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Employee Board Representation, Corporate Financialization and Government Subsidies in China

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Abstract: This paper examines whether worker representatives on corporate boards change how firms allocate resources between production and finance. Using hand-collected data on employee directors of Chinese A-share listed firms from 2007 to 2021 and two-way fixed-effects mediation models, it compares an internal channel, the restraint of corporate financialization, with an external channel, access to government subsidies. Firms with an employee director hold 1.6 percentage points less of their assets in financial instruments, and lower financialization is associated with higher employment. Employee directors are also associated with larger subsidies, which are positively related to employment. A decomposition of the indirect effects shows that the internal channel explains about 11-12% of the employment difference associated with employee directors, whereas the subsidy channel explains about 3%. The employment difference is robust to an asset-scaled labor measure, a treatment-effects model using peer adoption as instruments, controls for employment dynamics, high-dimensional fixed effects and sample exclusions. The results indicate that board-level worker voice affects real outcomes mainly by changing how firms use their own resources rather than by attracting public funds.

1. Introduction

Over the past two decades, a growing share of the assets of non-financial firms has been placed in trading securities, wealth management products, investment property and other financial instruments. Financial assets offer liquidity, short payback periods and, in many years, higher returns than industrial projects whose margins have narrowed[1,2]. The literature calls this shift the financialization of the real sector[3]. In China, financialization has been linked to managerial characteristics and agency problems[4,5], and recent work shows that the crowding-out of real investment also reduces the demand for labor[6]. These findings raise a governance question: which actors inside the firm are able and willing to keep capital in production?

Workers are natural candidates. Their human capital is firm-specific and their claims on the firm are largely fixed, so they gain more from stable operations than from short-term financial gains[7]. Whether giving them a seat on the board changes corporate decisions is, however, contested. Supporters argue that employee representatives improve information flows and monitoring[8,9,10]. Critics argue that labor representation lowers shareholder value[11] or entrenches insiders[12]. The most

credible recent evidence from Germany finds that board-level codetermination does not raise wages but, if anything, increases capital formation[13]. That result points to capital allocation, not rent extraction, as the margin on which worker voice operates. Evidence on how worker representation affects the split between real and financial uses of capital is, however, scarce.

China offers a useful setting for this question for two reasons. First, its employee director system gives workers' elected representatives a vote on the board, including on major investment decisions. The system began with the 1993 Company Law for certain state-invested companies, and the 2023 revision of the Company Law extends board-level employee representation to companies with 300 or more employees. Second, Chinese governments pursue explicit employment goals and channel subsidies to firms that carry social burdens[14,15]. Board-level worker representation can therefore affect a firm's resources from two directions: from inside, through the allocation of the firm's own assets, and from outside, through the firm's access to public funds.

Li et al.[16] show with the same hand-collected data that firms with employee directors employ more workers. They attribute the difference to less earnings manipulation, larger output and a better corporate reputation, and they find that the effect is concentrated in state-owned firms and reversed in non-state firms. We do not revisit these channels. Instead, we ask a different question: does board-level worker voice change the allocation of resources between production and finance, and how much of its association with employment runs through internal reallocation compared with external public support?

Our analysis yields three main findings. First, firms with employee directors are significantly less financialized, and financialization is negatively associated with employment. Second, firms with employee directors receive larger government subsidies, and subsidies are positively associated with employment. Third, a decomposition of the indirect effects shows that the internal channel is roughly four times as large as the subsidy channel. Because the decomposition is meaningful only if the employment difference is credible, we also report a full set of identification tests on the employment response. Li et al.[16] list several of these tests without reporting the estimates; we report them in full.

The paper contributes to three strands of research. First, it provides evidence that board-level labor representation is associated with lower corporate financialization, which extends the capital-formation result of Jäger et al.[13] to the margin between real and financial investment. Second, it adds a board-composition determinant to the literature on the causes of financialization in emerging markets, which has so far focused on managers and owners. Third, by comparing an internal and an external channel within one framework, it shows that the real effects of worker voice do not depend mainly on fiscal transfers, which has direct implications for the cost of employment policy.

2. Institutional setting and related research

2.1 Employee directors and capital allocation decisions

Employee directors in China are elected by the workers' congress or through other democratic procedures. The legal basis expanded gradually: the 1993 Company Law required them in limited liability companies established by two or more state investors, the 2005 revision allowed all other limited liability companies and joint stock companies to include them, and the 2023 revision made board-level employee representation mandatory for companies with 300 or more employees unless employees are represented on the board of supervisors. For this paper, the relevant feature is the scope of their board powers. Rules issued by the State-owned Assets Supervision and Administration Commission in 2009 give employee directors the same rights and obligations as other directors, together with special duties on matters such as employment, wages and labor protection. Because the board approves large financial investments, wealth management purchases and acquisitions of investment property, employee directors take part in exactly the decisions that determine whether

capital stays in operations. Adoption nevertheless remains limited: only 3.1% of the firm-years in our sample report an employee director.

2.2 Related research

Three strands of research are relevant. The first studies the consequences of employee board representation. In European data, employee representatives are associated with better board monitoring, higher earnings quality and, in some settings, higher valuations[10,17,18], and labor representation can insure workers against adverse shocks[19]. Chinese scholars question whether employee directors can act independently, because they are both subordinates and monitors of management and often hold trade union or Party posts[20,21,22]. Empirical work on China is limited to investment efficiency[23] and employment[16].

The second strand studies corporate financialization. Financial investment by non-financial firms crowds out real investment[1,2], and in China it is shaped by CEO background and agency costs[4,5]. Because labor demand is derived from production, the crowding-out of real investment also reduces hiring[6]. The third strand studies government subsidies. Subsidies in China serve social as well as economic goals: firms that carry heavier social burdens receive more support[14], firms that stabilized employment during the growth slowdown obtained more resources[15], and subsidies are related to firms' hiring decisions[24]. Neither the financialization strand nor the subsidy strand has examined the role of board composition.

3. Hypotheses

Agency theory predicts that managers whose pay and careers depend on short-term performance prefer projects with fast and visible returns[25]. Financial assets satisfy this preference better than industrial projects, so managers who pursue short-term targets have an incentive to move capital out of operations[2,5]. Employee directors are positioned to resist this shift. Their constituents are risk-averse and value continuity[18]. They observe early when operating budgets are cut in favor of financial portfolios, and they can raise the issue directly at board meetings, which strengthens monitoring[10]. Keeping resources in operations preserves the internal funds on which hiring depends[26]. The influence does not require employee directors to hold a majority. Board decisions on large financial investments are usually taken by consensus, and a dissenting director who records objections or requests further information raises the reputational cost of approving a proposal that weakens operations. Employee directors also bring shop-floor knowledge about capacity, workloads and staffing gaps that other directors lack[27], which makes the case for real investment more concrete. An opposing view holds that managers and incumbent workers may form an alliance that protects insiders' interests[12]; such an alliance would not, however, favor the diversion of capital away from the workers' own production units. We therefore expect the following.

H1: Employee directors reduce corporate financialization, and lower financialization is associated with higher employment.

Employee directors may also change the resources a firm receives from outside. Governments in China subsidize firms that help achieve public objectives[28,14]. Appointing an employee director is a visible commitment to employee protection and stable labor relations, which matches the employment targets on which local officials are evaluated. Firms also seek closer ties with governments by responding to policy calls, including the call to absorb labor[24]. Subsidies ease the financing and cash-flow constraints that are known to restrict hiring[29,30].

H2: Employee directors increase the government subsidies a firm receives, and larger subsidies are associated with higher employment.

4. Data and research design

4.1 Sample

The sample covers firms listed on the Shanghai and Shenzhen A-share markets from 2007, when the Accounting Standards for Business Enterprises issued in 2006 took effect, to 2021. Information on employee directors was collected by hand, and financial, governance and basic company data come from the CSMAR database. Following Liu et al.[31], we drop observations with missing key variables, firms in the financial, insurance and real estate industries, ST and *ST firms, and firms with fewer than ten employees. All continuous variables are winsorized at the 1st and 99th percentiles. The final sample contains 32,248 firm-year observations, of which 1,001 report at least one employee director. The sample and the hand-collected employee director data are the same as those in Li et al.[16], and the descriptive statistics are reported there.

4.2 Variables

Employee director representation (ER) is measured by ERD, a dummy equal to one if the firm has at least one employee director in the year, and by ERP, the ratio of employee directors to board size. Financialization (Fin) follows Du et al.[4] and is the ratio of financial assets to total assets, where financial assets include trading financial assets, derivative financial assets, net loans and advances, net available-for-sale financial assets, held-to-maturity investments and investment property. Government support (Gov) is the natural logarithm of one plus the government subsidies recorded under non-operating income in the notes to the financial statements. Employment (Emp) is measured by LnempA, the natural logarithm of the number of employees, and by LnempN, which excludes directors, supervisors and senior executives so that a newly created board seat cannot change the measure mechanically. Following Li and Liu[32], we also scale employees by total assets. Table 1 defines all variables.

Table 1. Variable definitions

Variable	Definition
ERD	1 if the firm has at least one employee director in the year, 0 otherwise
ERP	Number of employee directors / number of board members
Fin	Financial assets / total assets
Gov	Ln(1 + government subsidies recorded under non-operating income)
LnempA	Ln(number of employees)
LnempN	Ln(number of employees − directors, supervisors and senior executives)
EmpsizeA / EmpsizeN	Employees (excluding directors, supervisors and senior executives for N) / total assets × 10^6
IV1 / IV2	Mean ERD of other firms in the same province (IV1) or in neighboring provinces (IV2) in the same year
Size, Lev, Roa, Cash	Ln(total assets); total liabilities / total assets; net profit / total assets; monetary funds / total assets
AT, Growth, Wage	Operating income / total assets; growth rate of operating income; Ln(1 + cash paid to employees / employees)
Top1, Mhold, Bsize, Indir	Largest shareholder's stake; senior management ownership; Ln(board size); proportion of independent directors
Dual, SOE, Age	1 if the chair is also the CEO; 1 if state-owned; Ln(1 + firm age)
Mkt, GDP	Provincial marketization index; provincial GDP per capita / 10,000

4.3 Empirical models

We test both hypotheses with the stepwise mediation procedure and two-way fixed effects:

$$M_{i,t} = \beta_0 + \beta_1 ER_{i,t} + \sum \gamma Controls_{i,t} + \mu_i + \lambda_t + \varepsilon_{i,t} \quad (1)$$

$$Emp_{i,t} = \delta_0 + \delta_1 ER_{i,t} + \delta_2 M_{i,t} + \sum \gamma Controls_{i,t} + \mu_i + \lambda_t + \varepsilon_{i,t} \quad (2)$$

where M is Fin or Gov, μi and λt are firm and year fixed effects, and standard errors are clustered by firm. H1 predicts $\beta 1 < 0$ and $\delta 2 < 0$ for Fin, and H2 predicts $\beta 1 > 0$ and $\delta 2 > 0$ for Gov. We evaluate the indirect effect $\beta 1 \cdot \delta 2$ with the Sobel test and express it as a share of the total ER coefficient estimated on the same sample without the mediator. This share is the quantity that allows the two channels to be compared.

5. Main results: two resource channels

5.1 The internal channel: curbing financialization

Table 2 reports the tests of H1. In columns (2) and (5), employee directors are associated with significantly lower financialization. The coefficient on ERD is −0.0160 (t = −5.96), so firms with an employee director hold 1.6 percentage points less of their assets in financial instruments; the coefficient on ERP is −0.1581 (t = −6.22). Among the controls, cash holdings and leverage enter the Fin equation negatively, while firm age and provincial GDP per capita enter positively. In columns (3) and (6), Fin has a significantly negative coefficient of about −0.417 in the employment equation, and the employee director coefficients remain significant but become smaller. The Sobel statistics (Z = 5.01 and 5.15) reject the null hypothesis of no indirect effect at the 1% level. These results support H1: employee directors are associated with keeping capital in productive operations, and firms that keep more capital in operations employ more workers.

Table 2. Employee directors, financialization and employment

	(1) LnempA	(2) Fin	(3) LnempA	(4) LnempA	(5) Fin	(6) LnempA
ER	0.0567***	-0.0160***	0.0501**	0.5941***	-0.1581***	0.5275***
	(2.81)	(-5.96)	(2.48)	(3.19)	(-6.22)	(2.84)
Fin			-0.4172***			-0.4166***
			(-9.25)			(-9.23)
Size	0.7673***	-0.0066***	0.7646***	0.7673***	-0.0066***	0.7647***
	(101.85)	(-6.52)	(102.25)	(101.91)	(-6.54)	(102.26)
Lev	0.0140	-0.0543***	-0.0086	0.0147	-0.0542***	-0.0091
	(0.48)	(-12.16)	(-0.30)	(0.51)	(-12.14)	(-0.32)
Roa	-0.3249***	-0.0110	-0.3295***	-0.3255***	-0.0110	-0.3294***
	(-6.14)	(-1.41)	(-6.25)	(-6.16)	(-1.41)	(-6.25)
Cash	-0.2068***	-0.0968***	-0.2472***	-0.2054***	-0.0968***	-0.2472***
	(-8.22)	(-21.43)	(-9.82)	(-8.17)	(-21.43)	(-9.82)
AT	0.4890***	-0.0170***	0.4819***	0.4894***	-0.0170***	0.4819***
	(30.01)	(-9.83)	(29.74)	(30.08)	(-9.83)	(29.75)
Growth	-0.0632***	0.0009	-0.0628***	-0.0630***	0.0009	-0.0629***
	(-8.21)	(0.88)	(-8.19)	(-8.19)	(0.88)	(-8.19)
Wage	-0.9247***	0.0041***	-0.9229***	-0.9249***	0.0041***	-0.9230***
	(-74.38)	(3.16)	(-74.15)	(-74.40)	(3.17)	(-74.16)
Top1	0.0008**	0.0001*	0.0009**	0.0009**	0.0001*	0.0009**
	(1.98)	(1.71)	(2.10)	(2.05)	(1.69)	(2.10)
Mhold	-0.0369	-0.0213***	-0.0458	-0.0387	-0.0213***	-0.0459

	(1) LnempA	(2) Fin	(3) LnempA	(4) LnempA	(5) Fin	(6) LnempA
	(-1.11)	(-3.84)	(-1.38)	(-1.17)	(-3.84)	(-1.38)
Bsize	0.0406***	-0.0008	0.0403***	0.0422***	-0.0010	0.0410***
	(3.77)	(-0.43)	(3.75)	(3.92)	(-0.56)	(3.82)
Indir	-0.0137	-0.0068	-0.0166	-0.0142	-0.0070	-0.0157
	(-0.45)	(-1.31)	(-0.54)	(-0.46)	(-1.36)	(-0.51)
Dual	0.0130*	0.0013	0.0136*	0.0134*	0.0013	0.0137*
	(1.79)	(1.05)	(1.87)	(1.84)	(1.04)	(1.88)
SOE	0.0747***	0.0019	0.0755***	0.0739***	0.0019	0.0754***
	(4.40)	(0.72)	(4.47)	(4.34)	(0.73)	(4.47)
Age	0.0942***	0.0223***	0.1035***	0.0942***	0.0222***	0.1044***
	(2.98)	(4.90)	(3.30)	(2.98)	(4.87)	(3.33)
Mkt	0.0079	0.0028***	0.0090*	0.0078	0.0028***	0.0090*
	(1.59)	(3.46)	(1.83)	(1.58)	(3.47)	(1.82)
GDP	0.0185***	0.0024***	0.0195***	0.0187***	0.0024***	0.0195***
	(7.76)	(5.76)	(8.19)	(7.82)	(5.77)	(8.19)
Constant	0.4747**	0.0848***	0.5101**	0.4730**	0.0861***	0.5046**
	(2.10)	(2.97)	(2.26)	(2.09)	(3.02)	(2.24)
N	32217	32217	32217	32248	32217	32217
Adjusted R^2	0.9444	0.5818	0.9447	0.9444	0.5819	0.9447
F	1018.51	42.5207	968.4236	1018.11	42.5160	968.3499
Sobel Z		5.01***			5.15***	
ER measure	ERD	ERD	ERD	ERP	ERP	ERP
Firm FE / Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Note: t-statistics based on standard errors clustered at the firm level are in parentheses. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively. All columns include the control variables defined in Table 1. Column (4) reports the employment equation estimated on the full sample, as in the original estimation output.

5.2 The external channel: obtaining government subsidies

Table 3 reports the tests of H2 on the subsample with available subsidy data (25,562 observations). In column (2), ERD raises Gov by 0.7294 log points (t = 2.66), and in column (5), ERP has a coefficient of 7.1691 (t = 2.82). Taken literally, the ERD estimate implies that subsidies roughly double, which is large and is best read as an upper bound given the skewed distribution of subsidies. In columns (3) and (6), Gov is positively and significantly related to employment, and the employee director coefficients decline slightly. The Sobel statistics (Z = 2.42 and 2.54) are significant at the 5% level. These results support H2: firms with employee directors receive more public support, and the additional resources are associated with higher employment.

Table 3. Employee directors, government subsidies and employment

	(1) LnempA	(2) Gov	(3) LnempA	(4) LnempA	(5) Gov	(6) LnempA
ER	0.0850***	0.7294***	0.0823***	0.8309***	7.1691***	0.8051***
	(3.74)	(2.66)	(3.63)	(3.95)	(2.82)	(3.84)
Gov			0.0036***			0.0036***
			(5.91)			(5.90)
Size	0.7370***	0.8294***	0.7341***	0.7371***	0.8298***	0.7341***
	(85.33)	(10.83)	(85.20)	(85.34)	(10.83)	(85.21)
Lev	0.0323	0.1000	0.0319	0.0315	0.0937	0.0312
	(1.05)	(0.32)	(1.04)	(1.03)	(0.30)	(1.02)
Roa	-0.3121***	0.2730	-0.3130***	-0.3120***	0.2729	-0.3130***

	(1) LnempA	(2) Gov	(3) LnempA	(4) LnempA	(5) Gov	(6) LnempA
	(-5.10)	(0.41)	(-5.13)	(-5.10)	(0.41)	(-5.13)
Cash	-0.2341***	0.5065*	-0.2359***	-0.2345***	0.5033*	-0.2363***
	(-8.54)	(1.66)	(-8.62)	(-8.55)	(1.65)	(-8.64)
AT	0.4753***	0.1171	0.4749***	0.4753***	0.1168	0.4748***
	(26.93)	(0.78)	(26.96)	(26.94)	(0.78)	(26.96)
Growth	-0.0537***	-0.0546	-0.0535***	-0.0538***	-0.0549	-0.0536***
	(-6.11)	(-0.74)	(-6.11)	(-6.11)	(-0.74)	(-6.11)
Wage	-0.9342***	0.0585	-0.9344***	-0.9343***	0.0582	-0.9345***
	(-66.48)	(0.66)	(-66.65)	(-66.48)	(0.65)	(-66.65)
Top1	0.0008	0.0060	0.0008	0.0008	0.0061	0.0008
	(1.56)	(1.31)	(1.52)	(1.57)	(1.33)	(1.54)
Mhold	-0.0780**	0.9598**	-0.0814**	-0.0779**	0.9603**	-0.0814**
	(-2.00)	(2.03)	(-2.10)	(-2.00)	(2.03)	(-2.09)
Bsize	0.0363***	0.0944	0.0360***	0.0377***	0.1060	0.0373***
	(2.96)	(0.64)	(2.94)	(3.07)	(0.72)	(3.05)
Indir	0.0115	-0.4903	0.0132	0.0123	-0.4828	0.0140
	(0.34)	(-1.15)	(0.39)	(0.36)	(-1.13)	(0.41)
Dual	0.0125	-0.0086	0.0126	0.0126	-0.0083	0.0126
	(1.49)	(-0.09)	(1.50)	(1.49)	(-0.09)	(1.50)
SOE	0.0811***	-0.3181	0.0822***	0.0811***	-0.3183	0.0822***
	(3.96)	(-1.52)	(4.04)	(3.96)	(-1.52)	(4.04)
Age	0.1209***	-1.5788***	0.1266***	0.1215***	-1.5727***	0.1272***
	(3.45)	(-4.13)	(3.62)	(3.47)	(-4.12)	(3.64)
Mkt	0.0144**	0.0594	0.0142**	0.0144**	0.0592	0.0142**
	(2.52)	(0.82)	(2.48)	(2.51)	(0.82)	(2.48)
GDP	0.0225***	0.1466***	0.0220***	0.0225***	0.1465***	0.0220***
	(7.42)	(3.71)	(7.25)	(7.42)	(3.71)	(7.25)
Constant	1.0996***	-2.3554	1.1080***	1.0941***	-2.4036	1.1028***
	(4.20)	(-1.05)	(4.24)	(4.18)	(-1.07)	(4.22)
N	25562	25562	25562	25562	25562	25562
Adjusted R^2	0.9460	0.3970	0.9461	0.9460	0.3971	0.9461
F	784.2428	11.3573	745.9580	784.0541	11.3714	745.7657
Sobel Z		2.42**			2.54**	
ER measure	ERD	ERD	ERD	ERP	ERP	ERP
Firm FE / Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Note: t-statistics based on standard errors clustered at the firm level are in parentheses. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively. All columns include the control variables defined in Table 1.

5.3 Channel matters

Table 4 compares the two channels. The indirect effect is the product of the employee director coefficient in the mediator equation and the mediator coefficient in the employment equation, and the share divides it by the total employee director coefficient estimated on the same sample. The financialization channel accounts for 11.8% (ERD) and 11.1% (ERP) of the total effect, whereas the subsidy channel accounts for about 3.1% under both measures. The internal channel is therefore roughly four times as large as the external channel, even though the subsidy subsample yields a larger total effect. The difference matters for interpretation. If employee directors raised employment mainly by attracting public funds, their real effects would depend on local fiscal capacity and would partly be a transfer from taxpayers. The evidence instead suggests that most of the measured channel effect

comes from how firms use the resources they already own. Together, the two channels account for less than one-sixth of the employment difference, so other channels, including those studied by Li et al.[16], remain important.

Table 4. Decomposition of the indirect effects

Channel	ER measure	β1 (ER → M)	δ2 (M → Emp)	Indirect effect β1·δ2	Total effect	Share of total	Sobel Z
Financialization (Fin)	ERD	-0.0160***	-0.4172***	0.0067	0.0567***	11.8%	5.01***
Financialization (Fin)	ERP	-0.1581***	-0.4166***	0.0659	0.5941***	11.1%	5.15***
Subsidies (Gov)	ERD	0.7294***	0.0036***	0.0026	0.0850***	3.1%	2.42**
Subsidies (Gov)	ERP	7.1691***	0.0036***	0.0258	0.8309***	3.1%	2.54**

Note: Computed from Tables 2 and 3; no additional estimation is involved. β1 is the ER coefficient in the mediator equation, δ2 is the mediator coefficient in the employment equation, and the total effect is the ER coefficient in column (1) or (4) of the respective table. Significance stars are those of the original estimates.

6. Employment response credibility

The decomposition in Section 5 is informative only if firms with employee directors do employ more workers for reasons other than size or selection. In the full sample, the employee director coefficient in a two-way fixed-effects employment regression is about 0.057 for ERD (column (1) of Table 2), which is close to the estimate reported by Li et al.[16] with a slightly different set of controls. This section reports tests that address the main threats to that estimate.

6.1 Raw correlations and univariate differences

Panel A of Table 5 shows that ERD and ERP are positively correlated with both log employment measures (about 0.09 to 0.10) but only weakly correlated with the asset-scaled measures (0.025 to 0.028). Panel B shows that firms with employee directors have a mean LnempA that is 0.722 log points higher than other firms (t = 18.40). The raw gap is more than ten times the fixed-effects estimate, which indicates that adopters differ systematically from other firms and that firm size must be addressed. The very high correlations within each pair of alternative measures arise because they capture the same construct; the paired measures never enter the same regression.

Table 5. Correlations and univariate comparison

Panel A: Pearson correlation matrix						
	LnempA	LnempN	EmpsizeA	EmpsizeN	ERD	ERP
LnempA	1					
LnempN	0.999***	1				
EmpsizeA	0.266***	0.266***	1			
EmpsizeN	0.273***	0.274***	1.000***	1		
ERD	0.102***	0.101***	0.026***	0.025***	1	
ERP	0.095***	0.094***	0.028***	0.027***	0.978***	1
Panel B: Univariate t-test by employee director status						
Variable	Obs. (ERD=0)	Mean (ERD=0)	Obs. (ERD=1)	Mean (ERD=1)	Difference	t value
LnempA	31247	7.660	1001	8.382	-0.722***	-18.400
LnempN	31247	7.643	1001	8.371	-0.728***	-18.267

Note: In Panel B, Difference = Mean(ERD=0) − Mean(ERD=1). ***, ** and * denote significance at the 1%, 5% and 10% levels (two-tailed), respectively.

6.2 Labor use relative to firm size

A larger workforce may simply reflect a larger asset base. Following Li and Liu[32], Table 6 replaces the dependent variable with employees per million yuan of total assets. All four coefficients remain positive and significant at the 1% level. The ERD coefficient of 0.1107 equals about 14% of the sample mean of EmpsizeA (0.770), so employee directors are associated with more labor per unit of capital, not only with more workers in absolute terms.

Table 6. Asset-scaled employment measures

	(1) EmpsizeA	(2) EmpsizeA	(3) EmpsizeN	(4) EmpsizeN
ER	0.1107***	0.9758***	0.1101***	0.9699***
	(5.54)	(5.28)	(5.51)	(5.25)
N	32248	32248	32248	32248
Adjusted R^2	0.6542	0.6542	0.6530	0.6530
ER measure	ERD	ERP	ERD	ERP
Controls / Firm FE / Year FE	Yes	Yes	Yes	Yes

Note: t-statistics based on standard errors clustered at the firm level are in parentheses. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively.

6.3 Selection on unobservables

Firms choose whether to appoint employee directors, and a large workforce may itself lead to an employee seat. We therefore estimate Heckman's[33] treatment-effects model. The first-stage probit regresses ERD on the controls, year dummies and two instruments: the mean adoption rate of employee directors among other firms in the same province and year (IV1) and among firms in neighboring provinces in the same year (IV2). Peer adoption reflects regional enforcement by trade unions and state asset regulators and the local spread of governance practices, and it is unlikely to affect a given firm's hiring except through that firm's own board. Table 7 reports the second stage. The employee director coefficients remain positive and significant at the 5% level, or at the 10% level in column (4), and the inverse Mills ratio is significantly negative in the ERD specifications, which indicates that selection is present. The Cragg-Donald Wald F statistics exceed 10, and the Hansen test does not reject instrument validity.

Table 7. Treatment-effects model: second stage

	(1) LnempA	(2) LnempA	(3) LnempN	(4) LnempN
ER	0.8246**	1.0932**	0.7710**	1.0881*
	(2.23)	(2.00)	(2.03)	(1.96)
IMR	-0.4937**	-0.0461	-0.4587*	-0.0444
	(-2.13)	(-1.24)	(-1.93)	(-1.17)
Cragg-Donald Wald F	18.84	17.70	18.481	17.70
Hansen Test p-value	0.1573	0.2042	0.1452	0.1843
N	32243	32243	32243	32243
Adjusted R^2	0.9455	0.9455	0.9446	0.9446
ER measure	ERD	ERP	ERD	ERP
Controls / Firm FE / Year FE	Yes	Yes	Yes	Yes

Note: t-statistics based on standard errors clustered at the firm level are in parentheses. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively.

6.4 Employment dynamics and reverse causality

Employment is persistent, and a growing workforce may increase demand for worker representation. Following Lei and Sun[34], Table 8 adds employment lagged one year and led one year as controls. The lagged term absorbs persistence, and the lead term absorbs anticipated growth that could have motivated the appointment. The sample falls to 23,485 observations. The employee director coefficients decline to 0.0456 (ERD) and 0.4079 (ERP) for LnempA but remain significant at the 1% level.

Table 8. Controlling for lagged and lead employment

	(1) LnempA	(2) LnempA	(3) LnempN	(4) LnempN
ER	0.0456***	0.4079***	0.0468***	0.4191***
	(3.09)	(3.08)	(3.02)	(3.02)
Emp(t−1)	0.3946***	0.3946***	0.3951***	0.3951***
	(24.51)	(24.51)	(21.88)	(21.89)
Emp(t+1)	0.2829***	0.2829***	0.2850***	0.2850***
	(19.24)	(19.24)	(17.67)	(17.68)
N	23485	23485	23485	23485
Adjusted R^2	0.9779	0.9779	0.9765	0.9765
ER measure	ERD	ERP	ERD	ERP
Controls / Firm FE / Year FE	Yes	Yes	Yes	Yes

Note: t-statistics based on standard errors clustered at the firm level are in parentheses. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively.

6.5 Time-varying shocks and sample composition

Table 9 reports four further checks. Panel A adds industry-by-year fixed effects, which absorb industry-wide demand and technology shocks, and Panel B adds province-by-year fixed effects, which absorb regional labor market conditions and local employment campaigns. The coefficients remain significant in both panels. Panel C drops firms whose top ten shareholders are all state-owned, which we use as a proxy for firms most exposed to mandatory representation; the estimates are almost unchanged. Panel D drops 2020 and 2021, when COVID-19 disrupted travel, returns to work and consumer demand. The coefficients become slightly smaller but remain significant. The employment response is therefore not driven by industry or regional shocks, by state-held firms or by the pandemic years.

Table 9. Time-varying shocks and sample composition

	(1) LnempA	(2) LnempA	(3) LnempN	(4) LnempN
Panel A: Adding industry × year fixed effects				
ER	0.0820***	0.8163***	0.0817***	0.8127***
	(4.12)	(4.46)	(3.89)	(4.23)
N	32243	32243	32243	32243
Adjusted R^2	0.9462	0.9462	0.9420	0.9420
Panel B: Adding province × year fixed effects				
ER	0.0508**	0.5457***	0.0508**	0.5402***
	(2.49)	(2.92)	(2.36)	(2.75)
N	32248	32248	32248	32248
Adjusted R^2	0.9448	0.9449	0.9405	0.9405
Panel C: Excluding firms whose top ten shareholders are all state-owned				
ER	0.0567***	0.5924***	0.0581***	0.6013***

	(1) LnempA	(2) LnempA	(3) LnempN	(4) LnempN
	(2.81)	(3.19)	(2.73)	(3.09)
N	32218	32218	32218	32218
Adjusted R^2	0.9444	0.9444	0.9400	0.9401
Panel D: Excluding 2020-2021				
ER	0.0489**	0.5122**	0.0471*	0.4916**
	(2.10)	(2.37)	(1.96)	(2.20)
N	25852	25852	25852	25852
Adjusted R^2	0.9464	0.9464	0.9423	0.9423
ER measure	ERD	ERP	ERD	ERP
Controls / Firm FE / Year FE	Yes	Yes	Yes	Yes

Note: t-statistics based on standard errors clustered at the firm level are in parentheses. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively.

7. Conclusions

This paper asks whether board-level worker representation changes how Chinese firms allocate resources between production and finance, and how much of its association with employment runs through internal reallocation compared with public support. Firms with employee directors hold a smaller share of their assets in financial instruments and receive larger government subsidies, and both differences are associated with higher employment. The internal channel accounts for about 11-12% of the employment difference, compared with about 3% for the subsidy channel. The employment difference itself is robust to scaling labor by assets, to a treatment-effects model based on peer adoption, to controls for employment dynamics, to high-dimensional fixed effects and to several sample exclusions.

The findings have two implications. First, the financialization result suggests that employee directors can serve as a check on short-termist capital allocation. Their influence is greatest when they take part in board decisions on large financial investments, wealth management purchases and investment property, and when they have the training, information and protection needed to do so. As the 2023 Company Law brings many more firms under the employee director requirement, regulators and trade unions should give attention to these supporting conditions. Second, because the internal channel is much larger than the subsidy channel, the employment benefits associated with worker voice do not depend mainly on fiscal transfers. Governance reforms that give workers a say over the use of corporate resources may therefore complement subsidy-based employment policy at a lower fiscal cost.

The study has several limitations. Mediation estimates describe how the association decomposes and do not by themselves establish causal channels. The financial asset items that define Fin were affected by later changes in the classification of financial instruments, and the subsidy measure relies on non-operating income; alternative definitions would be a useful check. The Wage control is constructed with the number of employees in the denominator, so its coefficient should not be interpreted causally. Finally, only about 3% of firm-years have employee directors, and Li et al.[16] show that the employment effect differs between state-owned and non-state firms. Future work could use the 300-employee threshold in the 2023 Company Law as a quasi-experiment and examine whether the financialization channel also differs by ownership.

References

[1] Tornell A. Real vs. financial investment: Can Tobin taxes eliminate the irreversibility distortion? Journal of Development Economics. 1990; 32(2): 419-444.

[2] Demir F. Financial liberalization, private investment and portfolio choice: Financialization of real sectors in emerging markets. Journal of Development Economics. 2009; 88(2): 314-324.
[3] Wang C. A literature review on corporate financialization. American Journal of Industrial and Business Management. 2019; 9(3): 647-657.
[4] Du Y, Xie J, Chen J Y. CEO financial background and financialization of real enterprises. China Industrial Economics. 2019; (5): 136-154.
[5] Gao C, Chu X B, Yang Y Q. Financialization of real enterprises, agency costs and corporate bankruptcy risk. Statistics & Decision. 2021; 37(15): 179-183.
[6] Yu M G, Wang K. Local government debt financing, crowding-out effect and corporate labor employment. Economic Research Journal. 2022; 57(2): 58-72.
[7] Cho H, Lee B B H, Lee W J, et al. Do labor unions always lead to underinvestment? Journal of Management Accounting Research. 2017; 29(1): 45-66.
[8] Furubotn E G, Wiggins S N. Plant closings, worker reallocation costs and efficiency gains to labor representation on boards of directors. Journal of Institutional and Theoretical Economics. 1984; 140(1): 176-192.
[9] Freeman R B, Lazear E P. An economic analysis of works councils. In: Rogers J, Streeck W, editors. Works Councils: Consultation, Representation, and Cooperation in Industrial Relations. Chicago: University of Chicago Press; 1995.
[10] Fauver L, Fuerst M E. Does good corporate governance include employee representation? Evidence from German corporate boards. Journal of Financial Economics. 2006; 82(3): 673-710.
[11] Gorton G, Schmid F A. Capital, labor, and the firm: A study of German codetermination. Journal of the European Economic Association. 2004; 2(5): 863-905.
[12] Pagano M, Volpin P F. Managers, workers, and corporate control. Journal of Finance. 2005; 60(2): 841-868.
[13] Jäger S, Schoefer B, Heining J. Labor in the boardroom. Quarterly Journal of Economics. 2021; 136(2): 669-725.
[14] Tang Q Q, Luo D L. An empirical study of government subsidy motives and their effects: Evidence from Chinese listed companies. Journal of Financial Research. 2007; (6): 149-163.
[15] Huang X S, Ma X X. The employment-stabilizing effect of mixed-ownership reform of state-owned enterprises in the context of high-quality development. Finance & Economics. 2023; (1): 111-123.
[16] Li S G, Xiong Z T, Jiang Y M. Employee directors and enterprise labor employment: Theoretical analysis and empirical test based on people's democracy. Modern Finance and Economics: Journal of Tianjin University of Finance and Economics. 2024; (7): 42-57.
[17] Ginglinger E, Megginson W, Waxin T. Employee ownership, board representation, and corporate financial policies. Journal of Corporate Finance. 2011; 17(4): 868-887.
[18] Overland C, Samani N. The sheep watching the shepherd: Employee representation on the board and earnings quality. European Accounting Review. 2022; 31(5): 1299-1336.
[19] Kim E H, Maug E, Schneider C. Labor representation in governance as an insurance mechanism. Review of Finance. 2018; 22(4): 1251-1289.
[20] Hammer T H, Currall S C, Stern R N. Worker representation on boards of directors: A study of competing roles. ILR Review. 1991; 44(4): 661-680.
[21] Hu G R. Inadequacy of the employee director system in state-owned companies and its correction. Social Science. 2010; (11): 95-103.
[22] Dong S. Suspension of the employee director system. Directors & Boards. 2011; (2): 27.
[23] Huang B Y, Huang Y T. Do employee directors affect corporate investment efficiency? Empirical evidence from China's capital market. Accounting Research. 2022; (5): 77-91.
[24] Chen M, Hong H L. Government subsidies, employee hiring and excess employees. Journal of Shanghai Lixin University of Accounting and Finance. 2022; 34(3): 80-94.
[25] Jensen M C. Agency costs of free cash flow, corporate finance, and takeovers. American Economic Review. 1986; 76(2): 323-329.
[26] Cui C, John K, Pang J, Wu H. Employment protection and corporate cash holdings: Evidence from China's labor contract law. Journal of Banking & Finance. 2018; 92: 182-194.
[27] Ferreira M A, Laux P A. Corporate governance, idiosyncratic risk, and information flow. Journal of Finance. 2007; 62(2): 951-989.
[28] Gao Y H, Wan D F. Government R&D subsidies and remuneration incentives for scientific and technological personnel. Science of Science and Management of S.&T.. 2013; 34(2): 112-118.
[29] Boustanifar H. Finance and employment: Evidence from U.S. banking reforms. Journal of Banking & Finance. 2014; 46: 343-354.
[30] Zhang S F, Zhang W. Financing constraints, financial development and corporate hiring: Evidence from Chinese enterprise survey data. Journal of Financial Research. 2016; (10): 111-126.
[31] Liu G C, Ye Y W, Zhang J. Social insurance contributions, corporate liquidity constraints and stabilizing employment: A quasi-natural experiment based on the implementation of the Social Insurance Law. China Industrial Economics. 2021;

(5): 152-169.
[32] Li G Z, Liu L. Social goals, employee size and privatization pricing. Journal of Financial Research. 2013; (1): 177-191.
[33] Heckman J J. Sample selection bias as a specification error. Econometrica. 1979; 47(1): 153-161.
[34] Lei G Q, Sun H L. Industrial policy, tax incentives and enterprise technological innovation. Taxation Research. 2019; (8): 5-11.