



International Journal of Conflict Management

Do labour unions mitigate labour conflicts in China's manufacturing firms?:

Evidence from the China employer-employee survey

Hanbing Fan, Yiming Dong, Dezhuang Hu, Lianfa Luo,

Article information:

To cite this document:

Hanbing Fan, Yiming Dong, Dezhuang Hu, Lianfa Luo, (2018) "Do labour unions mitigate labour conflicts in China's manufacturing firms?: Evidence from the China employer-employee survey", International Journal of Conflict Management, Vol. 29 Issue: 4, pp.470-486, <https://doi.org/10.1108/IJCM-09-2017-0116>

Permanent link to this document:

<https://doi.org/10.1108/IJCM-09-2017-0116>

Downloaded on: 30 August 2018, At: 19:51 (PT)

References: this document contains references to 54 other documents.

To copy this document: permissions@emeraldinsight.com

The fulltext of this document has been downloaded 37 times since 2018*

Users who downloaded this article also downloaded:

(2018), "Governance conflict in Chinese family firms: Managed by family-based managers or external managers?", International Journal of Conflict Management, Vol. 29 Iss 4 pp. 446-469 <[a href="https://doi.org/10.1108/IJCM-09-2017-0114"](https://doi.org/10.1108/IJCM-09-2017-0114)><https://doi.org/10.1108/IJCM-09-2017-0114>

(2018), "Worker participation in union activities: a conceptual review", Personnel Review, Vol. 47 Iss 1 pp. 206-226 <[a href="https://doi.org/10.1108/PR-09-2016-0253"](https://doi.org/10.1108/PR-09-2016-0253)><https://doi.org/10.1108/PR-09-2016-0253>

Access to this document was granted through an Emerald subscription provided by emerald-srm:155010 []

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

Do labour unions mitigate labour conflicts in China's manufacturing firms?

Evidence from the China employer-employee survey

Hanbing Fan, Yiming Dong, Dezhuang Hu and Lianfa Luo
*Institute of Quality Development Strategy, Wuhan University, Wuhan, China
and Macro-quality Management Collaborative Innovation Center in Hubei Province,
Wuhan University, Wuhan, China*

Abstract

Purpose – This paper aims to examine whether labour unions influence labour conflicts and this mechanism is different in China compared with other countries.

Design/methodology/approach – This paper uses the data from the China Employer–Employee Survey that interviewed 1,208 firms and 10,087 workers in 2016 as the measurement of variables, and it uses Logit regression model to do the empirical research.

Findings – Unions cannot significantly influence labour conflicts. More active unions and unions whose leaders are appointed by the firms' management are associated with a higher incidence of labour conflicts.

Originality/value – This paper finds a new mechanism that explains the relationship between unions and labour conflicts. The existing literature states that unions may increase labour conflicts via “monopoly power” and may also mitigate labour conflicts via “voice mechanisms”. This paper's findings show that the positive correlation between unions and labour conflicts may be explained by the lack of “voice mechanism” rather than “monopoly power”. The findings imply that labour unions should represent the interest of workers to mitigate the increasing labour conflicts.

Keywords China, Labour conflict, China employer–employee survey, Labour union, Monopoly power, Voice mechanism

Paper type Research paper

Introduction

Labour conflicts are rooted in the employment relationship (Brandl and Traxler, 2009). When conflicts of interests between employers and employees emerge, they can most often be solved by the two involved parties themselves or through a third-party as the mediator. Otherwise, individuals or a group of workers may express anger, such as on absenteeism, turnover, protests or even strikes. Labour unions are a common means to resolve conflicts between employees and employers usually through collective bargaining (Blair and Crawford, 1984).

This paper focuses on whether Chinese labour unions can mitigate labour conflicts in the changing context. While fast-rising labour costs and the new labour law, amended in 2001, create much better labour terms for employees, labour conflicts between employers and employees in Chinese manufacturing firms are growing rapidly (Tang and Fitzsimons, 2013; Cheng *et al.*, 2013). Delayed payment of wages, denials of social insurance payments and unfair layoffs are among the most common causes of conflicts between employers and employees. The increasing labour conflicts not only impede the firms' production activities



but also destabilise social issues. In recent years, labour conflicts-induced mass incidents have increased. The “July 19 Incident” in Menglian county, Yunnan province; the petition incident in Wuhan, Hubei province, where 1,118 workers were laid off; and disputes in a large shoe manufacturing factory in Dongguan, Guangdong province, are only the tip of the iceberg (Chin and Liu, 2015). When these organised incidents happen, they usually cause destruction and violence, make firms stop production and waste social resources to maintain order and deal with unfavourable outcomes. Thus, since the 1990s, the Chinese Government has started to incorporate labour unions in labour conflict resolution, with an ultimate goal of ensuring social stability (Howell, 2008; Chan *et al.*, 2017). Additionally, as China begins to emphasise more on the quality of growth (Cheng, 2014), reducing labour conflicts was the need of the hour more so now than it was before.

In classical labour union research studies, two competing perspectives surface regarding how labour unions affect resolutions of labour conflicts (Addison and Hirsch, 1989; Booth, 1995). One perspective considers labour unions as monopoly organisations of employees. Unions represent their members to demand higher wages, fringe benefits, shorter working hours and higher overtime pay through collective bargaining (Blair and Crawford, 1984; Trejo, 1993; Flanagan, 1999). The outcomes negotiated by unions can easily be extended to non-union members inside a firm because an employee can obtain the same wage and benefit simply by claiming to join the union. These effects can reduce labour conflicts in the short term, but in the long term, higher compensation and shorter working hours will lead to employers replacing workers with machinery (Brown and Medoff, 1978), thereby, resulting in larger employee welfare loss and increased labour conflicts. Another perspective views the labour unions as a voice mechanism, amplifying the efficiency of information transmission inside a firm by channelling complaints from employees to employers. This creates opportunities for better communication, thereby alleviating labour conflicts (Barry and Wilkinson, 2016). These two perspectives agree on one common prerequisite that labour unions are organisations formed by employees on the labour side, and they act and even fight solely on behalf of employees and strive for more employee rights and benefits.

Chinese labour unions are much different than their Western counterparts (Ge, 2007; Chan *et al.*, 2016). Although the Labour Union Law stipulates that Chinese labour unions should be established freely by employees, in reality, they are controlled by the government. Chinese labour unions have a long history of being controlled by the government (Metcalf and Li, 2006). After the 1978 opening and reform, the Chinese Government controlled the labour unions through legislation, bureaucracy and funding. Through these three channels, the Chinese Government strongly influences the labour unions and distorts the workplace unions’ behaviour bilaterally (Clarke and Pringle, 2009; Lu *et al.*, 2010). The Chinese Government has multiple purposes for supporting firms to establish labour unions, such as alleviating labour conflicts, boosting economic development and maintaining social stability (Ding *et al.*, 2002; Lu *et al.*, 2010). Under the Labour Unions Law, Chinese labour unions are established to increase the collective bargaining power of labour contracts and supervise the fulfilment and execution of the related labour protection laws and regulations. However, the dual roles of labour unions may offset their originally designed functions. Unlike Western labour unions, organised group activities held by Chinese labour unions (especially strikes) are strictly controlled by the government to alleviate conflicts. Although the law sustains collective bargaining and labour unions’ supervision activities, the ban on strikes may adversely impact the employees’ opportunities to lend their voice, which may exacerbate conflicts.

Incorporating government intervention, the impact of Chinese labour unions on labour conflicts can be different either from monopoly organisations theory or using voice mechanism (Freeman and Medoff, 1984; Farber, 1986; Kaufman, 2006). The existing

literatures do not specifically explore this unique aspect of Chinese labour unions in detail. It is an empirical issue whether labour unions can meet the expectations that mitigate conflicts between employers and employees. Based on the unique, employer–employee matched survey data (The China Employer–Employee Survey, CEES), this paper explores this relationship between labour unions and labour conflicts. This data set covers the multiple facets of a firm’s indicators, including the relationships between firms and employees, and it is uniquely appropriate for this research question.

The contributions of this research are as follows: first, while it is assumed by the government that labour unions are a mechanism to mitigate conflicts, this paper finds out that under the intervention by the government, labour unions are positively correlated with higher probabilities of conflicts between employers and employees. The Chinese Government plays an active role in labour unions, which makes Chinese unions’ administrative structure completely different from Western labour unions and hampers the voice mechanism from enacting its role. The more active the unions are, the higher is the possibility of creating labour conflicts. Second, owing to the less efficient voice mechanism resulting from government intervention, state-owned enterprises (SOEs) have higher possibilities of labour conflicts. Third, this paper finds out that, *ceteris paribus*, an elected labour union leader rather than a management appointed union leader is positively correlated with lower labour conflicts. This finding has positive implications for firms under the present institutional context that changing the method of appointing a union leader can decrease the possibility of labour conflicts.

Theoretical background and hypotheses

Roles of traditional labour unions

A labour union can be considered as a group of workers bargaining collectively with employers regarding the terms and conditions of employment (Farber, 1986). Traditional labour unions usually refer to the labour unions in Western countries. Although the present literature has explored several roles of labour unions, the main roles are to represent employees in negotiations with the employers to obtain higher wages, acquire better compensation packages and increase the employment base (Lewis, 1986; Budd and McCall, 1997; Lee and Mas, 2012). If the unions and employers cannot come to an agreement, there could be a threat of an impending strike.

As per the definition of labour unions, when unions are established by workers and not intervened by the government, workers make rational decisions based on cost–benefit analysis. Labour unions have predefined goals. Though there is some social pressure when one is not a labour union member (Booth, 1985), workers need substantive revenue that exceeds the cost (membership fee). Members of unions pay monthly fees to maintain their membership and desire larger economic or non-economic benefits in return (Clark, 1984; Booth, 1995; Ehrenberg and Smith, 2016; Chew, 2014). The objective function of labour unions is twofold: wage level and employment (Oswald, 1982; Farber, 1986; Booth, 1995). In other words, labour unions are established to keep the wages of members higher than a market equilibrium level under complete market competition and to obtain better employment opportunities than non-members (Bennett and Kaufman, 2004; Gürtzgen, 2016). The empirical studies by Farber (1986) sustain that result from labour unions’ actions, depending on the regions and industries, union workers earn more income by 5–25 per cent (Farber, 1986).

As a formal mechanism for settling disputes, unions act as a monopolist in sale of labour who seek to create or capture monopoly rents in the market (Farber, 1986). Whether a union can play its role and achieve its objectives depends largely on the monopoly status of the labour union or the relative strength of its negotiating power compared with the employers

(Booth, 1995). Several factors affect the monopoly status of labour unions. The credibility of initiating strikes apparently influences the labour unions' monopoly power. Labour supply from competing economies is another influential factor (Brandl and Traxler, 2009). On the other hand, "voice mechanism" gives unionised firms a different choice to deal with labour conflicts. As a rational firm that wants to make short-term economic profit in the market, it should only consider marginal workers, which means a realistic firm cares more for young or new workers, as in the case for non-unionised firms. However, unionised firms have inclination for seniority and prefer to consider old and less mobile workers more (Kleiner, 2001; Buchmueller *et al.*, 2002), which gives voice to more workers within firms.

In recent years, empirical evidence shows that the traditional Western union's roles are becoming less significant, mostly because of business cycles (DiNardo and Lee, 2004; Brandl and Traxler, 2009; Shin *et al.*, 2016), which means demand and supply of the labour force constraint the functioning of the unions. As foreign countries (for example, Asian countries) are emerging as major competitive suppliers of labour, unions in Western countries are in disadvantageous positions in maintaining the balance of wages and employment. Leaders of the unions are another reason as the classic principle-agent problem. While representing the union members, it is reasonable and natural for the unions' leaders to have political interests (Friedman, 2014). Therefore, though the power of monopoly and voice mechanism can well explain traditional labour unions' actions and behaviour, it is crucial to analyse the unions in different changing institutional contexts.

Institutional background of Chinese labour unions

Chinese labour unions have a long history of being controlled by the government (Metcalf and Li, 2006). The first Chinese labour union began in Guangzhou in 1925. During the war era (1925-1949), Chinese labour unions were led by the Communist Party in support of the revolution. After the liberation in 1949, labour unions naturally became a part of the party-state organ, which as a department did not have any functional role because of the "iron bowls" (lifetime jobs) provided by SOEs in the planning era before 1978. After the 1978 opening up and reform, especially since the 1990s, employment relations in China have changed. The vast privatisation of SOEs, fast-growing private sector and the influx of migrant workers from the countryside have led to a huge increase in number of employees not directly employed by the government. With massive laying off of former SOE workers, heavy work load and unfair labour terms (e.g. more than 60 h of work every week and discriminative fringe benefits for migrant workers), protests and wildcat strikes arose frequently and raised harsh conflicts between employers and employees (Zhu, 2004). The government has encouraged labour unions to play a more active role in protecting workers' rights. However, Chinese labour unions do not have sole independence and act under tight control of the government, which is different from traditional Western labour unions (Wilson, 1990; White, 1996).

The Chinese unions are different from their Western counterparts in three aspects: legislation, governance and funding. First, the legislation and regulation of Chinese unions are different. The legal framework for Chinese unions' operation is set up by the Union Law. The first Union Law, enacted in 1950, was amended in 1992, 2001 and 2016. The Law stipulates the rights of workers in unions and the procedures to establish a union and requirement of management independence. The law also restrains unions from advancing workers' welfare (Yao and Zhong, 2013). The latest Union Law also stipulates, "unions should uphold the leadership by the Communist Party of China", which means all the unions are subject to the control of the government and strikes are strictly controlled by the government.

Second, the governance of Chinese unions is different. Under the law's framework, the All-China Federation of Trade Unions (ACFTU), a semi-governmental organisation under

government's tight control, is the only officially recognised union in China (Chan, 2009; Yao and Zhong, 2013). Any workplace labour union must be approved by ACFTU's local chapters and operate under its leadership. Unlike the traditional Western labour unions, Chinese union leaders are not elected by the union members. Rather, the ACFTU chairperson is appointed by the Party-State, as are the leaders of regional, industrial and workplace unions. A top-down controlling governance system is set up through appointment at all levels of union leaders. In the workplace, a union leader is usually appointed by the management directly or is elected by all the union members within a firm.

Third, the sponsorship and funding scheme of Chinese labour unions are different from Western labour unions. Chinese labour unions are sponsored mainly by unionised firms, not by membership fees. The law stipulates that unionised firms must pay a 2 per cent payroll levy as the unions' fee. A total of 57 per cent of this fee can be returned to workplace unions, with the remaining 43 per cent being transferred to the government-controlled labour union system (Metcalf and Li, 2006).

These differences show that as the traditional Western labour unions are a group of workers represented by their elected leaders, the Chinese unions are quite different in that both the unions' regulators and grass root unions are strictly controlled by the government. The Chinese Government strongly influences the labour unions at all levels and influences the workplace unions' behaviour bilaterally (Clarke and Pringle, 2009; Lu *et al.*, 2010).

Chinese labour unions' effect on labour conflicts

Government intervention in Chinese labour unions has contradictory effects for firms when dealing with labour conflicts. First of all, Chinese labour unions cannot represent employees' interests alone (Metcalf and Li, 2006) because the purpose of establishing workplace unions is not representing workers' interests. Chinese firms are strongly encouraged by ACFTU and its local chapters to establish workplace labour unions. On the one hand, the Chinese labour unions are not independent organisations; they should be guided by the local government. The Chinese Government cares about both economic development and social stability, which creates a trade-off for the government when making decisions. As employers contribute to economic development by paying taxes and providing jobs, they cannot be ignored when facing collective bargaining and negotiations. On the other hand, as a government body, strict subordination of ACFTU and its subsidiaries to the government does not imply merely an instrument of the state (Clarke and Pringle, 2009). Instead, the ACFTU has its own interest to be considered. First, it is similar to the traditional unions that the leaders of Chinese labour unions may have strong interest in political status; the difference only lies in the paths of bureaucratic promotion. Expanding unions' membership reflects the power and political influence of the leaders. Second, as the worldwide trend towards decreasing union density, funding channels create strong incentives for the ACFTU and its subsidiaries to expand itself to keep sustainable funding resources. Therefore, it puts pressure on firms to establish workplace labour unions.

Second, working environment harmony rather than representation of the workers is more important for Chinese labour unions. For Chinese individual firms, workers are not directly organised by industrial unions, like in the Western labour unions, or regional unions, like the ACFTU's local chapters, but they are members of the firm's own union. As a department of a firm, leaders of the unions are usually human resource managers or a senior manager of the firm. Though establishing a labour union means surrendering a small percentage of the payroll, which will decrease profit directly, Chinese firms are willing to comply with government unions to build better relationship with the government and also using unions as management tools (Yao and Zhong, 2013; Friedman and Kuruvilla, 2015). In

addition, as strikes are not upheld by law, firms do not face the threat of union-organised strikes, which means that labour unions do not have a monopoly power on the supply side.

However, labour conflicts arise because of the fast-changing supply, cost and elasticity of demand of labour force during the past 10 years. Employees gain more bargaining power than before, even without the power of labour unions. Though it is impossible to organise strikes, the employees can vote with their feet, just leave the firm and easily find another job in a different firm. Thus, Chinese labour unions cannot provide an efficient way for workers to express their opinions, which decreases the opportunity for negotiation and increases labour conflicts. Therefore, we expect that labour unions may be associated positively with labour conflicts:

- H1.* Labour unions are positively correlated with higher probability of conflicts because they do not transmit workers' voices.

The main function for labour unions is using collective bargaining to negotiate better terms for member workers. (Kuruville and Zhang, 2016) Normally, an active union can negotiate better terms. However, functions of collective contracts in Chinese firms are trivial, as the negotiated wage level in the collective contracts are usually deviated little from the minimum wage stipulated by the government. However, market equilibrium wage is much higher than the minimum wage, which makes the performance pay constituting a majority of the wages (Anwar and Sun, 2015). Unlike traditional labour unions aiming to help workers negotiate higher wages and shorter working time, which in turn sacrifices the firms' efficiency, Chinese workers demand overtime and longer working time to increase income. In most industrial zones, firms with fewer orders and those that cannot provide overtime work, face huge difficulties in recruiting new employees. As labour unions are median voters inclined (Farber, 1986), it will impair the interest of good workers.

Further, migrant workers, who have different demand structure on the total compensation package, constitute the majority of manufacturing firms' workforce. When viewing the separate parts of the compensation package, migrant workers have different marginal effects on fringe benefits, which is an important part that labour unions negotiate. Migrant workers enjoy social security benefits in their hometown, which makes the fringe benefit unattractive. Instead, migrant workers usually want to exchange these benefits for cash to increase monthly cash income, which is not in favour of labour unions' objectives. Therefore, we can infer that the more active the labour unions are, the more likely are labour conflicts to occur:

- H2.* More active labour unions are positively correlated with higher probability of conflicts.

Moderating factors for labour conflicts

Ownership may influence a labour union's impact on labour conflicts. SOEs are directly owned by the government, which means those have similar interests to that of the government. Senior managers of Chinese SOEs are appointed by the government (national or local), which makes the SOEs better connected with the government (Cooke *et al.*, 2016). Moreover, most Chinese SOE senior managers, as firm-level labour union leaders in these firms, have certain hierarchical level in the bureaucratic system, which helps in having closer connections with the government and the management. Managers with certain hierarchical level have easy access to transfer back to the government system with positions at the same level or even higher. It is easy to infer that union leaders in SOEs are not likely to act against the government; hence, they are not likely resolve labour conflicts in the interest of workers. Thus, the labour union within an SOE is not likely to pay more attention to the benefits of the

employees than other firms' labour unions do, not to mention good communication between the firm and employees. Further, apart from normal income paid to employees, SOEs are more likely to view union dues as non-cash benefits for employees, rather than as a cost to the firm. Therefore, we expect that unions in SOEs are less likely to represent the interest of employees and are more likely to increase the probability of labour conflicts:

H3. Labour unions in SOEs are positively correlated with higher probability of conflicts.

According to the theories of unions and conflicts (Booth, 1995; Posthuma *et al.*, 2006), the mitigation of labour conflicts is influenced by the effective way in which the "voice mechanism" of the unions functions. Considering a firm-level labour union, there are two main methods for appointing the leader of a union: direct appointment by management or conducting an election wherein all employees can participate. If the leader is directly appointed by the management, usually a human resource manager or a senior manager of the firm will take this position. On the contrary, if the leader is elected by all the employees, who is likely to be the leader? Normally, one of the most reputed and respected senior employees in the firm will take this position. It is the reputation of and trust in the person to represent his or her fellow colleagues, which is better for communication and voice mechanism to function. Thus, when the leader is appointed by a firm, the workers' complaints are less likely to be transmitted, which increases the probability of labour conflict:

H4. Firms appointed union leaders are positively correlated with higher probability of conflicts.

Method

Samples and data collection

To test the hypotheses for this study, we use unique, matched employer–employee survey data, collected from manufacturing firms in the People's Republic of China (including the two rapidly developing provinces of Hubei in central China and Guangdong in southeast China). This newly constructed, matched data set was generated by the CEES, conducted by Wuhan University, in conjunction with the Hong Kong University of Science and Technology, Stanford University and the Chinese Academy of Social Science. Based on a stratified, random sampling of both firms and employees, diverse firms of different sizes (from small workshops to large firms) across different industries were chosen to enhance the generality of the findings. The firms were sampled by the size of their labour force, according to the third Economic Census Database.

Data collection lasted from 2012 to the present. The baseline of the CEES survey was conducted between June 2015 and August 2016, tracing Guangdong province for two consecutive years and Hubei province for one year. The final sample of 1,208 firms and 10,887 matched employees includes comprehensive data, including the firms' basic information (e.g. the firm's age, ownership and industry), production, sales, R&D and innovation, quality, competitiveness and human resources. It also contains extensive, detailed information about employees (including middle and senior managers, other administrative staff, technical and design personnel, sales personnel and front-line workers), demographic information (gender, age and education), work experience, social benefits and personalities. CEES is the first data set that links firm performance with worker heterogeneity in China (Yu, 2017). Appropriate for the study's empirical purposes, the CEES data set incorporates detailed information on labour conflicts in the workers' questionnaire. The enumerators asked the workers whether they had conflicts, as they joined the firm. The CEES also included detailed information about

unions, such as leadership, union dues and evaluations of different roles of the union (i.e. wage determination and collective bargaining).

Measurements

Unions and their roles. We used a dummy variable to illustrate the unions' status in firms (1 represents there is a union in a firm and 0 represents no union in a firm). The roles of the labour unions were measured using a five-point Likert scale, from 1 = no use, 2 = very little use, 3 = normal, 4 = relatively important to 5 = very important'. We surveyed five roles of unions: wage determination, employee promotion, working conditions determination, performance evaluation and training of workers.

Labour conflicts. We measured labour conflicts by asking workers whether they have had any disputes with management since joining the firm. We matched six–ten workers to each firm and used the dummy variable to measure the dispute. If at least one of the surveyed workers reported a labour dispute, then that firm would be considered as having a labour conflict.

Control variables. Larger firms are more likely to have labour conflicts because there is likely to be more information asymmetry between workers and management. Moreover, regional policies, such as the strictness of labour law, union law and minimum wages, as well as industry characteristics may influence labour conflicts. For example, labour-intensive industries are more likely to have labour conflicts, as their workers usually are paid less and work under relatively poor conditions. Ownership may also influence labour conflicts, and non-SOE firms may not provide adequate labour protection. Therefore, firm size (employment), regional dummies and ownership (1 = SOE, 2 = Private, 3 = Foreign) were included as control variables (Table I) (Figure 1).

Results

A majority of firms in our sample established labour unions, less than 20 per cent of unionised firms experienced labour conflicts. When looking at the share of firms experiencing labour conflicts grouped by ownership, SOEs were more likely to have labour conflicts, compared with firms of different ownership types. In total, 22 per cent of SOEs experienced labour conflicts, higher by 3 per cent points than that experienced by private firms and higher than that experienced by foreign and Hong Kong, Macau and Taiwan (HMT) firms by 6 and 10 per cent points, respectively. Unionised firms, compared with non-unionised firms, experienced 0.7 per cent fewer labour conflicts, which suggests that labour unions do not play an important role in mitigating labour conflicts. To investigate further whether the relationship between unionisation and labour conflicts can change with ownership, the percentages of the firms experiencing labour conflicts are calculated within eight different groups. It can be inferred from the figure above that the relationship between unionisation and labour conflicts is not prominent. Also, labour dispute differences between unionised and non-unionised firms only exist among SOEs and foreign firms. However, relationships between unionisation and labour conflicts are quite different between these two groups. More conflicts take place in unionised SOE firms, while foreign firms are the opposite.

Labour conflicts may also change with labour unions' efforts. Thus, we investigate the relationship between labour conflicts and the labour unions' efforts to protect labour rights. Firms with labour unions are divided into two groups, active and inactive, according to the union's role in wage decisions and working conditions. A union's role in these two aspects is evaluated by the workers within each firm. As is shown in Figures 2, firms whose unions are active in wage decisions or working

Table I.
Summary statistics
of the variables

Variable	Explanations	N	Mean	SD
Dispute	1 = Yes; 0 = No	1,058	0.177	0.382
Union	1 = Unionised; 2 = Not unionised	1,058	0.627	0.484
Employment	Size of employment in 2015	1,058	809	2641
SOE	1 = State-owned enterprises 0 = Non-state-owned	1,058	0.077	0.266
Private	1 = Private enterprises 0 = Non private	1,058	0.65	0.477
Foreign	1 = Foreign invested enterprises 0 = Non foreign invested	1,058	0.267	0.443
Role_salary	1 = union is effective in deciding salary 0 = union is ineffective in deciding salary	696	0.431	0.496
Role_performance	1 = union is effective in deciding salary 0 = union is ineffective in deciding salary	696	0.348	0.477
Role_promotion	1 = union is effective in deciding performance 0 = union is ineffective in deciding performance	696	0.312	0.464
Role_condition	1 = union is effective in improving working conditions 0 = union is ineffective in improving working conditions	696	0.54	0.499
Role_training	1 = union is effective in deciding training plans 0 = union is ineffective in deciding training plans	696	0.428	0.495

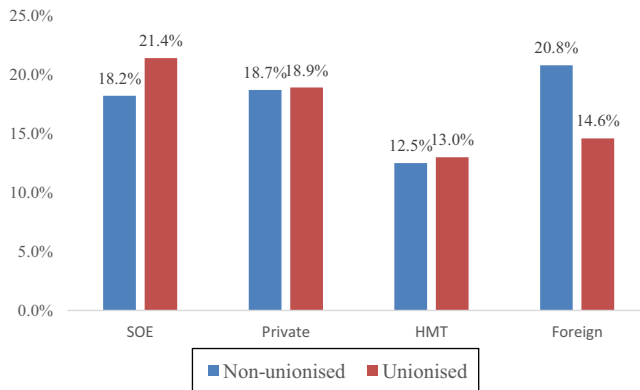


Figure 1.
Percentage of firms
experiencing Labour
conflicts, grouped by
union and ownership

conditions are more likely to experience labour conflicts. A total of 20 per cent of the firms with unions active in wage decisions experienced 5 per cent more labour conflicts than those with inactive unions. In total, 19 per cent of firms with labour unions actively contesting working conditions experienced about 4 per cent more conflicts than those with inactive unions.

Regression model

$$\text{Logit}(\text{dispute}_{ijk} = 1) = \beta_0 + \beta_1 \text{Union}_{ijk} + \beta_2 X_{ijk} + \beta_3 D_j + \beta_4 D_k + \varepsilon_{ijk}$$

In this equation, dispute_{ijk} is the proxy for labour conflicts (if a firm has a dispute, then the variable equals 1; otherwise, it is 0) for firms in industry j and region k . Union_{ijk} is the union

dummy, which equals 1 if the firm has a union and 0 if not. X_{ijk} is the vector of a firm's characteristics, including its employment size and ownership. Employment may influence labour conflicts because it will increase the difficulty of negotiation between management and workers. Ownership is controlled as firms with different ownership type may have different unions. D_j is the industry dummy and D_k is the regional dummy.

Table II shows the results for the regressions regarding labour conflicts. If no other variables are controlled [equation (1)], the coefficient of union is negative but insignificant, which means the probability of labour conflict is 1.1 per cent lower in unionised firms than non-unionised when other variables are evaluated at the means. After controlling for firm-, regional- and sector-level variables, the size of the coefficients becomes larger, but it is still insignificant. Therefore, the labour unions generally do not play a significant role in firms, these results support *H1*. Some researchers argue that because labour unions in China do not represent workers' interests, they are considered "useless". However, labour unions are not homogenous across firms. Some labour unions may play relatively important roles regarding some issues (i.e. collective bargaining, improving working conditions and negotiating disputes), while others are less active. The CEES has included such variables in describing the unions' roles in different issues. Therefore, we will continue to examine the unions' activeness as it relates to the incidence of labour conflicts.

After controlling all firm- and regional-level characteristics, Table III reports the results of the regressions regarding labour conflicts and the different roles of unions. The results show that all the coefficients are positive, which means that more active labour unions are correlated with higher possibilities of labour conflicts. However, only the coefficient for active wage decisions is significant. The probability of labour dispute is 5.1 per cent higher in firms with unions that are active in wage decisions than those inactive at the mean values.

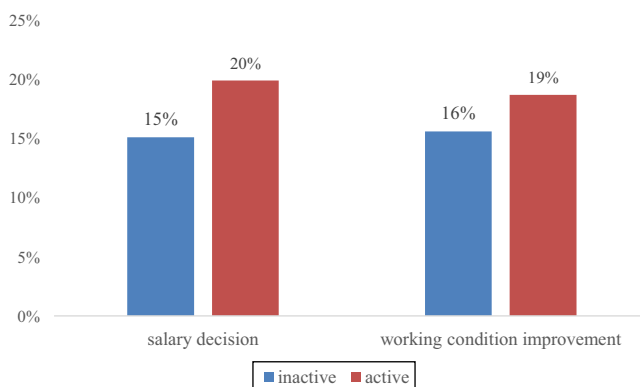


Figure 2.
Percentage of firms experiencing Labour conflicts, grouped by a union's role in salary decision and working condition improvement

Variables	Dependent: dispute = 1		
	(1)	(2)	(3)
Union	-0.0730 (-0.436)	-0.0687 (-0.389)	-0.103 (-0.574)
Marginal effects at means	-0.011 (0.024)	-0.103 (0.697)	-0.0142 (0.566)
Firm characteristics	NO	YES	YES
Region and sector dummies	NO	NO	YES
Observations	1,041	1,041	1,041

Notes: Standard in parentheses; *, ** and *** significant at 10, 5 and 1% respectively

Table II.
Logit regression of unions' effects on labour conflicts

These results support *H2*. Therefore, the unions' roles have opposite results as those expected by the government. After controlling more variables, the role in wage determination is still positively significant (Table IV) and the marginal effects are around 6 per cent at the mean values.

Table V shows the results for the regressions on labour conflicts about unions for firms with different ownership. We find that unions are positively correlated with labour conflict in SOEs, while they are negatively correlated with private and foreign-owned firms. Therefore, the relationship between unions and labour conflicts is not homogenous. Table VI shows that the marginal effect is largest in SOE firms for unions' involvement in the wage decision and labour conflicts, which is 9.4 per cent at the means. However, it is

Table III.
Logit regression of the effects of unions' role about labour conflicts (baseline regressions)

Variables	Dependent: dispute = 1				
	(1)	(2)	(3)	(4)	(5)
Role_training	0.0507 (0.245)				
Marginal effects at means	0.007				
Role_salary		0.373* (1.776)			
Marginal effects at means		0.051			
Role_performance			0.0901 (0.418)		
Marginal effects at means			0.013		
Role_promotion				0.199 (0.908)	
Marginal effects at means				0.028	
Role_condition					0.206 (0.992)
Marginal effects at means					0.029
Other controls	YES	YES	YES	YES	YES
Observations	695	693	692	694	694

Notes: To save the space, we do not report the results of the other controls, which include employment size, ownership, industry dummies, region dummies; standard in parentheses; *, ** and *** significant at 10, 5 and 1% respectively

Table IV.
Logit regression of the effects of unions' roles about labour conflicts (controlling more variables)

Variables	Dependent: dispute = 1		
	(1)	(2)	(3)
Role_salary	0.428** (1.973)	0.461** (2.064)	0.479** (2.099)
Marginal effects at means	0.061	0.065	0.067
Employment size	-3.48e-05 (-0.684)	-3.57e-05 (-0.715)	-2.89e-05 (-0.604)
Province	0.344 (1.360)	0.361 (1.411)	0.189 (0.707)
Ownership (Base: Private)			
SOE	0.0174 (0.051)	-0.0425 (-0.122)	-0.217 (-0.612)
HMT	-0.315 (-0.719)	-0.344 (-0.786)	-0.393 (-0.892)
Foreign	-0.232 (-0.503)	-0.254 (-0.547)	-0.297 (-0.637)
Relative wage (Higher than median = 1)	-0.0691 (-0.316)	-0.0640 (-0.291)	0.0672 (0.296)
Union leader (Base: Appointed by firms)			
Government		-0.559 (-1.527)	-0.524 (-1.423)
Workers' election		-0.274 (-1.059)	-0.287 (-1.095)
Medical insurance coverage			-0.986* (-1.775)
Retirement insurance coverage			-0.365 (-0.653)
Constant	-3.574*** (-4.166)	-3.275*** (-3.714)	-1.918* (-1.948)
Observations	628	628	628

Notes: Standard in parentheses; *, ** and *** significant at 10, 5 and 1% respectively

insignificant, only SOE firms indicate a positive and significant correlation between unions' involvement in the working conditions and labour conflicts, in which the marginal effect is 25.4 per cent. The results in Tables (V)-(VI) support *H3*.

Tables VII shows that only in firms where union leaders are appointed by the firms' management, there exists a significantly positive correlation between an active union dummy and labour conflicts, where the marginal effects are 16.1 and 15.9 per cent, respectively, or the firms whose leaders are appointed by the government. These results support *H4*.

Discussion

Theoretical contributions

In this study, we focussed on whether labour unions can mitigate labour conflicts in Chinese manufacturing firms. The Chinese economy is experiencing huge institutional and economic changes in the long term, which is common soil for labour conflicts between firms and

Variables	Dependent: dispute = 1		
	(1) SOE	(2) Private	(3) Foreign
Union	0.527 (0.532)	-0.110 (-0.533)	-0.241 (-0.573)
Marginal effects at means	0.093	-0.016	-0.031
Other controls	YES	YES	YES
Observations	63	682	257

Notes: Standard in parentheses; *, ** and *** significant at 10, 5 and 1% respectively

Table V.
Logit regression of
the effects of unions
on labour conflicts
(by ownership)

Variables	Dependent: dispute = 1					
	(1) SOE	(2) Private	(3) Foreign	(4) SOE	(5) Private	(6) Foreign
Role_salary	0.516 (0.683)	0.275 (1.008)	0.329 (1.477)			
Role_condition				1.511* (1.928)	0.347 (1.271)	0.0951 (0.434)
Marginal effects at means	0.094	0.040	0.044	0.254	0.050	0.013
Other controls	YES	YES	YES	YES	YES	YES
Observations	53	393	625	53	395	627

Notes: Standard in parentheses; *, ** and *** significant at 10, 5 and 1% respectively

Table VI.
Logit regression of
the effects of unions'
role on labour
conflicts (by
ownership)

Variables	Dependent: dispute = 1					
	(1) Management	(2) Government	(3) Election	(4) Management	(5) Government	(6) Election
Role_salary	1.105** (2.289)	0.368 (0.593)	0.244 (0.926)			
Role_condition				1.09** (2.421)	0.44 (0.70)	-0.042 (-0.163)
Marginal effects at means	0.161	0.050	0.032	0.159	0.060	-0.006
Other controls	YES	YES	YES	YES	YES	YES
Observations	145	84	450	146	84	450

Notes: Standard in parentheses; *, ** and *** significant at 10, 5 and 1% respectively

Table VII.
Logit regression of
the effects of unions'
role in labour
conflicts (by different
types of leadership)

employees to appear. The Chinese Government expects the labour unions to coordinate work relationships between employers and employees and mitigate labour conflicts. However, this paper's findings show that unions are not significantly correlated with the incidence of the labour conflict. Furthermore, we find that more active labour unions are correlated with higher probability of labour conflicts, which is opposite to the functions that anticipated by the Chinese Government. The findings in this paper are different from those in previous research, which suggest effective roles for labour unions in wages and welfare decision and other aspects. However, the mechanism for the positive correlation between labour unions and labour conflicts is different in Western countries. As most of the literature about unions suggest, unions increase labour conflicts because they give the workers more monopoly power over employers. In China, however, the positive relationship between unions and labour conflicts is because of the ineffectiveness of the "voice mechanism".

The difference found in this paper is mainly resulted from the intervention on labour unions at all levels caused by the Chinese Government. With the government intervention through legislation, bureaucracy and funding channels, the behaviour of unions changed bilaterally. Some firms establish unions solely to satisfy the legal requirements, while others may play an actual role. We find that the positive correlation between unions and labour conflict is found only in firms where the union leaders are appointed by the firms. In firms where union leaders are elected by workers or appointed by the government, we find an insignificant correlation. This finding gives support to our hypothesis that labour unions controlled by management will not only be ineffective in expressing workers' needs but also may increase the incidence of labour conflicts. It is possible that workers do not trust the labour unions, ask for help from other agencies and even initiate legal proceedings. We further find that a positive correlation between unions and labour conflicts is found only in SOEs, whereas a negative correlation is found in private and foreign-owned firms. Unions in SOEs are less likely to represent the interest of workers, as they are controlled more directly by the government and management. The empirical results in this paper explain why China's unions play different roles, compared with those in Western countries.

In general, our study has made three contributes to the literature by exploring the unique role of Chinese unions under specific institutional context. First, we find that under the Chinese institutional background, unions' benefits to workers may also increase the possibility of labour conflicts. Therefore, when we evaluate the unions' overall effect, we have to consider this corollary effect as well, which changes the theoretical model of a union's objective function. Most of the models only use wage and employment into the objective functions (Oswald, 1982; Booth, 1995). However, unions may also increase the possibility of labour conflicts, which may result in welfare loss for workers.

Second, this paper contributes to exploring the heterogeneity characteristic of the unions' effects on labour conflicts. In the existing literature, labour unions' monopoly status may increase the possibility of labour conflicts, and the "voice mechanism" may lower the possibility of labour conflicts (Metcalf and Li, 2006). In China, neither of these mechanisms exist because unions are intervened by the government and are not organised by workers. However, we may still use these theories to test the effects empirically. As Chinese labour unions do not represent the workers' interests, the "voice mechanism" is mitigated while monopolies do not exist.

Third, this paper also contributes to the literature in labour union's governance. China's unions have a completely different governance structure compare to traditional Western countries, which has not been thoroughly analysed by literature. Unions whose leaders are appointed by firms are correlated with more labour conflicts. This finding also gives additional insights regarding the theories of labour unions and conflicts.

Practical implications

As the costs to both sides, firms and workers do not want labour conflicts to happen. Further, the government also does not want conflicts to happen, as they are harmful to social stability. Therefore, to improve negotiations between management and workers, it is necessary that labour unions behave well as a mediator. However, Chinese unions have multiple roles, which make them unable to achieve what the government expects. Moreover, unions regulate the managements' roles to guarantee reasonable benefits for workers. The government does not expect unions to represent solely the workers' benefits, and they worry that strikes will be out of control. According to the findings in this paper, it is possible to lower the probabilities of labour conflicts by improving the roles of the labour unions.

First, the government should increase the labour unions' autonomy in firms. The two roles of the labour unions are contradictory, which makes them ineffective in dealing with labour conflicts. One prerequisite for a labour union to function well is that it should represent workers' interests. The government should not interfere too much with the activities of labour unions, and it should educate workers about their roles and benefits in the labour unions. The government should also encourage workers to participate in their workplace labour unions and form the culture where unions can express workers' voices.

Second, firms' management should realise that their control of labour unions may worsen labour relations. Management should not join unions or lead unions directly, on the contrary, it should let workers elect leaders whom they trust. Although risk of "monopoly power" over employers exists, it is better to let unions play active roles in negotiation. Otherwise, employers may pay more for labour conflicts. Government's control over unions keeps them from gaining too much monopoly power. In this manner, unions cannot threaten the management by going on a strike.

Limitations and future research

This paper has three limitations. The research design in this paper uses workplace labour disputes to measure the labour conflicts, and this variable is generated from the CEES data set. This variable can only measure whether or not there are labour conflicts in the firms, but it cannot measure how many and how severe these conflicts are. Therefore, we can only analyse the effects on the incidence of labour conflict. Also, there may be some measurement error for conflicts, as some of the disputes may be complaints not conflicts. This is the limitation of the data. In the future research, we should use more accurate measurements for labour conflicts, such as the strikes, unrest and also number of the conflicts.

In this paper, we find positive correlation between union and labour conflicts. However, we have not identified the causality between the two variables. To get more robust results, we have controlled certain firm and region level variables. In theory, we may predict that the Chinese unions do not provide good channels of expressing opinions. However, in the empirical study, we have not found out the causality from labour unions to labour conflicts. It is possible that the establishment of labour unions is the result of high probability of labour conflicts. For firms with more labour conflicts, it will be more likely that the government try to set up labour unions. If this is true, the relationship between labour union and labour conflicts will go to the opposite way. In the future, we should focus more on the mechanism of how labour union influences the incidence of labour conflicts.

Finally, the labour conflicts can be correlated with many other factors, such as culture and emotions (Posthuma *et al.*, 2006; Posthuma, 2012). In this paper, we have not included control variables like culture and emotions. Actually, the roles of unions may be different under different culture background (Chan, 2009). In the future research, we should analyse this topic by controlling more cultural and emotional variables. And try to find out under

what cultural background (or with what kind of emotions), the unions are more effective in influencing the portability of labour conflicts.

Conclusion

Using the CEES data, the empirical findings in this paper show that unions cannot significantly mitigate the incidence of labour conflicts, but more active unions are associated with a higher probability of labour conflicts compared with less active unions. This kind of positive correlation is found only in unions whose leaders are appointed by a firm's management. The reason for this positive correlation between labour unions and labour conflict is different from the standard union economic model not because the unions in China have too much monopoly power, but because they lack the ability to transmit the workers' voices under the intervention of government. So, if the government expects unions to mitigate labour conflicts, it should allow the labour unions to efficiently represent the workers' interests, which will encourage workers to transmit their complaints to the management.

References

- Addison, J.T. and Hirsch, B.T. (1989), "Union effects on productivity, profits, and growth: has the long run arrived?", *Journal of Labour Economics*, Vol. 7 No. 1, pp. 72-105.
- Anwar, S. and Sun, S. (2015), "Unionisation and firm performance in China's manufacturing industries", *Journal of Labor Research*, Vol. 36 No. 1, pp. 78-102.
- Barry, M. and Wilkinson, A. (2016), "Pro-social or pro-management? A critique of the conception of employee voice as a pro-social behaviour within organizational behaviour", *British Journal of Industrial Relations*, Vol. 54 No. 2, pp. 261-284.
- Bennett, J.T. and Kaufman, B.E. (2004), "What do unions do? A twenty-year perspective", *Journal of Labor Research*, Vol. 25 No. 3, pp. 339-350.
- Blair, D.H. and Crawford, D.L. (1984), "Labour union objectives and collective bargaining", *The Quarterly Journal of Economics*, Vol. 99 No. 3, pp. 547-566.
- Booth, A.L. (1985), "The free rider problem and a social custom model of trade union membership", *The Quarterly Journal of Economics*, Vol. 100 No. 1, pp. 253-261.
- Booth, A.L. (1995), *The Economics of the Trade Union*, Cambridge University Press, New York, NY.
- Brandl, B. and Traxler, F. (2009), "Labour conflicts: a cross-national analysis of economic and institutional determinants, 1971-2002", *European Sociological Review*, Vol. 26 No. 5, pp. 519-540.
- Brown, C. and Medoff, J. (1978), "Trade unions in the production process", *Journal of Political Economy*, Vol. 86 No. 3, pp. 355-378.
- Buchmueller, T.C., DiNardo, J. and Valletta, R.G. (2002), "Union effects on health insurance provision and coverage in the United States", *Industrial and Labour Relations Review*, Vol. 55 No. 4, pp. 610-627.
- Budd, J.W. and McCall, B.P. (1997), "The effect of unions on the receipt of unemployment insurance benefits", *Industrial and Labour Relations Review*, Vol. 50 No. 3, pp. 478-492.
- Chan, A. (2009), "Challenges and possibilities for democratic grassroots union elections in china: a case study of two factory-level elections and their aftermath", *Labour Studies Journal*, Vol. 34 No. 3, pp. 293-317.
- Chan, A.W., Snape, E., Luo, M.S. and Zhai, Y. (2017), "The developing role of unions in China's foreign-invested enterprises", *British Journal of Industrial Relations*, Vol. 55 No. 3, pp. 602-625.
- Chan, J., Pun, N. and Selden, M. (2016), "Labor protests and trade union reforms in China", in Drahokoupil, J., Andrijasevic, R. and Sacchetto, D. (Eds), *Flexible Workforces and Low Profit Margins: Electronics Assembly between Europe and China*, European Trade Union Institute, pp. 205-222.

- Cheng, H. (2014), "China's economic growth: transition from Velocity Era to Quality Era", *Journal of Macro-Quality Research*, Vol. 2 No. 4, pp. 1-12.
- Cheng, Z., Wang, H. and Chen, Y. (2013), "Labour contract, trade union membership, and workplace relations: a study of migrant workers", *Guangdong Province, Social Issues in China: Gender, Ethnicity, Labour, and the Environment*, Springer, New York, NY, pp. 183-206.
- Chew, S.B. (2014), "Impact of trade unions on economic performance: the case of Singapore", *The Singapore Economic Review*, Vol. 59 No. 04, p. 1450035.
- Chin, T. and Liu, R. (2015), "Understanding labour conflicts in Chinese manufacturing: a yin-yang harmony perspective", *International Journal of Conflict Management*, Vol. 26 No. 3, pp. 288-315.
- Clark, K.B. (1984), "Unionization and firm performance: the impact on profits, growth, and productivity", *The American Economic Review*, Vol. 74 No. 5, pp. 893-919.
- Clarke, S. and Pringle, T. (2009), "Can party-led trade unions represent their members?", *Post-Communist Economies*, Vol. 21 No. 1, pp. 85-101.
- Cooke, F.L., Xie, Y. and Duan, H. (2016), "Workers' grievances and resolution mechanisms in Chinese manufacturing firms: key characteristics and the influence of contextual factors", *The International Journal of Human Resource Management*, Vol. 27 No. 18, pp. 2119-2141.
- DiNardo, J. and Lee, D.S. (2004), "Economic impacts of new unionization on private sector employers: 1984-2001", *The Quarterly Journal of Economics*, Vol. 119 No. 4, pp. 1383-1441.
- Ding, D.Z., Goodall, K. and Warner, M. (2002), "The impact of economic reform on the role of trade unions in Chinese enterprises", *International Journal of Human Resource Management*, Vol. 13 No. 3, pp. 431-449.
- Ehrenberg, R.G. and Smith, R.S. (2016), *Modern Labor Economics: Theory and Public Policy*, Routledge.
- Farber, H.S. (1986), "The analysis of union behavior", *Handbook of Labour Economics*, Vol. 2 No. 355, pp. 1039-1089.
- Flanagan, R.J. (1999), "Macroeconomic performance and collective bargaining: an international perspective", *Journal of Economic Literature*, Vol. 37 No. 3, pp. 1150-1175.
- Freeman, R.B. and Medoff, J.L. (1984), *What Do Unions Do*, Basic Books, New York, NY.
- Friedman, E. (2014), *Insurgency Trap: labour Politics in Post Socialist China*, Cornell University Press, New York, NY.
- Friedman, E. and Kuruvilla, S. (2015), "Experimentation and decentralization in China's labour relations", *Human Relations*, Vol. 68 No. 2, pp. 181-195.
- Ge, Y. (2007), "What do unions do in China?", Working paper, University of International Business and Economics, Beijing.
- Gürtzgen, N. (2016), "Estimating the wage premium of collective wage contracts: evidence from longitudinal linked employer-employee data", *Industrial Relations: A Journal of Economy and Society*, Vol. 55 No. 2, pp. 294-322.
- Howell, J. (2008), "ACFTU: beyond reform? The slow march of direct elections", *The China Quarterly*, Vol. 196, pp. 845-863.
- Kaufman, B.E. (2006), "The global evolution of industrial relations: events, ideas, and the IIRA", *ILR Review*, Vol. 59 No. 3, pp. 496-505.
- Kleiner, M.M. (2001), "Intensity of management resistance: understanding the decline of unionization in the private sector", *Journal of Labor Research*, Vol. 22 No. 3, pp. 519-540.
- Kuruvilla, S. and Zhang, H. (2016), "Labour unrest and incipient collective bargaining in China", *Management and Organization Review*, Vol. 12 No. 1, pp. 159-187.
- Lee, D.S. and Mas, A. (2012), "Long-run impacts of unions on firms: new evidence from financial markets, 1961-1999", *The Quarterly Journal of Economics*, Vol. 127 No. 1, pp. 333-378.

- Lewis, H.G. (1986), "Union relative wage effects", *Handbook of Labour Economics*, Vol. 2, pp. 1139-1181.
- Lewis, H.G. (1990), "Union/nonunion wage gaps in the public sector", *Journal of Labour Economics*, Vol. 8 No. 1, pp. S260-S328.
- Lu, Y., Tao, Z. and Wang, Y. (2010), "Union effects on performance and employment relations: evidence from China", *China Economic Review*, Vol. 21 No. 1, pp. 202-210.
- Metcalf, D. and Li, J. (2006), "Chinese unions: nugatory or transforming? An Alice analysis", Centre for Economic Performance, London School of Economics and Political Science, Discussion Paper.
- Oswald, A.J. (1982), "The microeconomic theory of the trade union", *The Economic Journal*, Vol. 92 No. 367, pp. 576-595.
- Posthuma, R.A. (2012), "Conflict management and emotions", *International Journal of Conflict Management*, Vol. 23 No. 1, pp. 4-5.
- Posthuma, R.A., White, G.O., III, Dworkin, J.B., Yáñez, O. and Stella Swift, M. (2006), "Conflict resolution styles between co-workers in us and Mexican cultures", *International Journal of Conflict Management*, Vol. 17 No. 3, pp. 242-260.
- Shin, Y., Tinaikar, S. and Zhang, Y. (2016), "The impact of labour unionization on corporate overinvestment and underinvestment", Social Science Research Network.
- Tang, L. and Fitzsimons, B. (2013), "The converging divergence of labor relations in automobile industry: the case of China", *Competitiveness Review: An International Business Journal*, Vol. 23 No. 2, pp. 175-188.
- Trejo, S.J. (1993), "Overtime pay, overtime hours, and labour unions", *Journal of Labour Economics*, Vol. 11 No. 2, p. 253.
- White, G. (1996), "Chinese trade unions in the transition from socialism", *British Journal of Industrial Relations*, Vol. 34 No. 3, pp. 433-457.
- Wilson, J.L. (1990), "The polish lesson: China and Poland 1989-1990", *Studies in Comparative Communism*, Vol. 23 Nos 3/4, pp. 259-279.
- Yao, Y. and Zhong, N. (2013), "Unions and workers' welfare in Chinese firms", *Journal of Labour Economics*, Vol. 31 No. 3, pp. 633-667.
- Yu, M. (2017), "The challenge to China's enterprises from increasing labour costs: the product quality perspective", *China Economic Journal*, Vol. 10 No. 1, pp. 1-3.
- Zhu, Y. (2004), "Workers, unions and the state: migrant workers in China's labour-intensive foreign enterprises", *Development and Change*, Vol. 35 No. 5, pp. 1011-1036.

Further reading

- Chung, S.W. and Chung, S.W. (2016), "Industrial relations (IR) changes in China: a foreign employer's perspective", *Employee Relations*, Vol. 38 No. 6, pp. 826-840.
- Elfstrom, M. and Kuruvilla, S. (2014), "The changing nature of labour unrest in China", *Industrial and Labour Relations Review*, Vol. 67 No. 2, pp. 453-480.
- Wessels, W.J. (1994), "Do unionized firms hire better workers?", *Economic Inquiry*, Vol. 32 No. 4, pp. 616-629.

Corresponding author

Lianfa Luo can be contacted at: luo0708sky@163.com