.181***	0.183***
	(11.348)	(11.475)
TobinQ	-0.000	-0.000
	(-0.233)	(-0.263)
Mshare	-0.116***	-0.112***
	(-11.677)	(-11.594)
FirmAge	0.032***	0.033***
	(4.529)	(4.557)
Constant	-0.069	-0.063
	(-1.059)	(-0.969)
Observations	48,517	48,517
R-squared	0.049	0.049
IndustryFE	YES	YES
YearFE	YES	YES

\*Note: Robust t-statistics in parentheses. \*\*p<0.01, p<0.05, \* p<0.1

### 5.2. Excessive Board Appointments

When large shareholders strengthen their control over the board through excessive appointments, the independence of independent directors often faces severe challenges, and their supervisory functions are easily weakened or hollowed out (Zhi Xiaoqiang and Tong Pan, 2005; Li Shigang et al., 2025). If independent director dissent is merely a formal expression constrained by the will of large shareholders, or if their voice struggles to generate substantial resistance in an environment of excessive control, we expect the inhibitory effect of dissent on tunneling to be weakened in firms with excessive appointments. Conversely, if independent directors can insist on dissenting in front of powerful large shareholders, this counter-current supervisory signal may be more shocking, thereby activating stronger external governance responses. From this, we infer that the inhibitory effect of independent director dissent on tunneling may be more obvious in firms with excessive appointments.

Referring to the practice of Zheng Zhigang et al. (2022), this paper uses whether "the number of directors actually appointed minus the number of directors that should be appointed according to shareholding ratio" is greater than 0 to measure excessive appointments, taking 1 if greater than 0, otherwise 0. This paper divides the full sample into an "Excessive Appointment" group (Column 1) and a "Non-Excessive Appointment" group (Column 2) for separate regressions. The regression results show that in the excessive appointment group, the coefficient of DIF is significantly negative (-0.087), and the coefficient of the interaction term (DIF × Excessive Appointment) is also significantly negative (-0.061); while in the non-excessive appointment group, the coefficient of DIF is -0.034 and is only significant at the 10% level. This indicates that independent director dissent has a stronger inhibitory effect on tunneling in scenarios where the board is under excessive control by large shareholders and the governance environment is harsher, verifying our inference and indicating that independent director dissent has special governance value when confronting powerful insiders.

### 5.3. Related Transaction Opposition

The most common means used by large shareholders for tunneling is unfair related-party transactions (Jiang et al., 2010; Huang Jun and Pan Meixia, 2010). When independent director dissent directly targets proposals involving related-party transactions, such objections not only hit the core channel of large shareholder tunneling but also transmit more precise and strong warning signals to the outside world. Compared with general dissent, opposition specifically targeting "related transactions" is more likely to attract targeted attention from the media, analysts, and regulators, rapidly raising the political and public opinion costs for large shareholders to implement related-party tunneling. Therefore, we expect that when independent director dissent specifically targets related transaction topics, its inhibitory effect on large shareholder tunneling will be more significant.

Referring to the topic classification of disclosed independent director dissent, this paper sets a dummy variable "Related Transaction Opposition," taking 1 if the dissent explicitly involves related-party transactions, fund occupation, or guarantees, otherwise 0. The interaction term (DIF × Related Transaction Opposition) is included in the regression for testing, where Column (1) shows the full sample regression results. The regression results show that the coefficient of the interaction term is significantly negative (-0.106), and is significantly higher than the benchmark coefficient of DIF in the full sample (-0.095). This indicates that when independent director dissent directly targets related transactions—the "hard-hit area" of tunneling—its governance efficacy is greatly enhanced, effectively curbing large shareholder expropriation through related transactions, verifying the aforementioned inference.

## 5.4. Mechanism Analysis

Table 10. Mechanism Analysis

VARIABLES	(1) Negative News Count	(2) SYN
DIF	0.158*** (4.115)	-0.078** (-2.355)
Size	0.409*** (37.771)	-0.040*** (-6.134)
Leverage	0.062 (1.262)	-0.320*** (-10.102)
ROA	-1.155*** (-11.066)	-0.776*** (-9.465)
Boardsize	0.111** (2.073)	0.055* (1.753)
IndRate	0.938*** (5.222)	0.076 (0.717)
Top1	-0.277*** (-4.315)	-0.165*** (-4.456)
TobinQ	0.202*** (30.344)	-0.168*** (-32.089)
Mshare	0.313*** (7.402)	-0.193*** (-6.682)
FirmAge	-0.190*** (-6.313)	0.022 (1.182)
Constant	-6.833*** (-23.437)	1.646*** (8.832)
Observations	48,517	48,474
R-squared	0.442	0.309
IndustryFE	YES	YES
YearFE	YES	YES

\*Note: Robust t-statistics in parentheses. \*\*p<0.01, p<0.05, \* p<0.1

Prior theoretical analysis posits that independent director dissent inhibits tunneling by emitting a strong negative signal. This signal breaks information barriers to activate external governance: it triggers media scrutiny and reduces stock price synchronicity (SYN), thereby increasing the visibility and cost of expropriation.

Following Huang (2024) and Dou et al. (2022), we employ Negative News Count and SYN as mechanism variables. Regression results show that DIF significantly increases negative media coverage (coef. = 0.158) and reduces SYN (coef. = -0.078). These findings confirm that dissent activates external pressure through "media attention" and "information transparency," thereby curbing tunneling.

## 6. Conclusion

Against the backdrop of relatively concentrated ownership structures in China's capital market and prominent agency conflicts between large shareholders and minority shareholders, how to effectively constrain large shareholder tunneling behavior has always been a core issue in the field of corporate governance. Based on the specific supervisory behavior of independent director dissent, this paper empirically tests its governance effect on large shareholder tunneling using data from A-share listed companies from 2007 to 2024. The study finds that independent directors expressing dissent can significantly inhibit large shareholder

fund occupation and tunneling through related-party transactions, and this conclusion remains valid after endogenous treatments such as propensity score matching, the Heckman two-step method, and instrumental variable methods. Heterogeneity analysis shows that this inhibitory effect is more pronounced in the presence of excessive appointments and when involving related transaction topics. Mechanism tests further reveal that independent director dissent activates external governance pressure by triggering negative media reports and reducing stock price synchronicity, thereby raising the cost of large shareholder tunneling.

The research logic of this paper is: Independent director dissent is not only a veto power within the board but also a risk signal transmitted to the capital market. By leveraging media and market supervision forces, it achieves external constraints on large shareholder behavior. The conclusions of this paper not only enrich the relevant literature on the economic consequences of independent director performance and large shareholder tunneling governance but also provide empirical evidence for regulatory authorities to further optimize the independent director system. Specifically, it is recommended that regulatory agencies refine the disclosure rules for independent director dissent, encourage independent directors to actively voice opinions on key proposals such as related-party transactions, and guide the media and analysts to exert external supervision synergy, jointly safeguarding the legitimate rights and interests of minority investors and the order of the capital market.

## References

- [1] Claessens, S., Djankov, S., Fan, J. P. H., & Lang, L. H. P. (1999). The expropriation of minority shareholders: Evidence from East Asia (World Bank Policy Research Working Paper No. 2088). World Bank.
- [2] Dou, C., Yang, X., Liu, W., & Chen, X. (2022). Independent director macro-vision and corporate debt default. *Accounting Research*, (7), 58–74. (Original work published in Chinese)
- [3] Du, X., Yin, J., & Lai, S. (2017). Seniority ranking, CEO tenure and independent directors' dissent behavior. *China Industrial Economics*, (12), 151–169. (Original work published in Chinese)
- [4] Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301–325. <https://doi.org/10.1086/465037>
- [5] Fan, H., & Wang, S. (2021). Investor network attention and the supervision effect on corporate tax avoidance. *China Certified Public Accountant*, (12), 70–76. (Original work published in Chinese)
- [6] Fried, J. M., Kamar, E., & Yafeh, Y. (2020). The effect of minority veto rights on controller pay tunneling. *Journal of Financial Economics*, 138(3), 777–788. <https://doi.org/10.1016/j.jfineco.2020.06.012>
- [7] Gao, K. J., Shen, Y. R., & Chan, K. C. (2021). Does analyst following restrain tunneling? Evidence from brokerage closures and mergers. *Finance Research Letters*, 41, 101849. <https://doi.org/10.1016/j.frl.2021.101849>
- [8] Hao, Y., Li, J., & Wei, Z. (2022). Can industry expert independent directors improve capital allocation efficiency? Empirical evidence from A-share listed companies. *Accounting Research*, (5), 65–76. (Original work published in Chinese)
- [9] Huang, J. (2024). Can the implementation of the new Securities Law curb large shareholder tunneling? *Accounting Research*, (10), 82–94. (Original work published in Chinese)

- [10] Jiang, G., Lee, C. M. C., & Yue, H. (2010). Tunneling through intercorporate loans: The China experience. *Journal of Financial Economics*, 98(1), 1–20. <https://doi.org/10.1016/j.jfineco.2010.05.005>
- [11] Jiang, W., Wan, H., & Zhao, S. (2016). Reputation concerns of independent directors: Evidence from individual director voting. *The Review of Financial Studies*, 29(3), 655–696. <https://doi.org/10.1093/rfs/hhv127>
- [12] Johnson, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2000). Tunneling. *American Economic Review*, 90(2), 22–27. <https://doi.org/10.1257/aer.90.2.22>
- [13] Li, M., & Ye, Y. (2016). Empirical study on the impact of negative media coverage on controlling shareholder tunneling behavior. *Management Review*, 28(1), 73–82. (Original work published in Chinese)
- [14] Li, S., Shao, H., & Zhang, W. (2025). Limited partnership agreement structure and independent director dissent behavior. *Accounting Research*, (3), 179–192. (Original work published in Chinese)
- [15] Luo, D., & Tang, Q. (2007). Market environment and controlling shareholders' "tunneling" behavior: Empirical evidence from Chinese listed companies. *Accounting Research*, (4), 69–74, 96. (Original work published in Chinese)
- [16] Tang, Q., Luo, D., & Wang, L. (2005). Large shareholders' tunneling and checks and balances: Evidence from the Chinese market. *China Accounting Review*, (1), 63–86. (Original work published in Chinese)
- [17] Ye, K., Lu, Z., & Zhang, Z. (2007). Can independent directors curb large shareholders' "tunneling"? *Economic Research Journal*, (4), 101–111. (Original work published in Chinese)
- [18] Ye, K., Zhu, J., Lu, Z., & Zheng, D. (2011). Independence of independent directors: Evidence based on board voting. *Economic Research Journal*, 46(1), 126–139. (Original work published in Chinese)
- [19] Zheng, Z., Li, M., Jin, T., & Deng, K. (2022). Limited partnership agreement structure and listed company governance. *Management World*, 38(7), 184–201. (Original work published in Chinese)
- [20] Zhi, X., & Tong, P. (2005). Earnings management, control transfer and independent director turnover: Also on the exertion of independent director governance role. *Management World*, (11), 137–144. (Original work published in Chinese)