PERCEIVED EFFECTIVENESS OF DEMOCRATIC MANAGEMENT, JOB PERFORMANCE, AND CITIZENSHIP BEHAVIOR: EVIDENCE FROM A LARGE CHINESE STATE-OWNED PETROCHEMICAL COMPANY

By

FUXI WANG

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Mingwei Liu

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ABSTRACT OF THE THESIS

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By FUXI WANG

Thesis Director

Mingwei Liu

Democratic management, a unique union-based form of employee participation in China, is understudied in the employee participation literature. The paper investigates the associations between employee's perceived democratic management effectiveness, employee job performance and organization citizenship behavior (OCB), using 988 matching surveys of both workers and their supervisors in a state-owned petrochemical firm in Central Region of China. We find that our measure of employee's perceived democratic management effectiveness is positively associated with employee's job performance and organization citizenship behavior (OCB). However, the association between perceived democratic management effectiveness and employee performance is negative if the employee is dispatch worker. Our interpretation of the findings suggests that employee's perception of democratic management effectiveness is a source of employee performance.

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Perceived Effectiveness of Democratic Management, Job Performance, and Citizenship Behavior: Evidence from a Large Chinese Sate-owned Petrochemical Company

1. Introduction

Democratic management is a union-based employee participation institution unique to China. It "refers to labor having rights as employees, to participate in the operation and management of their work units (enterprises or government organs) or be involved in the affairs that concern their material interests" (Taylor *et al.* 2003). The right to participate in democratic management in practice has a lot in common with classical management participation in much of Western Europe (Taylor *et al.* 2003). However, unlike codetermination in Germany (e.g., Gurdon and Rai 1990; Addison *et al.* 2000), democratic management in Chinese context is understudied and inadequate attention is paid to this topic in participation literature.

Democratic management was designed and enforced by central government of China to fulfill the ideological premise that workers are the masters of the state and to serve the function of moderating tensions between management and labor (Zhu and Chen 2005). In the last twenty years, the liberalization of foreign direct investment (FDI) in China had a

dynamic impact on the state sector by spreading capitalist labor practices across firms. And the consequence of the evolution of foreign ownership has two aspects: (1) the marginalization and fragmentation of labor, and (2) the increase in the degree of managerial autonomy (Gallagher 2005). The influence of workers in state-owned enterprises (SOEs) through democratic management, under the new contexts, is affected by these trends.

Most of the prior research on democratic management and workers' congress, the elemental form of democratic management, focused on how democratic management (or workers' congress) could preserve workers' democratic rights and well-being, assuming that the major function of the institution is to defend employees against the violation of their interests by granting them voice (Chen and Chan 2004, 2010; Zhu and Chan 2005; Philion 2007; Yu 2011). These researches focus on the incapability of workers' congress to buttress worker's democratic appeal (Philion 2007; Yu 2011), and the lack of independence of workers' congress from the management and Party leaders (Clarke et al. 2004; Ng 1984). The only empirical works so far find that employees' evaluation of workers' congress effectiveness is positively associated with the protection of the workers' occupational health and safety (Chen and Chan 2004); that workers' congress could foster consensus industrial relations (Zhu and Chan 2005); and that employee participation through workers' congress is positively related to firm productivity (Li 2004). No study, to my knowledge, attempts empirical tests of democratic management beyond workers' congress. In addition, few has attention been directed to another

function of democratic management – improving performance, which has always been a prior issue to the management (Taylor *et al.* 2003). Democratic management is understudied, such that its academic attention mismatches its importance. Therefore, one crucial question remains unclear: does democratic management matter to firms?

Li's (2004) paper makes the first attempt to study the effect of employee's participation in workers' congress on firm performance based on a provincial survey on 1000 large or medium sized enterprises. As evidenced by Li's (2004) study, union chair's report of employee's participation in workers' congress has a positive effect on firm performance. However, no research has examined the implication of employee's perceived democratic management effectiveness on their performance at individual level. I evaluate the effectiveness of democratic management as perceived by employees against two metrics: employee job performance and organizational citizenship behavior, rated by their direct supervisor. Employee job performance reflects how well the employee does their assigned tasks, while organizational citizenship behavior indicates how much effort he or she exerts on extra-role behaviors, such as helping colleagues with their work. I start by identifying democratic management as an integrated form of employee participation and then introduce a debate on the effectiveness of democratic management. Following that, I analyze the relationship between democratic management effectiveness perception and employee job performance. Literature on both employee participation and work council in German provide support for the association between democratic management and performance. In addition, a unique feature of democratic management practices under

Chinese context is discussed to elaborate the relationship.

I then examine the association between democratic management effectiveness perception and organizational citizenship behavior. To substantiate the relationship, I draw on theories of procedure justice, perceived supervisor support and psychological ownership to endorse the logic. Psychological ownership, especially, captures the concept of employees being "masters of enterprises" in SOEs (Clarke *et al.* 2004). This paper takes the first attempt to empirically investigate the instrumental function of democratic management at individual level, and provides empirical evidence to managers on why implementing this institution would be beneficial to the firms.

The article will proceed as follows. In Section 2, I first conceptualize democratic management as a form of employee participation in China, followed by a discussion of perceived democratic management in relation to employee job performance and citizenship behaviors. In Section 3, I describe the survey data, operationalization of variables, and set out the analysis strategy. In Section 4, I present and discuss the empirical results. The article ends with a discussion of the findings and conclusions.

2. Democratic Management

Democratic Management as a Form of Employee Participation in China

Traced back to 1986, "Regulations on the Workers' Congresses in State-owned Industrial

Enterprises" was officially introduced by State Council of China, marking the institutional origin of democratic management we usually refer to at present. In this regulation, the workers' congress is stated as the basic organ for the practice of democratic management, and is for workers to exercise their rights to democratic management (Taylor et al. 2003: 139). As described by Yu (2011), workers' congress in China experienced a cyclical pattern, with sudden surge in activity and lapses into formalism. The 1988 Enterprise Law provided lots of power to employee representatives. Employee representatives could review major management decisions, approve or disapprove wage and bonus distribution schemes, decide the use of welfare fund and elect the manager of the enterprise (Li 2004). However, the 1993 Corporate Law significantly reduced the power of employee representatives. The new law no longer empowered employee representatives with the rights listed above; instead, the law required that management to consult with employee representatives before making the final decisions (Li 2004).

Most recently, "Provisions on the Democratic Management of Enterprises" was issued by the All-China Federation of Trade Unions (ACFTU) jointly, together with five other Chinese authorities in 2012, indicating another leap towards the national legal regulations on democratic management and workers' congress in China. The six authorities include two departments of Central Commission of the Communist Party of China, Central government, the only legitimate union organization in China and a national-wide commercial association. Although "Provisions" doesn't carry force of law, the execution

of these authorities shouldn't be underestimated. The "Provisions" stipulates three major practices to facilitate organizations to execute democratic management, including workers' congress (WC), employee director and supervisor (EDS) and "open corporate affairs" (OCA). One advance of the "Provisions" is that, in line with other local regulations on democratic management (Hubei province) and on workers' congress (Shanghai Municipality), the regulations apply to all types of enterprises, including stateowned and privately-owned enterprises. In another word, the implementation of democratic management system and workers' congress should not be constrained to stateowned enterprises. In 2012, 84.4% of the state-owned enterprises (236129 in numerical measures) established "open corporate affairs" institution, while among all unionized non-state-owned enterprises, 84.6% (4891257 in numerical measures) built "open corporate affairs" institution. As for workers' congress, 88.1% of the state-owned enterprises have the institution, while in unionized non-state-owned enterprises, the percentage is 85.5%. Therefore democratic management is expected to play an increasingly important role in helping employees' participation in firm operation and management in the coming years.

Traditionally, state-owned enterprises are "owned by the whole people", and the workers, "masters of the enterprises", share a common commitment to the firm. Both Ng and Warner (1998:84-5) and Clarke et al (2004) acknowledge that within the institutionalized democratic management system, employees and employers have unity of interests. In a sense, it is consistent with the unitary assumption of participation schemes

in management literature. As stated in "Provisions on the Democratic Management of Enterprises", one of the objectives of democratic management is to "promote the sustainable development of the company." These substantiate democratic management's similarity with classical management participation.

One the other hand, democratic management is slightly different from both participation in decision making in management literature (Wagner 1994) and codetermination in Germany. First, trade union is closely involved in the institutionalization and implementation of democratic management. All-China Federation of Trade Union (ACFTU), the only legitimate union organization in China, acts as the major player to promote the legalization of workers' congress, "open corporate affair" and democratic management. Besides, enterprise union, the branch of ACFTU at company level, is supposed to collect suggestions from employees before the meeting of workers' congress, to deal with workers-related issues between two congress meetings, and, according to the "Provisions", union chair or deputy chair must be the candidate of employee directive and supervisor directive (Chen and Chan 2004; Yu 2011). Second, the overarching role of Chinese Communist Party, the party in power, also distinguishes democratic management from management-driven participation schemes in SOEs. According to the "Provision", democratic management in the enterprise is supported, instructed and supervised by corporate Party committee. In state-owned enterprises, both enterprise union and the management are under the direct control of the Communist Party (Yu 2011). Party committees in SOEs have great say on important issues in the company, including

nomination of top management team and union officials. Most SOEs allowed their dependence on the Party to make arrangement for them (Yu 2011). Therefore, Party committees in SOEs are able to facilitate implementation of democratic management by lessening resistance from both management and labor, and to amplify its effects on the firm by attaching political meanings to the schemes to mobilize the employees.

Workers Congress: Core Form of Democratic Management

Workers congress (WC), also known as "Staff and Worker Representative Congress" (SWRC), Employee Representative Congress (ERC), and Worker Representative Congress" (WRC), is the core form of democratic management. Workers representatives are elected directly from rank-and-file workers and convene once or twice a year to discuss important issues at company level. The workers' congress is not a trade union body, but an instrument for the participation of workers in the management of the enterprises (Clarke et al. 2004). According to "Provisions on the Democratic Management of Enterprises", WC has legal rights in several areas: (1) to be consulted on major strategic policies of the enterprises, including annual production plan, firm reform, and formulation of important firm rules; (2) to be consulted on how to use the workers' welfare fund (fund used to build equipment for collectives), the distribution of welfare apartments (apartments constructed by the company and sold to employees at low prices) among employees and all important issues concerning workers' welfare; (3) to decide on

the draft of collective contract (4) to elect and dismiss employee directors and employee supervisors, and to recommend or elect managers according to the mandate; (5) to monitor the performance of managers at all levels and to make suggestion on rewarding or penalizing them (Article 13). Workers' congress has taken an increasingly important role in Chinese legal systems. The "Labor Contract Law" in 2008 requires that enterprise follow democratic procedures, such as workers' congress, and discuss the rules and decisions with the employees, when it formulates or amends any company rules and institutions or makes any important decisions that are directly related to the interests of the employees (Article 4), otherwise it can't be supported as evidence in court for labor dispute resolution¹.

Other Forms of Democratic Management

In addition to the three practices of democratic management as stated in "Provisions": workers' congress, employee director and supervisor and "open corporate affairs", I also summarize four other practices that are commonly used in practice based on prior literature, interviews with Chinese industrial relations scholars and union chairs in state-owned enterprises. The other four practices include: "rationalization proposal", "factory director reception day/factory director mail box", "collective consultation", and "grass-roots democratic participation institution (e.g., democratic forum, democratic

¹ The Interpretation of the Supreme People's Court on Several Issues about the Application of Laws for the Trial of Labor Dispute Cases, Article 19.

management panel)".

"Employee director" and "employee supervisor" represent employees' rights and interests in the Board of Directors and Board of Supervisors, possessing equal power as other directors and supervisors (Taylor et al. 2003). The Corporate Law (1995) established the legal status of employee director and supervisor (EDS). In 2011, approximately 85000 unionized companies have employee directors, rising from 29000 in 2005; 83000 unionized companies have employee directors, rising from 24000 in 2005. In Chinese SOEs, employee directors and employee supervisor participate directly in the management decision-making on the board. According to "Provisions", both employee director and employee supervision are nominated by the union, and elected through workers' congress. And union chair and vice chair should be listed as candidates for these two positions.

"Open corporate affairs", similar to "information sharing", is a practice initiated to foster direct communication between management and employees and to protect employees' "right to know" (Taylor et al. 2003). Dating back to 1994, "Open corporate affairs" was first practiced in a tractor company in Shijiazhuang. The common ways unions execute the "open corporate affairs" include: post the detailed evaluations of everyone's monthly performance on public board so that workers would know why they wages are lower or higher than others; worker representatives will debrief the and distribute the information as reported in the workers' congress to rank-and-file employees; before making the decision on major issues, the information would be posted

on internal network (Liu 2007).

"Rationalization proposal" is an input mechanism through which employees are able to make suggestion on productivity improvement, working conditions, employee welfare and benefits. First regulated in "Rationalization Proposals and Technical Improvements Awards Regulations" by State Council in 1982, "Rational Proposal" has been popular among companies as a motivation practice to enhance productivity and encourage innovation (Liu 2007). In the good practices of rationalization proposal, feedbacks from relevant department are enforced. Even though some problems cannot be solved at present, explanation must be given to employees who make the suggestions.

"Factory director reception day/factory director mail box" policy, similar to "open door" policy, enables direct communication between factor director and employees. Workers could make suggestions, ask questions, and seek feedbacks on the issues they are concerned with, including working conditions, salary and benefits, company plans, etc. This policy reduces the hierarchical obstacles during transferring the information.

"Collective consultation" is an institution through which union chair negotiates collective contracts with the management. However, this institution is built to secure the "harmonious labor relations" and emphasize the unity of interest between employee and management. Unions in China do not have the right to organize a strike, so Chinese union in general has little leverage at negotiation table. At the present stage, collective consultation is essentially a development of 'workers' participation in management' (Clarke et al. 2004), rather than a real collective bargaining system. And the

subordination of the trade union to management priorities partially discourages collective consultation system from becoming collective bargaining.

"Grass-roots democratic participation institution", like team meeting, is a direct form of employee participation. Employees constantly share information with supervisor as equal in the panel or meeting, complaining or making suggestions on any issues in the workplace. Also, employees will discuss production or work plans, regulations within the team and the distribution of bonus among team members in the meeting. Besides, employees will evaluate and even elect supervisors under the arrangement of higher-level managers.

Democratic management is an integrated participation system. First, the practices of democratic management enable employee's participation in decision making at different level. At organizational level, workers' congress, employee directors and employee supervisors system and collective consultation offer employees the opportunity to have a say in the company's decision making procedure. At the annual meeting of workers' congress, workers representatives should make suggestions on issues that are directly related to the interests of the employees before the final decisions are made. Employee director and employee supervisor act as representation of employees by exercising their voting rights on major issues of the company in board meeting. Union could initiate collective consultation on wages with the management and negotiate a higher wage and better benefit. At team level, employees are able to have influence on their tasks and working conditions through grass-root democratic management panel. Supervisors are

obligated to disclose information concerning the production and employee interest to workers, and workers could discuss task arrangement and distribution of benefits within the team through the panel. Second, the practices of democratic management enable increased flow of information between employees and the management. Employees could have easy access to information concerning their interest through "open corporate affair" arrangement, and the management could receive input from employees through "factory director mail box" or "rationalization proposal". Therefore, I believe the seven practices of democratic management function as integrated employee participation system and contribution to both the production of the firm and the protection of employees' right and interest.

Debates on the Effectiveness of Democratic Management

A debate on the effectiveness of the democratic management centers on whether workers' congress is an institution on paper or in practice. On the one hand, prior literature on democratic management focused on the incapability of workers' congress to buttress worker's democratic appeal and thus failed to stop privatization in state-owned enterprises (Philion 2007; Yu 2011). They identified that the lack of independence of workers' congress from the management and Party leaders defers union's ability to enforce collective bargaining (Clarke et al. 2004), prevent workers' congress from supporting the formulation of self-management in Chinese factory (Ng 1984), and lead to

the failure to stop privatization of state-owned enterprises during the SOE reform² (Yu 2011). Based on the notion that the workers' congress is "under the guidance of Party committee" and that trade union, "the arm of the management" (Zhu and Chan 2005), plays a pivotal role in executing and organizing workers' congress, Yu argues that workers' congress tended to be formalistic (2011). Yu (2011) explains that workers' congress can't be effective, because, otherwise, employees would have real control over workers' congress, and the struggle between those supporting privatization of state-owned enterprise (mainly management who took order directly from the government) and those opposing it (mainly workers who would suffered loss of job security from the reform) during the SOE reform would have been more intense and widespread. Besides, workers' congress are seen by workers themselves as a display of "formalism" generally, because almost all the representatives were the upper management levels (Zhu and Chan 2005).

On the other hand, some qualitative and quantitative researches have provided support to the effectiveness of workers' congress. Zhu and Chan (2005) provided a case in which the employee in a science research institute suddenly found the workers congress a powerful tool to distribute research funding and workers' congress became a useful consultation mechanism between workers and the management. Furthermore, Zhu and Chan use the 1997 national survey conducted by ACFTU, to provide evidence in support

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² SOE reform started since 1978 and reached its peak during the 1990s and early 2000. The reform was intended to privatize most SOEs to build a competitive market. The direct effect of the reform was liquidation of lots of SOEs, which led to huge laid-offs.

of the fact that the Chinese WCs are not as useless as conventional wisdom holds, and some workers do give their WCs positive evaluations. The qualitative work and quantitative work done by Chen and Chan (2004, 2010) also support the effectiveness of workers' congress. Although the mere existence of a WC does not affect the OHS system, the enterprise level workers' congress does have a significant impact on the protection of employees' health and safety. For example, bivariate analyses show that employees in enterprises with ineffective workers' congress are much more likely to report ineffectiveness or poor quality in the design, facilities, and implementation of their factory's OHS system. The results provide some evidence to challenge the widely ingrained perception that workers' congress is "useless" (Chen and Chan 2004, 2010).

Democratic Management in X petrochemical Company

The X Company I studied is a large state-owned petrochemical company located in the Central Region of China, where the democratic management practices is relatively well-preserved. X company is relatively geographically isolated from other places and is the dominant enterprise in the city where it is located. The company is established in 1950s with approximately 55,000 employees. The X Company is composed primarily of state contract workers (or regular workers), and dispatched workers and few temporary workers who are paid by hour. The number of temporary workers is less than 1% of the population. There are two types of dispatched workers in this company, dispatched

workers who are the offspring of regular workers, and dispatched workers who are not. The proportion of dispatched workers and regular workers varies with workshops, with some having more regular workers and some with more dispatched workers. The dispatched workers are paid approximately 75% of the payment for regular workers doing the same job, and the promotion opportunities to the companies that share the same parent company is only offered to regular workers. However, the promotion opportunities for both regular workers and dispatched workers within the company are the same and dispatched workers have chance to transfer to regular workers if they perform well.

The X Company has all the seven democratic management policies I studies in this research. The workers' congress is strictly established at company level, plant level and workshop level. Workers' congress meeting is held once a year at each level, and workers' congress representative committees are in charge of issues between two meetings, including collecting proposals, and supervising the enforcement of the proposals passed on the meetings. Employee representatives at company level and plant level are given "Employee Representative Work Manual" that specify the work obligations, the names of employees they need to contact and their contacts, and they are supposed to collect proposals and suggestions on regular basis. 32.7% of employee representatives at company and plant level are nominated and elected directly from employees, while 61% of them are nominated by party committees and elected by employees. The X Company integrate "open corporate affair" with internal control, which refers to a set of work procedures executed corporately by all employees. Certain

information is released to the employees at fixed stages of work process in the forms of workers' congress, open corporate affair board, internet, newspaper, etc. The main contents of the information include major decisions of the company, the important issues on production and management, issues regarding the interests of employees, etc. The union chair and vice chair take the position of employee director and employee supervisor, but not all interviewees know what they do and who took the positions. "Rationalization proposals" are collected constantly by employee representatives, and the frequency varies with workshops. Proposals are handed to the union and feedbacks are required within 10 days. In 2011, union collected 3378 rationalization proposals and 2129 are adopted. Factory director reception day/factory director mail box" policy is established in some of the workshops I interviewed. Collective consultations take place at both company level and plant level. Collective contracts regarding compensation, working hours, vacations, health and safety and insurance and benefits are negotiated between union and the management, passed on the workers' congress meeting and signed by union chair and head of management. 64 violations of collective contracts are discovered and corrected under union's inspection in 2011. Different forms of grass-roots democratic participation institution are employed in different plants. For example, one plant holds annual meetings between head of the plant and employee representatives. Suggestions are taken and questions are answered at the scene. The head of plant also report to employee representatives the state of operation of the plant.

3. Democratic Management and Employee Performance

Perceived Effectiveness of Democratic Management and Employee Performance

As Schregle (1970) states, "everyone who employs the terms (participation) thinks of something different." Narrowly defined, participation is a process in which influence is shared among individuals who are otherwise hierarchical unequals (Locke and Schweiger 1979). Broadly speaking, the definition will be extended to refer to a wide variety of instances in which subordinates are accorded greater personal influence, including delegation, consultation, etc. (Leana 1986; Vroom and Jago 1988). Economists (Levine and Tyson 1990), management scholars (Wagner 1994; Cotton et al. 1988) and IR scholars (Cook 1994) generally agree that (1) participation usually has positive, small effect on productivity or performance; (2) the size and significance of the effect are contingent on the type of participation involved and industrial relations environment; (3) substantive rather than consultative has positive long-term effects on productivity, and high degree of employee commitment and employee-management trust. However, debate on participation's ability to affect performance (Locke and Schweiger 1979; Schweiger and Leana 1986) and on whether forms of participation matter (Wagner 1994; Cotton et al. 1988; Cotton et al. 1990) challenge the conclusions reached by these economists and management scholars.

Similarly, mixed results were found between mandatory work council and firm performance (Addison and Wagner 1997; Addison et al. 2001; Addison 2000; Mueller

2011). Many studies on worker council have revealed the positive relationship between establishment of works councils and performance (Addison 2000). For example, Mandatory work councils do not impair, and may improve, the performance of larger German establishments (Addison 2000). When utilizing the self-report subjective measure, work council effect on profit is negative; with the objective measure, however, the work council effect on profits is positive and significant (Mueller 2011). Addison et al. (2004) found that German work councils have a positive impact on establishment productivity. However, previous studies using a self-reported subjective evaluation of profitability as the dependent variable (e.g. Addison and Wagner 1997; Addison et al. 2001) typically find a negative relationship between work councils and profits.

Specifically, employee participation schemes will affect individual employee performance by providing employees with greater intrinsic rewards from work. Employees will have higher job satisfaction when they have a say on work, which in turn increase employees' motivation to achieve new production goals (Miller and Monge 1986; Wagner 1994). Besides, if employees are given more access to management information, they are more likely to build up trust and commitment to organizational goals (Wagner 1994), which leads to better performance with their own work.

Both literatures on participation-performance relationship and work councilperformance relations show that involving employees in the decision-making process is likely to result in favorable performance. Democratic management is a form of employee participation in China similar to co-determination in Germany (Unger and Chan 2008; Taylor et al. 2003). Thus, we may expect positive relationship between democratic management and performance. Taylor et al. (2003) stated that democratic management is supposed to "have the motivational function of stimulating workers' enthusiasm to engage in production, to encourage them to cooperate with management in fulfilling the economic targets specified by the owners" (Taylor et al. 2003). The direct impact of having participation implemented in the company is that communication channels are open in all directions, such as workers' congress, grass-root democratic management panel, resulting in greater and more accurate information flow (Mitchell 1973). First, through feedback and information exchange between employees and management in democratic forum and other grass-root democratic management institutions, it is clearer to employees what behaviors would be rewarded and what would be punished. Accurate expectations about the effort-performance relationship would lead employees to be more likely to make efforts. Second, through such participation procedures as workers' congress, collective consultation and rationalization proposal, employees are able to influence the working conditions and reward structure. They would be able to choose the rewards they value most, which will give them the most incentives. Third, participation increases exposure of employees to leaders and superiors, so that they will have a better chance for promotion. Our interviews with employees of the state-owned enterprise shows that those who were elected worker representatives, who exceled in labor competition, and who are active in rational proposal are more likely to be given more opportunities and be promoted to a higher position. Therefore, democratic management

policies themselves may act as a motivation to higher employee performance.

Given some special features of democratic management, this participation scheme may also contribute to improved employee performance through other mechanisms. The involvement of the government in promoting democratic management may attach political overtones to this participation scheme. In state-owned enterprise, workers depend on their firms and supervisors on many sides other than income, such as social identity, career opportunities, access to company housing and other public goods controlled by their supervisors, and official approvals bypassing the normal process in formal regulations (Walder 1986). Especially, the employment in state-owned enterprises establishes workers' superior social identity and right to specific distribution and welfare, such as welfare housing³ (Taylor et al. 2003), which are benefits generally regarded as unique to SOEs. Therefore, employees are more likely to show political loyalty (Walder 1986) by supporting the objectives set through political mobilization by government in return for the benefits granted to them (Gouldner 1960). Besides, it is common practice that government sets up a production objective for SOEs and mobilizes the employees to accomplish the objective not only for their own sake but for such a greater purpose as the development of the country. Employees from SOEs, therefore, may reframe the meaning of their work and their work identities. When they integrate themselves into the functioning of a State-owned enterprise, they are able to see their work as contributing to

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³ Welfare housing is built on the company-owned land and thus is sold at a price lower than the market price to the employees.

the prosperity of their country and to see themselves as a crucial part of the process. Through these changes, employees in SOEs would make sense of why their work matters and be more motivated to work in compliance to objectives set by the government (Wrzesniewski and Dutton 2001). Policies of democratic management, such as "rationale proposal" and "open corporate affair", are often implemented in SOEs by the government in the form of political mobilization. Both union officials in the firm and managers intensely propagandize the political meanings attached to these participation policies, and argue that these policies are intended to protect employees' right to know and right to voice as citizens. For employees, these incentives to comply could be either based on "a deep-seated particularism in the allocation of material rewards and career opportunities" (Walder 1986), or be based on reframing the meaning of work. This political aspect of democratic management may shape employee's attitude toward work, increase their acceptance of the company's democratic management policies and production decisions, and promote production. Although the political mobilization is losing its impact as market has become a more influential institution, the political overtones of the democratic management policies still takes effect under the new context because SOEs could reinforce employees' political loyalty by maintaining instrumental-personal ties between party authorities and employees and rights to specific distributions and welfare provided by state, especially in SOEs geographically isolated from alternative workplace for employees. Grass-roots democratic participation institution

Given the logic as described above, effectively implemented democratic management

would predict high performance. The effectiveness of democratic management as perceived by employees is reflected through three aspects: employee's right to know, employee' right to participate and employee's right to voice. Effective democratic management is designed to fully protect these three employee rights. Employee's right to know is realized through workers' congress, open corporate affairs, employee director and supervisor, and grass-root democratic participation institutions. Similarly, employees' right to voice is accomplished through workers' congress, employee director and supervisor, rationalization proposal, and factory director reception day and factory director mail box. Likewise, employee's right participate in decision-making is achieved through workers' congress, employee director and supervisor, collective consultation, and grass-roots democratic participation institutions. Therefore, employees who perceive the policies of democratic management as effective may also demonstrate higher job performance.

Organizational citizenship behavior (OCB) refers to individual behavior that is performed voluntarily, not explicitly recognized by the formal reward system, and that in aggregate contributes to organizational effectiveness (Organ 1988). OCB in U.S. context and in Chinese context share some common dimensions, including altruism, conscientiousness and identification with company (referred to as civic virtue in U.S. literature) (Hui and Law 1999). Altruism refers to employee voluntarily helping colleagues with their work. Conscientiousness refers to employee behaviors that go beyond the minimum role requirements of the organization, which includes adherence to

rules of work procedures and conduct (Smith et al.1983). Identification with the company refers to employee behaviors that indicate involvement in the overall well-being of the organization (Organ 1988). Hui and Law (1999) identify two other dimensions applicable to Chinese context: "interpersonal harmony" and "protecting company resources". Interpersonal harmony refers to "negative employee behaviors that aim at personal power and that have a detrimental effect on others" (Hui and Law 1999), which to some extent captures the reverse meaning of altruism, but focuses more on interpersonal relationship. Similarly, protecting company resources refers to "negative employee behaviors that involve the abuse of company resources (e.g., company phones, copy machines, computers, and cars), and policies to satisfy personal means" (Hui and Law 1999), which broadly represents the reverse meaning of conscientiousness, but focus more on protecting company resources.

One motivational factor for OCB is the perception of fairness, particularly the perception of procedural justice (Deluga 1994; Konovasky and Pugh 1994; Konovsky and Organ 1996; VanYperen et al 1999). Participation in decision making shapes how employees view the fairness of procedure (Folger 1977). According to Deutsch (1975: 139), employees are more likely to accept the decisions and consequences if they have participated in making them. Reasons for making the decisions and concerns from all sides are fully exchanged during the participation process, so that the final decisions are more likely to be accepted. So if the process is perceived fair by allowing for participation, it is more likely that the resulting outcomes would be considered fair as

well. Democratic management as participation system allows for fairer procedure in task arrangement, benefit distribution, workplace rules-making and wage determination, which increase employees perceived procedure fairness. According to social exchange theory and norm of reciprocity (Gouldner 1960), when employees feel that they are treated fairly, one possible way to "pay back" is through higher citizenship behaviors (Konovsky and Pugh 1994).

In view of similar rationale, a second motivational factor for OCB is perceived supervisor support (Van Yperen et al 1999). The opportunity to participate in decision-making implies supervisor's respect for the rights of individual employee and willingness to consider the suggestions and complaints from subordinates. High quality relationship between supervisor and subordinates is associated with OCBs (Deluga 1995; Farh et al. 1990). OCB can be regarded as employees' way to maintain the quality of relationship between employee and supervisor according to social exchange logic (Van Yperen et al 1999). Therefore, perceived effective democratic management might induce citizenship behaviors from employees by raising their perceived supervisor support.

A third motivational factor for OCB is psychological ownership (Van Dyne and Pierce 2004). "Psychological ownership is the psychologically experienced phenomenon in which an employee develops possessive feelings for the target" (Van Dyne and Pierce 2004). This feelings of "mine" could cause proactive behavior aimed at enhancing the target of ownership, (Beaglehole 1932; Wilpert 1991) and at defending their plants against theft and other form of resource misuse (Yu 2011). Therefore, psychological

ownership is likely to be positively associated with OCBs. In state-owned enterprises, traditionally, employees are regarded "masters of the enterprise" (Clarke et al. 2004). Socialist ideology demonstrates that workers, under common ownership, contribute to industrialization of the country in general and to the development of "their own" plant in particular (Yu 2011). However, the introduction of market competition mechanism and "directive responsible institution" diminish employees' psychological ownership toward the state-owned enterprise they work for. "Iron rice bowl" (Kuruvilla et al. 2011), or lifetime employment, is no longer guaranteed and the idea of pure economic exchange relations with the firm is growing in SOEs. To maintain the "sense of possession" of the SOE employees, democratic management could be used to strengthen the power and control of employees by valuing their say on important workplace issues, including layoff decisions, evaluations on supervisors and the management and approval of firm strategy and investment plan through workers' congress. Besides, rational proposal offers employees the chance to exert some influence on work place issues by making reasonable suggestions on technology and work conditions improvement. When employees develop sense of belonging, efficacy and effectance (or sense of control), and self-identity based on a sense of possession, they are more likely to have a sense of responsibility and act in align with organizational objectives (Van Dyne and Pierce, 2004; Taylor et al. 2003), and have discretionary actions. Therefore, I hypothesize that:

Hypothesis 1a:

Employee perceived effectiveness of democratic management is positively associated with their job performance.

Hypothesis 1b:

Employee perceived effectiveness of democratic management is positively associated with their organizational citizenship behavior.

Moderating Role of Employment Type

Workers are fragmented along many different lines, such as older "permanent" workers, younger contract workers, female production-line workers, male maintenance and supervisory workers, local workers and rural migrants, in Chinese factories (Gallagher 2005). A general categorization of employment type in SOEs is "regular workers" and "dispatch workers", which evolves from the previous categorization of "formal workers" and "informal workers" before the strong enforcement of Labor Contract Law in 2008. Dispatch workers are workers sent by the employment service agencies to the company requiring their service. The prevalence of dispatch employment arrangement in SOEs contributes to the flexibilization of employment relations in SOEs on the one hand, and precariousness and exploitation of dispatch workers on the other hand (Friedman and Lee 2010). Under this tiered employment system (Zhang 2008), dispatch workers are treated

differently regarding job security, benefits and welfare, promotion opportunities, and, in some cases, even pay level. According to Labor Contract Law, dispatch workers can only be hired for temporary, auxiliary or substitute positions, so that they are more likely to have less commitment to the firm and concentrate on the economic exchange with the employer. Even though some dispatch workers have chance to "transfer" to regular workers, the policies are not applied to everyone. Those whose parents work in the same SOEs and those who excel at what they do have higher chance to be "transferred", according to our interviews with the workers.

Dispatch workers are in general under-represented in firms through democratic management institution and workers' congress. It is not until the recent implementation of "Provisions on the Democratic Management of Enterprises", effective in 2012, are dispatch workers explicitly given the right to be elected as worker representatives for workers' congress. One possible result of the underrepresentation is that dispatch workers will feel more unfairly treated and more isolated from the contract workers when they perceive that the company has a stronger democratic management system. Consequently, democratic management will work as discouragement rather than motivator for dispatch workers, and they are less like to exert extra efforts to help co-workers or do their jobs. Therefore, even if dispatch workers perceive democratic management as an effective participation system, they will be less likely to be responsive to it because they have less attachment to the firm and care less about their "voice" in the firm.

Hypothesis 2:

Employment type will moderate the relationship between employee perceived effectiveness of democratic management and job performance, such that the positive relationship for regular workers will become negative for dispatch workers.

Hypothesis 3:

Employment type will moderate the relationship between employee perceived effectiveness of democratic management and organizational citizenship behaviors, such that for regular workers will become negative for dispatch workers.

4. Data and Operationalization

Data

To examine the effects of perceived democratic management on employee job performance and organizational citizenship behavior, I used quantitative survey data from 31 workshops⁴ of 6 plants in a state-owned petroleum company located in Middle China. I include all workshops in the six plants I survey and randomly sample 19 to 60 employees in each workshop depending on the size of the workshop. The survey questionnaires are distributed and collected directly by the union representative for the

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⁴ Workshop in this paper is used to indicate a administrative level. The corporation is comprised of several different plants conducting different businesses, including heavy machine manufacturing, petrol mining, water supply, etc. Each plant is divided into several divisions, such as workshops, maintaining team, department, etc.

workshop. I asked the union representative to randomly distribute the questionnaires to employees on the shift and to choose a group of workers to include representative demographic features (including gender, age and employment type). I used two sources of questionnaires to avoid single source problem. I collected the independent variable (perceived democratic management effectiveness) from questionnaires asking the employees to evaluate the effectiveness of democratic management in the company. Dependent variables (employee job performance & OCB) are rated by each employee's direct supervisor. I assessed the moderator variable (employment type) using survey responses from employees. Control variables were collected from the same survey given to employees. I visited several sites to make sure the procedures are strictly executed. The survey data come from 988 employees and 151 supervisors. The average survey response rate is 89.8 percent.

Perceived Democratic Management Effectiveness

I measure employee's perceived democratic management effectiveness using eight items $(\alpha = .90)$ rated by employees on an evaluation scale ranging from 1("very bad") to 4 ("very good"). Because the perceived democratic management effectiveness has never been measured before, I developed the items through analyzing the key aspects of democratic management in public documents, including government regulations, provincial laws, company reports and prior research, and through interviews with

Chinese IR scholars and union chairs. Eight aspects of democratic management are identified as central to the concept of democratic management. For example, workers congress is the elemental form of democratic management in support of employee participating in firm management, employees' rights protection and corporate development. Thus, consistent with the documents and interviews, I developed items tapping the specific aspects of democratic management that are deemed important for evaluation of democratic management: "How would you evaluate the effectiveness of ... "Workers' Congress", "the institution of Opening Corporate Affairs", "rationalization proposal", "Factory Director Reception Day and Factory Director Mail Box", "collective consultation", "employee directors and employee supervisor system", and "grass-roots democratic participation institution". Principal components analysis yielded a single factor for the construct. Table 3 lists the 7 items, and their loadings, and table 4 gives summary factor statistics.

Employee Job Performance

I measured employee job performance using a four-items (α = .92) scale based on Ashford, Lee, and Bobko's (1989) four-item measure. Items were as follows: the performance level of this employee is satisfactory; this employee is effective in his or her job; this employee performs better than many other employees who perform the same job; and this employee produces high-quality work. Supervisors rated these items on a

scale ranging from 1 ("strongly disagree") to 6 ("strongly agree"),

Organizational Citizenship Behavior

Organizational citizenship behavior (OCB) was measured by the indigenous Chinese measure adapted by Hui adn Law (1999) in a factory setting. This measure of OCB was developed and validated in Mainland China. To capitalize on the cultural variance of measuring OCB, I used the Hui and Law's scale instead of the OCB scale used in American samples. A total of 15 items were used to represent five dimensions of OCB in this company: altruism, conscientiousness, identification with the company, interpersonal harmony, and protecting company resources. Items included "Willing to assist new colleagues in adjusting to the work environment; willing to help colleagues solve work-related problems" (α = .93). These 15 items are listed in the Appendix. These items are rated by supervisors on a scale ranging from 1 ("strongly disagree") to 6 ("strongly agree"),

Regular Worker

I use a dummy variable (0 = "dispatch worker," 1 = "regular worker") to account for employees' identity as regular worker.

Controls

I control for the usual demographics (gender, marital status), and for education (measured in two categories: high school and below; college and above). I combined the two categories of education "lower than high school" and "high school" because less than 5% of respondents receive lower than high school degree. I also controlled for work tenure, job position (measured in three categories: workers, technicians and managerial staff) and some identity variables (union membership, dispatch worker/regular worker, worker representative, Hukou (household registration status)). These control variables are included in the models because they are found correlated to employee performance and organizational citizenship behaviors in previous studies.

Analysis Strategy

Our analyses are conducted on individual level variables, with every employee embedded in a workshop. Such groupings call into question whether the individual level data are independent. Therefore, I first employed HLM analyses to explicitly examine the independence resulting from workshop (n = 29) groupings (Raudenbush and Bryk 2002). For each dependent variable in the study, I ran a set of null models without predictors. The between-workshop variance for dependent variables are significantly different from zero, indicating that the variance attributable to workshop level are significant in explaining variance in individual-level dependent variables. Therefore, a random-effect

model clustered at group level is appropriate for the research. Second, I used the level 1 analyses to determine the significance of perceived democratic management in predicting employee job performance and OCB. Third, I add interaction effects to the model and test for additional explained variance. I ran an exploratory factor analysis on perceived effectiveness of democratic management and the items loaded on one factor.

5. Results

Table 2 shows the correlations, means, and standard deviations for the study variables. Perceived democratic management effectiveness is positively associated with employee job performance (r = 0.22, p < .001) and organizational citizenship behaviors (r = 0.31, p < .001). Additionally, employment type (r = 0.21, p < .001) is significantly associated with employee job performance. And employment type (r = 0.21, p < .001) is also positively and significantly associated with OCB. Most control variables are correlated to the two dependent variables. However, marital status is not significantly associated with their OCB (r = 0.06, n.s.), nor is job position significantly related to OCB (r = 0.03, n.s.). Null models were run for two individual-level dependent variables. Resulting ICC(1) values and associated chi-square tests revealed that 29 percent of the variance in employee job performance resided between workshops ($\chi^2[30] = 373.8$, p < .001); 45 percent of the variance in organizational citizenship behaviors resided between

workshops ($\chi^2[30]$ =735.30, p < .001). Accordingly, I used random effect to predict employee job performance and OCB (Hypothesis 1-3).

I ran a random effect model for perceived democratic management effectiveness. I entered the control variables as predictors for perceived democratic management effectiveness. The results (see table 5) show that non-single employees (b = 0.13, p < .05) are more likely to perceived democratic management as effective and single employees, and technicians are more likely to perceived democratic management as effective (b = 0.11, p < .05) than workers. Although work tenure is significantly associated with perceived democratic management effectiveness (b = -0.01, p < .01), the effect size is small.

I proposed in the Hypothesis 1a that perceived democratic management effectiveness is positively associated with employee job performance. To test the hypothesis, I entered the control variables (gender, age, college degree, union membership, regular worker, marital status, job position, work tenure, residential identity and worker representative) and perceived democratic management effectiveness. As shown in model 1 in table 6, the hypothesis is supported. Perceived democratic management effectiveness was significantly and positively associated with employee job performance (b = 0.11, p < .01). These predictors explained 15 percent of the available within group variance (71%) in employee job performance ($R^2 = .150$).

I proposed in the Hypothesis 1b that perceived democratic management effectiveness is positively associated with OCB. To test the hypothesis, I entered the same group

control variables and perceived democratic management effectiveness. As shown in model 3 in table 6, the hypothesis is supported. Perceived democratic management effectiveness was significantly and positively associated with employee job performance (b = 0.10, p < .001). These predictors explained 12 percent of the available within group variance (55%) in employee job performance ($R^2 = .12$).

I proposed in the hypothesis 2 that employment type moderates the relations between perceived democratic management effectiveness and job performance, such that the relationship between job performance and their perceived democratic management effectiveness will be negative for dispatch workers. As shown in model 2 in table 6, the interaction between perceived democratic management effectiveness and employment type is significantly related to employee job performance (b = 0.27, p < .01). To assess whether the forms of these interactions are consistent with our hypotheses, I plotted the interactions according to the guidelines provided by Aiken and West (1991), plotting independent variable at high and low level (one standard deviation above and below the mean). As shown in Figure 2, the relationship between perceived democratic management effectiveness and employee job performance when the employees are dispatch workers is in the predicted direction. These results are consistent with Hypothesis 2.

I proposed in the hypothesis 3 that employment type moderates the relations between perceived democratic management effectiveness and OCB, such that the relationship between citizenship behaviors and their perceived democratic management effectiveness will be negative for dispatch employees. As shown in model in table 6, the interaction between perceived democratic management effectiveness and regular is significantly related to OCB (b = 0.33, p < .001). Figure 3 displays the relationship between perceived democratic management effectiveness and OCB when the employees are dispatch workers is in the predicted direction. These results offer support for Hypothesis 3.

6. Discussion and conclusion

The empirical results support the idea that democratic management matters to the firm. Employees of different employment type perceive democratic management effectiveness differently. The perceived democratic management effectiveness is positively associated with employees' job performance and citizen behaviors. As indicated from the our analysis, for dispatch workers who have less voice and less bond with the firm, their perception of the effectiveness of democratic management would be negatively related to employee job performance and citizen behaviors, indicating the importance of job security in supporting the effects of democratic management. Democratic management is not only beneficial for the well-being of employees; it is also beneficial to the firm in regards to employee performance, as suggested in this paper.

The limitation of the analysis might be the sampling and data collecting procedure of the research. It is difficult to fully control the procedure of conducting surveys due to workplace environment of the petrochemical firm. And even though we invite the union representative to process the survey distribution and collection, it is possible that employees would have concern and rate democratic management policies with bias. Especially, dispatch workers are often at a disadvantage position in this situation, they may tend to evaluate high on the survey questions to please the union representatives.

Future research may look at the effects of democratic management perception on performance and OCB in non-state-owned enterprises. The mechanism through which the perception has an effect would be quite different because the employees in private firms are less influenced by party or patriotism, but are more likely to be influenced by market-driven value.

Besides, the employers and managers who support some form of participation hope to enhance employee job satisfaction, or even contribute to productivity, and thus increase productivity and profits (Rose 1988). Empirical work could use objective productivity measures, such as sales per person, to evaluate employee performance. What is more, future research could investigate democratic management beyond individual level, and examine its implications on team performance and, most significantly, firm performance.

References

Addison, J. T. and Wagner, J. (1997). 'The impact of German Works Councils on profitability and innovation: new evidence from micro data'. *Jahrbücher für Nationalökonomie und Statistik*, 216 (1): 1–20.

Addison, J. T., Schnabel, C. and Wagner, J. (2001). 'Work councils in Germany: their effects on establishment performance'. *Oxford Economic Papers*, 53 (4): 659–94.

Addison, J., Siebert, S., Wagner, J., & Wei, X. (2000). Worker participation and firm performance: evidence from Germany and Britain. *British Journal of Industrial Relations*, 38(1), 7-48.

Addison, J. T., Schnabel, C. and Wagner, J. (2004). 'The course of research into the economic consequences of German works councils'. *British Journal of Industrial Relations*, 42 (2): 255–81.

Beaglehole, E. P. (1932). A Study in Social Psychology.

Chen, M. S., & Chan, A. (2004). Employee and union inputs into occupational health and safety measures in Chinese factories. *Social Science and Medicine*, 58(7), 1231-1245.

Chen, M. S., & Chan, A. (2010). Occupational health and safety in China: the case of state-managed enterprises. *International Journal of Health Services*, 40(1), 43-60.

Cooke, W. N. (1993). Employee participation programs, group-based incentives, and company performance: A union-nonunion comparison. *Indus. & Lab. Rel. Rev.*, 47, 594.

Cotton, J. L., Vollrath, D. A., Froggatt, K. L., Lengnick-Hall, M. L., & Jennings, K. R. (1988). Employee participation: Diverse forms and different outcomes. *Academy of Management Review*, 13(1), 8-22.

Cotton, J. L., Vollrath, D. A., Lengnick-Hall, M., & Froggatt, K. L. (1990). Fact: The Form of Participation Does Matter--A Rebuttal to Leana, Locke, and Schweiger. *Academy of Management Review*, *15*(1), 147-153.

Clarke, S., Lee, C. H., & Li, Q. (2004). Collective consultation and industrial relations in China. *British journal of industrial relations*, 42(2), 235-254.

Deluga, R. J. (1994), Supervisor trust building, leader-member exchange and

organizational citizenship behaviour. Journal of Occupational and Organizational Psychology, 67: 315–326.

Deluga, R. J. (1995). The relationship between attributional charismatic leadership and organizational citizenship behavior. *Journal of Applied Social Psychology*, 25(18), 1652-1669.

Deutsch, M. (1975). Equity, equality, and need: What determines which value will be used as the basis of distributive justice?. *Journal of social issues*, 31(3), 137-149.

Farh, J. L., Podsakoff, P. M., & Organ, D. W. (1990). Accounting for organizational citizenship behavior: Leader fairness and task scope versus satisfaction. *Journal of Management*, 16(4), 705-721.

FitzRoy, F., & Kraft, K. (2005). Co - determination, Efficiency and Productivity. *British journal of industrial relations*, 43(2), 233-247.

Folger, R. (1977). Distributive and procedural justice: Combined impact of "voice" and improvement on experienced inequity. <u>Journal of Personality and Social Psychology</u>, <u>35</u>, 108-119.

Gallagher, M. E. (2005). Contagious capitalism. Princeton University Press.

Gouldner, A. W. 1960. The norm of reciprocity. American Sociological Review, 25: 165-167.

Gurdon, M. A., & Rai, A. (1990). Codetermination and enterprise performance: empirical evidence from West Germany. *Journal of Economics and Business*, 42(4), 289-302.

Konovsky, M. A., & Organ, D. W. (1996). Dispositional and contextual determinants of organizational citizenship behavior. *Journal of Organizational Behavior*, 17(3), 253-266.

Konovsky, M. A., & Pugh, S. D. (1994). Citizenship behavior and social exchange. *Academy of management journal*, *37*(3), 656-669.

Kuruvilla, S., Lee, C. K., & Gallagher, M. E. (2011). From iron rice bowl to informalization: Markets, workers, and the state in a changing China (No. 14). Ilr Pr.

Leana, C. R. (1986). Predictors and consequences of delegation. *Academy of Management Journal*, 29(4), 754-774.

Lee, C. K. (2007). Against the law: labor protests in China's rustbelt and sunbelt. Univ of California Press.

Liu, Wenyuan. (2007). Zhigong Minzhu Guanli Lilun yu Shijian (Employee Democratic Management: Theories and Practices). Zhongguo Laodong Shehui Baozhang Chubanshe (China Labor and Social Security Press)

David Levine and Laura D'Andrea Tyson, "Participation, Productivity, and the Firm's Environment," in Alan Blinder, ed., *Paying for Productivity: A Look at the Evidence* (Washington, D.C.: The Brookings Institution, 1990)

Deluga, R. J. (1994). Supervisor trust building, leader - member exchange and organizational citizenship behaviour. *Journal of Occupational and Organizational Psychology*, 67(4), 315-326.

Hui, C., Law, K. S., & Chen, Z. X. (1999). A structural equation model of the effects of negative affectivity, leader-member exchange, and perceived job mobility on in-role and extra-role performance: A Chinese case. *Organizational behavior and human decision processes*, 77(1), 3-21.

Konovsky, M. A., & Organ, D. W. (1996). Dispositional and contextual determinants of organizational citizenship behavior. *Journal of Organizational Behavior*.

Konovsky, M. A., & Pugh, S. D. (1994). Citizenship behavior and social exchange. *Academy of management journal*, *37*(3), 656-669.

Locke, E. A., & Schweiger, D. M. (1979). Participation in decision-making: One more look. *Research in organizational behavior*, *1*(10), 265-339.

Miller, K. I., & Monge, P. R. (1986). Participation, satisfaction, and productivity: A meta-analytic review. *Academy of management Journal*, 29(4), 727-753.

Mitchell, T. R. (1973). Motivation and participation: An integration. *Academy of Management Journal*, 16(4), 670-679.

Mueller, S. (2011). Works councils and firm profits revisited. *British Journal of Industrial Relations*, 49(s1), s27-s43.

Mueller, S. (2012). Works councils and establishment productivity. *Ind. & Lab. Rel. Rev.*, 65, 880-975.

Ng, S. H. (1984). One Brand of Workplace Democracy: The Workers' Congress in the Chinese Enterprise. *Journal of Industrial Relations*, 26(1), 56-75.

Ng, S. H., & Warner, M. (1998). *China's trade unions and management*. London: Macmillan.

Organ, D. W. (1988). Organizational citizenship behavior: The good soldier syndrome (Vol. 133). Lexington, MA: Lexington books.

Philion, S. (2007). Workers' Democracy vs. Privatization in China. *Socialism and Democracy*, 21(2), 37-55.

Schregle, J. (1970). Forms of participation in management. *Industrial Relations: A Journal of Economy and Society*, 9(2), 117-122.

Schweiger, D. M., & Leana, C. R. (1986). Participation in decision making. *Generalizing from laboratory to field settings*, 147, 166.

Taylor, B., Chang, K., & Li, Q. (2003). *Industrial relations in China*. Edward Elgar Pub.

Unger, J., & Chan, A. (2004). The internal politics of an urban Chinese work community: A case study of employee influence on decision-making at a state-owned factory. *The China Journal*, (52), 1-24.

Van Dyne, L., & Pierce, J. L. (2004). Psychological ownership and feelings of possession: Three field studies predicting employee attitudes and organizational citizenship behavior. *Journal of Organizational Behavior*, 25(4), 439-459.

VanYperen, N. W., Berg, A. E., & Willering, M. C. (1999). Towards a better understanding of the link between participation in decision - making and organizational citizenship behaviour: A multilevel analysis. *Journal of Occupational and Organizational Psychology*, 72(3), 377-392.

Vroom, V. H., & Jago, A. G. (1988). Managing participation: A critical dimension of leadership. *Journal of Management Development*, 7(5), 32-42.

Wagner, J. A. (1994). Participation's effects on performance and satisfaction: A reconsideration of research evidence. *Academy of management Review*, 19(2), 312-330.

Walder, A. G. (1986). Communist neo-traditionalism: Work and authority in Chinese

industry. University of California Press.

Wilpert, B. (1991). Property, ownership, and participation: On the growing contradictions between legal and psychological concepts. *International handbook of participation in organizations: For the study of organizational democracy, co-operation, and self management*, 2, 149-164.

Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, 26(2), 179-201.

Yu, A. L. (2011). From "master" to "menial": State-owned enterprise workers in contemporary China. *Working USA*, 14(4), 453-472.

Zhu, X & Chan, A. (2005). Staff and Workers' Representative Congress: An Institutionalized Channel for Expression of Employees' Interests?. *Chinese Sociology & Anthropology*, *37*(4), 6-33.

Zhang, L. (2008). 'Lean production and labor controls in the Chinese automobile industry in an age of globalization'. *International Labor and Working-Class History*, 73 (1): 1–21.

Appendix

TABLE 1 Variables used in the present study

Variable Name	Description				
Dependent Variables					
employee job performance	A respondent's job performance index value is the average value of the following four items (measured on the same six-point scale (1 = strongly disagree; 6 = strongly agree))				
	 The performance level of this employee is satisfactory. This employee is effective in his or her job. This employee performs better than many other employees who perform the same job. 				
organizational citizenship behaviors	 This employee produces high-quality work. A respondent's ocb index value is the average value of the following fifteen items (measured on the same six-point scale (1 = strongly disagree; 6 = strongly agree)) Willing to assist new colleagues in adjusting to the work environment. Willing to help colleagues solve work-related problems. Willing to cover work assignments for colleagues when needed. Takes one's job seriously and rarely makes mistakes. Complies with company rules and procedures even when nobody is watching and no evidence can be traced. Does not mind taking on new or challenging assignments. Eager to tell outsiders good news about the company and clarify their misunderstandings. Makes constructive suggestions that can improve the operation of the company. Actively attends company meetings. Often speaks ill of the supervisor or colleagues behind their backs. Uses illicit tactics to seek personal influence and gain with harmful effect on interpersonal harmony in the organization. Takes credit, avoids blame, and fights fiercely for personal gain. Conducts personal business on company time (e.g., trading stocks, shopping, and going to barber shops). 				

	14. Uses company resources to do personal business (e.g., company phones, copy machines, computers, and cars).15. Views sick leave as a benefit and makes excuses for taking sick leave.
Independent Variables	
democratic management	employee's perceived democratic management effectiveness is the average of 7 questions (measured on the same four-point scale (1= very bad; 4 = very good))
	1. How would you evaluate the effectiveness of Workers' Congress in general?
	2. How would you evaluate the effectiveness of the institution of Opening Corporate Affairs (e.g. open information through notice boards, workplace intranet, etc.)?
	3. How would you evaluate the effectiveness of "rationalization proposal"?
	4. How would you evaluate the effectiveness of "Factory Director Reception Day" and "Factory Director Mail Box"?
	5. How would you evaluate the effectiveness of collective consultation in your corporation?
	6. How would you evaluate the effectiveness of employee directors and employee supervisor system?
	7. How would you evaluate the effectiveness of grass-roots democratic participation institution, such as democratic deliberation meeting, democratic forum, democratic management panel, etc.?
Control Variables	F,
gender	female =0; male =1
college	high school and below = 0; college and above=1
union membership	non-union member=0; union member=1;
worker	worker representative=0; worker representative=1
representative	
regular worker	dispatch worker=0: regular worker=1

representative
regular worker

Tenure

city resident

Single

job position

worker representative=0; worker representative=1

dispatch worker=0; regular worker=1

Number of years the respondent has worked for this employer.

rural = 0; city = 1

single = 0; other = 1

job position

workers = 1; technicians = 2; managerial staff = 3

TABLE 2
Descriptive Statistics for Perceived Democratic Management Effectiveness, Employee Job Performance, OCB, Worker Representative and Controls^a

Variable	Maan	a d	N	1	2	2	1	5	6	7	0	0	10	11
-	Mean	s.d.	N	1	2	3	4	5	6	/	8	9	10	11
 Employee job performance 	5.11	0.79	901											
2. OCB	5.14	0.67	873	.75***										
3. Democratic management	3.12	0.54	854	.22***	.31***									
4. Gender	0.63	0.48	878	.13***	.12***	08**								
5. Marital status	0.84	0.36	895	.10**	.06	.09**	- .16***							
6. Education	0.40	0.49	887	.08*	.13***	.06	06	- .11***						
7. Work tenure	16.10	9.65	874	.15***	.11**	.04	11**	.53***	- .15***					
8. Union membership	0.88	0.32	884	.19***	.20***	.16***	09**	.23***	.06	.32***				
9. Regular worker	0.76	0.42	899	.21***	.21***	.19***	- .16***	.34***	.13***	.48***	.33***			
10. Worker representative	0.23	0.42	896	.09**	.20***	.08*	00	.10**	.04	.19***	.09**	.10**		
11.City resident	0.91	0.29	893	.10**	.10**	.14***	- .17***	.35***	.13***	.32***	.18***	.47***	.08*	
12. Job position	1.28	0.58	890	.11***	.03	.07*	.06	05	.32***	.04	.05	.20***	.16***	10*

^{*} *p* < .05

^{**}*p* < .01

^{***}p < .001

TABLE 3
Results of Factor Analysis

	Factor
Items	1
How would you evaluate the effectiveness of Workers' Congress in general?	0.74
How would you evaluate the effectiveness of the institution of Opening Corporate Affairs (e.g. open information through notice	0.72
boards, workplace intranet, etc.)? How would you evaluate the effectiveness of "rationalization	
proposal"?	0.71
How would you evaluate the effectiveness of "Factory Director Reception Day" and "Factory Director Mail Box"?	0.76
How would you evaluate the effectiveness of collective consultation in your corporation?	0.79
How would you evaluate the effectiveness of employee directors and employee supervisor system?	0.77
How would you evaluate the effectiveness of grass-roots democratic participation institution, such as democratic deliberation meeting, democratic forum, democratic management panel, etc.?	0.81

TABLE 4
Summary Factor Statistics

Factor	Eigenvalue	Percentage of Variance Explained	Cumulative Percentage of Variance Explained	
1	4.00	100.1	100.1	

TABLE 5
Results of Random Effect Analysis Corrected for Cluster Effect at Workshop for Perceived Democratic Management
Effectiveness

Variable	Perceived DME		
variable	Co-efficient		
Gender	- 0.01		
College degree	- 0.04		
Union member	0.05		
Worker representative	0.08^{+}		
Regular worker	- 0.01		
Work tenure	- 0.01**		
City resident	- 0.01		
Marital status	0.13*		
Job position (technician)	0.11*		
job position (managerial)	0.10		

^{*} p < .05 * p < .05 **p < .01 ***p < .001

TABLE 6
Results of Random Effect Analysis Corrected for Cluster Effect at Workshop for Employee Job Performance and OCB

	Employee Job	Performance	OCB			
	Main Effect	Moderation	Main Effect	Moderation		
Variable	Model 1	Model 2	Model 3	Model 4		
Intercept	4.75	5.33	4.88	5.59		
Gender	- 0.03	- 0.04	- 0.01	- 0.02		
College degree	0.05	0.05	0.09*	0.09*		
Union member	- 0.02	- 0.03	- 0.05	- 0.05		
Worker representative	0.03	0.03	- 0.01	- 0.01		
Regular worker	- 0.03	87**	- 0.03	- 1.07***		
Work tenure	0.00	0.00	0.00	0.00		
City resident	- 0.03	- 0.01	- 0.03	- 0.01		
Marital status	0.07	0.09	- 0.02	0.01		
Job position (technician)	0.24***	0.23**	0.12*	0.10^{+}		
Job position (managerial)	0.19+	0.19+	0.09	0.11		
Perceived DME	0.11*	- 0.08	0.10**	14*		
Regular worker ×Perceived DME		0.27**		0.33***		
N	710	710	689	689		
Chi Square	23.94	30.87	21	37.21		
Df	11	12	11	12		

⁺ *p* < .1 * *p* < .05 ***p* < .01*** *p* < .001

FIGURE 1 Theoretical Model

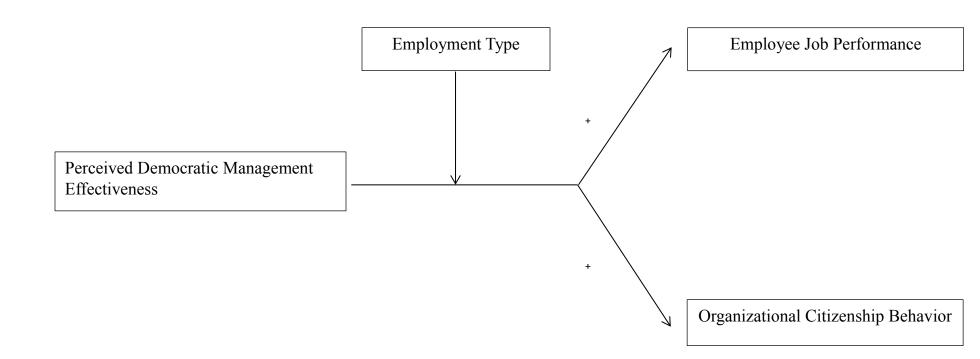


FIGURE 2
Interaction between Perceived Democratic Management Effectiveness and Employment Type on Employee Job Performance

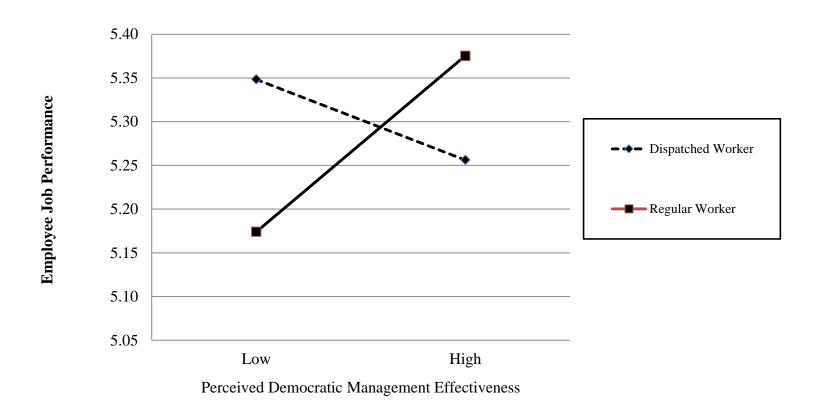
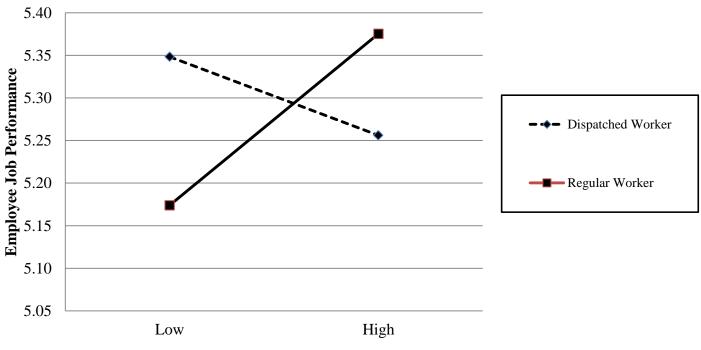


FIGURE 3
Interaction between Perceived Democratic Management Effectiveness and Employment Type on Organizational Citizenship Behavior



Perceived Democratic Management Effectiveness