THE ROLE OF TRADE UNIONS IN VIETNAM: A CASE STUDY OF SMALL AND MEDIUM ENTERPRISES

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Abstract: On the basis of matched employer–employee data from 2007 to 2009, this paper examines the union wage gap among small and medium non-state manufacturing enterprises in Vietnam. Controlling for both worker and firm characteristics, the results provide evidence that union members earn higher wages than non-members, and are more likely to receive social benefits. Within unionised firms, a substantial wage premium is revealed for workers employed in Southern firms, a finding which among other factors may be attributed to historical differences between the North and South of Vietnam. Copyright © 2012 John Wiley & Sons, Ltd.

Keywords: trade unions; wages; Vietnam

1 INTRODUCTION AND BACKGROUND

It is widely documented that unionised establishments pay higher wages than otherwise comparable non-union firms, yet with some variation depending among other factors on the competitiveness of the labour market and the degree of centralisation and coordination. The existing trade union literature covers mostly OECD countries, whereas evidence from developing and transition countries remains scarcer, due in great part to limited data availability. However, in many developing countries, the lack of support for workers means that trade unions represent one of the few institutional mechanisms capable of promoting some measure of equity and social justice. For this reason, examining the role and impact of trade unions in a development context is interesting as well as worthwhile from both a research and policy perspective.

In Vietnam, the transition to a market economy has meant a significant change in the institutional setting in which trade unions operate. State-owned enterprises, traditionally the

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stronghold of unions, have gradually been equitised resulting in a reduction in union members, whereas domestic private companies including small businesses have become increasingly important employers, creating new bases for the establishment of local trade unions (Edwards and Phan, 2008). However, despite the recent increase in union density from around 45 to 50 per cent between 2007 and 2010 (VGCL, 2010), a large number of firms remain non-unionised, and there appears to be little pressure on employers to set up unions, nor any sanction prescribed by the law for failure to comply (Clarke *et al.*, 2007). The paucity of unions has been described as the leading cause of the surge in wildcat strikes during the mid-2000s providing the only option for workers to 'voice' their demands for higher wages and other concerns.

Nevertheless, with the growing focus on Corporate Social Responsibility the pressure on trade unions to live up to their role in terms of monitoring the observance of labour legislation and act in the interests of their members has increased. The negotiation and monitoring of collective agreements provides an important 'test' of the effectiveness of unions in representing their members. The Labour Code mandates that enterprises with more than 10 employees must have legally binding collective agreements including agreed wage and bonus scales. Yet, it is estimated that only 20 per cent of unionised private sector firms have collective agreements, although in Ho Chi Minh City (HCMC), the figure is around 65 per cent (Clarke *et al.*, 2007).

Moreover, although the Trade Union Law (1994) indicates that the enterprise trade union is free to independently represent workers' rights and interests, in practice, a trade union can *only* be established legally under the umbrella of the Vietnam General Confederation of Labour, which is under the oversight of the Communist Party. This subordination of trade unions to the Party is said to limit their independence and ability to act as a pressure group on government. Further, trade unions are very much left to their own devices, and their performance depends to a large extent on the personality of the union leader who often is part of the firm management. Although trade unions are expected to supervise firms' implementation of minimum wage legislation and are to be consulted during the formulation of wage scales and labour rates, the Trade Union Law does not set out specific requirements for wages to be above the minimum or average wage in a particular industry. Thus, the wage level depends on the bargaining power of the different parties.

It is within this context that this paper examines whether union membership is associated with higher wages and social benefits using matched employer–employee survey data of Vietnamese non-state manufacturing firms from 2007 to 2009. The surveys cover micro, small and medium firms (SMEs), yet the focus here is on small and medium firms, because the establishment of trade unions is mandatory only for enterprises with more than 10 employees. As a share of the total workforce union membership in the non-state sector increased from 26 per cent in 2007 to 31 per cent in 2010 (VGCL, 2010) suggesting that workers are increasingly perceiving union membership to be beneficial. Indeed in a case study of 10 Vietnamese firms, Clarke *et al.* (2007) find a 5 per cent wage premium in unionised firms, and Edwards and Phan (2008) argue that wages would be lower were it not for the presence of trade unions, yet provide no evidence of this.

One major advantage of using matched employer–employee data is that it allows for disentangling worker and firm heterogeneity by controlling for firm *and* worker characteristics that could affect both union status and wage outcomes. [1] Moreover, union membership

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[1] Abowd and Kramarz (1999) provide a review of studies using matched employer–employee data.

information allows for estimating the individual wage gap within unionised firms only. The results reveal that union membership is associated with higher wages, the magnitude and significance level depending on the specification. However, within unionised firms the wage gap is not well determined, yet union membership increases the probability of receiving social benefits. Finally, union members employed in Southern firms earn a considerable wage premium vis-à-vis non-union members, and this holds within unionised enterprises. This is an interesting finding that may be attributed to historical differences between the North and South of Vietnam.

The following section describes the data followed by section 3 that outlines the methodology and the variables included in the empirical analysis. Section 4 presents the results and section 5 concludes.

2   DATA

Two quantitative SME surveys, conducted in 2007 and 2009, are used in this paper (see CIEM, 2010).[2] The surveys trace firms over time covering around 2600 enterprises in 10 provinces (HCMC, Ha Noi, Hai Phong, Long An, Ha Tay, Quang Nam, Phu Tho, Nghe An, Khanh Hoa and Lam Dong). For reasons of implementation, the surveys were confined to specific districts in each province/city. The sampling scheme of the SME surveys is based on a representative sample of registered household and non-household firms drawn from enterprise census information (General Statistics Office (GSO), 2004 and General Statistics Office, 2008). In both 2007 and 2009, the surveys included a separate employee module consisting of randomly sampled employees from a random sub-sample of firms. In 2007, the employee module covered 582 firms and 1043 employees, and in 2009, the corresponding figures were 577 firms and 1444 employees. As indicated earlier, the establishment of trade unions is mandatory only for enterprises with more than 10 employees, and thus, the analysis focuses on firms that were classified as small or medium sized in both 2007 and 2009. For micro-enterprises, establishing a trade union is not economically viable and as all informal firms fall under the micro category, this analysis considers only formally registered firms.[3] After applying this selection criterion and undertaking a thorough data cleaning including checking consistency of time-invariant variables between the two survey rounds, I was left with an unbalanced panel of 1153 workers: 477 in 2007 and 676 in 2009.[4]

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[2]The World Bank SME Department currently operates with three groups of SMEs: micro, small and medium scale firms. Micro-enterprises have between 1 and 10 employees, small-scale enterprises between 11 and 50 employees, and medium-size enterprises between 51 and 300 employees. These definitions are broadly accepted by the Vietnamese Government (see Government decree no. 90/2001/CP-ND on 'Supporting for Development of Small and Medium Enterprises'). In what follows, I apply these definitions.
[3]According to the Decree No. 88/2006/ND-CP of 29 August 2006 on business registration, when a firm has more than 10 employees and/or uses more than one business premise, it may no longer operate as a household firm (formal or informal) and should register as a company under the Enterprise Law (2000).
[4]Twenty-two observations were omitted following an outlier test and 32 were dropped because of missing wage information. In order to rule out selection bias, a Heckman selection procedure based on functional form identification was carried out, and the results (not reported) reveal no evidence of selection bias along the wage dimension. The results from the selection equation show that younger workers, managers, professional and those working in Southern firms are more likely *not* to report wages, whereas older workers, those hired informally and employees in larger firms are more likely to report wages.

3   EMPIRICAL STRATEGY AND SUMMARY STATISTICS

In order to analyse the union-wage relation, I estimate an equation where individual wages depend on both worker attributes and the firm characteristics where the worker is employed.

The specification takes the form:

(i) $\ln Y_{ijt} = \alpha + X_{ijt}\beta + Z_{jt}\gamma + U_{ijt}\delta + \varepsilon_{ijt}$

where the log of the real individual wage for worker i in firm j at time t ($\ln Y_{ijt}$) depends on: a set of individual characteristics (X_{ijt}), a vector of firm-level covariates for the firm where worker i is employed (Z_{jt}), an indicator for whether the individual is member of a firm-level trade union (U_{ijt}) and a worker specific error term (ε_{ijt}).

As with any analysis of repeated observations over time, there is the possibility of autocorrelation which if not accounted could lead to biased results. In order to address this, the standard errors have been clustered at the firm level thereby allowing for intragroup (within firm) correlation, whilst maintaining the assumption that the observations are independent across firms. Bias may also arise from the fact that given the existence of a firm union, individuals select into union membership if they believe this to be beneficial. This could in turn generate a positive correlation between wages and union membership that is due to reverse causality: it is because wages are higher in these occupations that workers are unionised rather than the other way around. However, because the union membership contribution amounts to 2 per cent of the individual wage, low paid workers are not less likely to become union members than highly paid workers. Moreover, in the employee questionnaire when asked about the main benefit of being a union member, only 9 per cent answered 'better and more stable wages' indicating that workers do not generally select into unions in order to obtain higher wages. I control for possible union membership/non-membership selection bias, by applying a Heckman selection model procedure based on functional form identification, and the results (not reported) reveal no evidence of sample selection. [5]

Finally, because non-union members who work in non-union firms do not have the option to become union members, any observed wage difference may simply reflect the wage differential between being employed in a union versus a non-union firm, rather than the individual wage gain associated with union membership. However, given that not all firms are unionised combined with the fact that not all workers are union members, it is possible to estimate the individual wage premium by restricting the sample to unionised firms. This is what distinguishes the current analysis from country studies where trade union membership is compulsory and compliance is not a concern. Table 1 presents the summary statistics of the variables used in the analysis.

First, the outcome variable is the logged monthly equivalent of the real individual basic wage calculated on the basis of the sample median of six working days a week and 8-h days; thus avoiding any bias that may arise if working hours differ between union and non-union members. Table 1 shows that real wages have increased from 2007 to 2009. The second outcome is social insurance, modelled as an indicator variable taking the value 1 if the worker receives social insurance and 0 otherwise. More specifically, social insurance is defined as whether the employer provides health insurance for the worker. 53 per cent of workers report receiving social insurance, and the proportion has risen considerably with time. This could be

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[5]Functional form identification rather than two-step identification is applied due to the lack of a suitable instrument. Results are available upon request.

Table 1. Summary statistics

	Total		2007		2009	
	Mean	SD	Mean	SD	Mean	SD
Monthly real wage (logged)	6.433	0.435	6.398	0.442	6.458	0.429
Social insurance	0.529	0.499	0.470	0.500	0.570	0.496
Member of trade union	0.351	0.478	0.304	0.460	0.385	0.487
Member of trade union if firm union = 1	0.851	0.357	0.775	0.418	0.900	0.301
Gender (male = 1)	0.524	0.500	0.516	0.500	0.530	0.500
Age	33.715	9.844	34.151	10.382	33.410	9.442
Higher education	0.785	0.411	0.799	0.401	0.776	0.418
Manager	0.140	0.347	0.149	0.356	0.133	0.340
Professional worker	0.169	0.375	0.195	0.397	0.151	0.358
Sales worker	0.108	0.311	0.130	0.337	0.093	0.291
Production worker	0.375	0.484	0.298	0.458	0.430	0.495
Other (office and service workers)	0.208	0.406	0.229	0.420	0.194	0.396
Informal hiring	0.640	0.480	0.539	0.499	0.712	0.453
Firm size (regular full-time employees)	40.386	39.640	38.734	35.686	41.552	42.195
Private firm	0.209	0.409	0.218	0.413	0.203	0.402
Cooperative/collective/partnership	0.090	0.287	0.107	0.309	0.078	0.269
Limited liability	0.600	0.490	0.604	0.490	0.598	0.491
Joint stock company	0.101	0.301	0.071	0.258	0.121	0.327
Urban	0.614	0.487	0.635	0.482	0.600	0.490
South	0.463	0.499	0.430	0.496	0.487	0.500
Sector low value added	0.325	0.469	0.340	0.474	0.315	0.465
Sector medium value added	0.535	0.500	0.491	0.500	0.567	0.496
Sector high value added	0.140	0.347	0.170	0.376	0.118	0.323
Owner is male	0.610	0.488	0.614	0.487	0.607	0.489
Owner has higher education	0.909	0.288	0.899	0.301	0.916	0.280
Professional share	0.093	0.075	0.097	0.078	0.091	0.072
Female share	0.416	0.235	0.414	0.234	0.418	0.235
Total number of observations	1,153		477		676	

Note: 1 USD = 16.010 (31/12/2007) and 18.465 (31/12/2009). Real wages deflated using province level deflators (base year = 2005).

related to the Law on Social Insurance that came into effect in 2007 mandating firms with more than 10 employees to pay social insurance contributions to full-time employees with contracts of *more* than 3 months.[6] Third, the variable of interest is union membership, taking the value 1 if the worker is member of a union and 0 otherwise.[7] Union membership is 35 per cent and has increased over time, in accordance with the national trend during the same period (VGCL, 2010). Within unionised firms membership is 85 per cent and rising over time.

In terms of worker attributes, I control for gender, age and education of the worker as well as job function and hiring method. As for firm characteristics, I further control for firm size, legal status, location, sector, the owners' gender and education, and the share of professional workers and women. The justifications for the selection of these covariates and their summary

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[6]Note that the wage and social insurance data for the 2007 survey are from end 2006.
[7]In order to minimise the risk of measurement error, I scrutinised observations indicating union membership but where the corresponding firm did not have a union. Five firms indicated not having a union, yet several workers in each firm reported being union members; thus, these firms were assumed to have unions (this did not alter the results significantly).

statistics are as follows. First, given that it is common to find gender wage gaps, in particular in developing countries (Jones, 2001), I incorporate a gender dummy that is equal to 1 if the worker is male. Table 1 shows that the gender division is close to equal. Second, I control for age of the worker as a proxy for experience—a key variable in the standard human capital earnings function (Mincer, 1974)[8] and include age squared to allow for a diminishing marginal effect.[9] The average worker age is 34 years. Third, I include a dummy equal to 1 if the individual has at least a high school/college degree and 0 otherwise because according to both human capital and signalling theory (Spence, 1973; Mincer, 1974), the level of education accounts for a large share of the variation in earnings. Moreover, unionised firms may hire better quality workers. The share of workers with a higher education is around 80 per cent.[10]

Fourth, the different job functions are included as dummy variables on the basis that wages may vary substantially across occupation categories, beyond what is accounted for by education. Managers account for 14 per cent, professional for 17 per cent, sales workers for 11 per cent, production workers for 38 per cent and others (office and service workers) for 21 per cent.[11] All worker types, except production workers, have seen declining shares between 2007 and 2009. Fifth, I include a dummy variable for whether the worker found their job through an informal contact (knowing the owner or someone who works in the firm), as opposed to via a formal contact (advertisement, employment agency, etc.), because this has been shown to be associated with higher individual wages (Larsen *et al.*, 2011). Sixty-four per cent of workers have been hired through an informal contact, and this job finding method has increased over time.

Sixth, in terms of firm size, a general finding is that average earnings tend to rise with firm size (Oi and Idson, 1999; Söderbom *et al.*, 2005). In addition, by controlling for firm size, I am taking account of the fact that the union markup may represent some form of compensating wage differential associated with a possibly less salubrious work environment in larger firms. Seventh, because there is substantial variation in wages and the degree of unionisation across ownership types, I incorporate dummies for the different legal categories. In fact, ownership form has been shown to be a critical factor influencing human resource practices including in relation to trade unions (Zhu *et al.*, 2008). Limited liability companies constitute the largest category, followed by private firms, joint stock companies and finally cooperatives/ collectives/partnerships (CCP). Eight, because prices are likely to differ across urban and rural areas—beyond what is captured by province level deflators, I model location using a dummy taking the value 1 for urban provinces and 0 for rural provinces. Further, in order to account for institutional differences between the North and the South of Vietnam, I include a dummy taking the value 1 for Northern and 0 for Southern provinces. [12] Around 60 per cent of firms are located in urban areas and 46 per cent in the south. Ninth, because wage returns may vary

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[8]The question on years of experience was only introduced in the 2009 survey, and the measure of tenure suffers from severe measurement error and therefore cannot be used.
[9]Note that age squared has been divided by 100 in order to avoid obtaining very low coefficients in the analysis.
[10]Controlling for a worker's observed skills, a higher/lower level of co-worker skills implies that the worker has above average/below average *unobserved* skill characteristics, and thus removes some of the potential bias arising from omitted unobserved factors.
[11]The interviewed workers were selected randomly (except that in each firm at least one manager and one production worker were interviewed). Thus, the sample is not representative along the occupation dimension. However, controlling for job functions in the empirical analysis helps to eliminate the bias that may arise from the sample not being representative.
[12]Kim (2008) provides a captivating discussion of institutional differences between North and South Vietnam and Nørlund (1996) argues that unions seem stronger in the South than in the North.

across sectors of production, I include three sector dummies indicating whether the sectors are low, medium or high value added. [13]

Tenth, the gender of the owner has been shown to be important in terms of compensation with female owners generally being more generous in the provision of non-wage benefits (Rand and Tarp, 2011), I therefore include a dummy taking the value 1 if the owner is male and 0 if female. Sixty-one per cent of the firms have male owners. Eleventh, studies have found that well-educated managers are more likely to hire well-educated workers (Rosenbaum *et al.*, 1999), and to capture this, I include a dummy indicating whether the owner has at least high school education. Table 1 shows that around 90 per cent of owners have higher education.

Twelfth, because the average educational level in the firm has been shown to be positively correlated with overall productivity and wages (Lucas, 1988), I include the share of professional workers as a proxy for the general quality of the workforce. Moreover, this eliminates the bias that might arise from a positive correlation between union status and worker quality if, as a result of unionisation, firms choose to hire better quality workers so that productivity matches the union-imposed higher wage (Lewis, 1986).[14] Similarly, higher wages may attract more highly qualified workers. Furthermore, given that workers with higher unobserved ability will tend to have co-workers with higher average skills, including a measure for the latter will also help to reduce the bias arising from omitted worker specific ability. Professionals make up around 9 per cent of the workforce.[15] Finally, the share of female workers is included because this has been found to have a negative effect on the wages of all workers in the firm (Croson and Gneezy, 2009). The summary statistics show that the proportion of women is just above 40 per cent.[16]

4   RESULTS

Table 2 presents the results when the outcome variable is the individual wage, and the variable of interest is union membership. Column 1 shows that when controlling for employee specific attributes, the union wage gap amounts to 13 per cent, yet when the firm-level characteristics are added in columns 2 and 3, the significance drops and the wage premium falls to just above 7 per cent. This is largely in accordance with Clarke *et al.* (2007), who report a 5 per cent trade union wage premium for Vietnamese workers.

As for the individual level controls, there is a substantial gender wage gap with male earnings being between 14 and 18 per cent higher than for women depending on the specification. This corresponds to other Vietnamese studies (Liu, 2004). The age of the worker is also highly significant and has the expected concave effect with a maximum at

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[13] According to the two-digit International Standard Industrial Classification system, low value added sectors are classified as 15–19 and 37, medium as 20–29 and high as 30–36.

[14] Pencavel (2005) provides evidence that the union wage gap drops substantially once worker skill is controlled for.

[15] None of the other worker categories (managers, sales, office, service and production workers) were significant, and their inclusion did not alter the results.

[16] Appendix Table A presents the union membership probit estimations underlying the analysis in section 4. The results show that differences between union and non-union members clearly exist along the following dimensions: firm size, CCPs, urban location, high value added sector, owner's education and age of the worker.

Table 2.   Individual wages

	(1)	(2)	(3)
Union member	0.132***	0.075*	0.073*
	(0.041)	(0.040)	(0.038)
Male	0.180***	0.171***	0.143***
	(0.024)	(0.023)	(0.024)
Age	0.032***	0.034***	0.033***
	(0.009)	(0.008)	(0.008)
Age squared	−0.040***	−0.039***	−0.038***
	(0.012)	(0.011)	(0.011)
Higher education	0.151***	0.128***	0.119***
	(0.035)	(0.033)	(0.034)
Manager	0.501***	0.461***	0.457***
	(0.042)	(0.040)	(0.040)
Professional	0.303***	0.284***	0.270***
	(0.030)	(0.029)	(0.029)
Sales	0.209***	0.179***	0.172***
	(0.043)	(0.041)	(0.040)
Other	0.107***	0.064**	0.048*
	(0.028)	(0.027)	(0.026)
Informal	0.106***	0.117***	0.119***
	(0.032)	(0.030)	(0.030)
Firm size		0.072***	0.079***
		(0.025)	(0.024)
CCP		−0.210**	−0.216**
		(0.089)	(0.093)
Limited liability		−0.009	−0.014
		(0.046)	(0.045)
Joint stock company		0.050	0.030
		(0.068)	(0.068)
Urban		0.143***	0.138***
		(0.037)	(0.035)
South		0.032	0.048
		(0.041)	(0.038)
Medium value added sector		0.072*	0.024
		(0.041)	(0.052)
High value added sector		0.102*	0.022
		(0.057)	(0.073)
Owner male			−0.026
			(0.035)
Owner has higher education			0.083
			(0.052)
Professional worker share			0.227
			(0.257)
Female worker share			−0.252**
			(0.104)
Year dummy	0.101***	0.093***	0.091***
	(0.033)	(0.031)	(0.031)
R-squared	0.124	0.154	0.390
Observations	1,153	1,153	1,153

Note: Dependent variable: individual wage. Ordinary least squares. Robust standard errors clustered at the firm level (in parenthesis).
***$p < 0.01$, **$p < 0.05$, *$p < 0.1$.

around 43 years of age.[17] With regard to education, the results show that a worker with education beyond secondary school has a wage that is about 12 per cent higher than a worker with only basic education when all controls are included. Thus, the characteristics of the workers are in line with human capital theory. The different occupation categories all indicate a substantial wage premium compared with production workers, especially for managers and professional workers at close to 50 and 30 per cent, respectively. Having been hired through an informal contact gives a positive wage return of about 12 per cent compared with a formal method, which is in line with Larsen *et al.* (2011).

In terms of the firm-level control variables, firm size is significantly positive in line with the general finding that larger firms pay higher wages. CCPs pay wages that are more than 20 per cent lower than private firms and workers in urban firms receive wages that are about 14 per cent higher compared with workers in rural areas. Because wages have been deflated at the province level, this gap is not attributed to price differences between rural and urban areas; however, one plausible explanation is that firms in urban areas pay efficiency wages in order to attract more productive workers. This is in line with the Vietnam Provincial Competitiveness Index (Malesky, 2009) according to which HCMC and Hanoi rank no. 2 and no. 9, respectively in the labour policy sub-index which among other components includes a measure of labour quality. As expected, medium and high value added sectors pay higher wages, yet their contribution disappears with the addition of the firm-level workforce characteristics. The female share is significantly negative and indicates that going from 0 per cent to 100 per cent female workers is associated with a wage bill that is 25 per cent lower. Finally, the year dummy shows an increase in individual wages of around 9 per cent from 2007 to 2009.

The aforementioned analysis compares the wages between union members (in union firms) and non-union members (in union *and* non-union firms). However, non-union members working in non-union firms, and union members in union firms may not be directly comparable, because the former have not been faced with the choice of becoming union members, unless they purposely chose to work in a non-union firm. Thus, the results do not reveal whether the wage differential is due to the gap between workers in union and non-union firms, or the gap between union and non-union workers *within* unionised firms. However, by restricting the sample to unionised firms I am able to test this.[18] Table 3 shows that *within* unionised firms, there is no significant wage gain from being a union member. This could be due to the presence of collective agreements, yet as seen earlier, the share of firms with such agreements remains relatively low.

If non-union members, within unionised firms, are able to obtain similar wages as union members then why do most workers decide to become union members? Explanations of this *union free-rider puzzle* have included the exclusive provision to union members of private goods such as on-the-job-training (Acemoglu *et al.*, 2001), legal and pensions advice (Booth and Chatterji, 1995) and unemployment benefits (Boeri *et al.*, 2001). In both the 2007 and the 2009 surveys, 50 per cent of workers replied that the main benefit of trade union membership is that 'it secures that the firm pays social benefits'. In order to examine

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[17]Recall from footnote 9 that age squared was divided by 100, and thus in order to obtain the correct maximum age, I multiply the result obtained from the standard formula by $100 : x^* = 100 * |\beta_1/(2\beta_2)|$.

[18]An alternative would be to add the variable for whether the firm has a union to the individual level specification. However, this leads to multicollinearity due to the high correlation between firm union and union membership (0.878).

Table 3.   Individual wages within unionised firms

	(1)	(2)	(3)
Union member	0.065	0.058	0.059
	(0.076)	(0.072)	(0.072)
Employee characteristics	Yes	Yes	Yes
Firm characteristics	No	Yes	Yes
Workforce shares	No	No	Yes
R-squared	0.339	0.435	0.438
Observations	476	476	476

Note: Dependent variable: log real individual wages. Ordinary least squares. Robust standard errors clustered at the firm level (in parenthesis).

this in more detail, Table 4 presents the probit estimates where social insurance is the dependent variable.

The results show that being a union member is highly positively correlated with receiving social benefits when controlling for both employee and firm characteristics. In terms of the other variables, more highly educated workers, managers, professionals and others all have a higher probability of receiving benefits. Moreover, individuals working in larger and Southern firms, limited liability and joint stock companies are more likely to receive benefits, as are workers in firms with a higher share of professionals. I again restrict the sample to unionised firms only, and the results presented in Table 5 show that being a union member remains significantly positively associated with receiving social security, when all controls are included.

Prior to the reunification of Vietnam Northern trade unions were characterised by rather close links with the Party, whereas Southern trade unions adopted a more adversary attitude towards the government and as such were more independent (Edwards and Phan, 2008). Following reunification in 1975, the system prevalent in the North was officially adopted in the South, yet some of the ideological and institutional differences between the two parts of the country continue to permeate through today (for further detail see Kim, 2008). Further, Zhu *et al*. (2008) find that firms in Hanoi remain more oriented towards traditional (socialist) personnel practices including government wage scales and unions' involvement as government agents, whereas firms in HCMC have a higher rate of adoption of modern human resource management. Thus, given the historical and institutional context combined with the higher concentration of collective agreements in HCMC a North–South split may reveal varying results with regard to the union wage gap.

Table 6 shows the union membership wage association when the sample is split into Northern and Southern provinces. Columns B1 and B2 show that union members in Southern firms receive a substantial wage premium when both employee and firm characteristics are included. Since urban location is controlled for, this is not merely an HCMC effect. Moreover, as shown in column B3, the union wage association holds when the sample is restricted to unionised firms only. By contrast, in Northern provinces, the union wage association is not well determined. Thus, the extent to which union membership is associated with a compensation gain seems to be in great part a function of firm location, most probably related to the historical and institutional factors outlined earlier.

Table 4.   Social benefits

	(1)	(2)	(3)
Union member	0.527***	0.570***	0.575***
	(0.047)	(0.051)	(0.050)
Male	−0.002	−0.010	0.008
	(0.036)	(0.038)	(0.039)
Age	0.009	0.014	0.016
	(0.013)	(0.014)	(0.014)
Age squared	−0.014	−0.016	−0.018
	(0.016)	(0.017)	(0.017)
Higher education	0.079	0.120**	0.092*
	(0.049)	(0.053)	(0.055)
Manager	0.152***	0.120**	0.119**
	(0.048)	(0.056)	(0.057)
Professional	0.114***	0.125***	0.113***
	(0.036)	(0.043)	(0.044)
Sales	0.062	0.039	0.031
	(0.043)	(0.047)	(0.048)
Other	0.089**	0.051	0.045
	(0.037)	(0.040)	(0.040)
Informal	−0.002	0.080	0.081
	(0.053)	(0.054)	(0.054)
Firm size		0.086**	0.089*
		(0.044)	(0.047)
CCP		−0.076	−0.102
		(0.170)	(0.169)
Limited liability		0.328***	0.303***
		(0.075)	(0.078)
Joint stock company		0.302***	0.299***
		(0.092)	(0.091)
Urban		−0.031	−0.041
		(0.062)	(0.061)
South		0.384***	0.389***
		(0.065)	(0.066)
Medium value added sector		0.027	0.061
		(0.065)	(0.073)
High value added sector		0.112	0.144
		(0.092)	(0.100)
Owner male			−0.015
			(0.063)
Owner has higher education			0.063
			(0.111)
Professional worker share			0.900**
			(0.443)
Female worker share			0.192
			(0.159)
Observations	1,153	1,153	1,153

Note: Dependent variable: Employee receives social benefits. Probit estimates, marginal effects. Year dummy included. Robust standard errors clustered at the firm level (in parenthesis).
***$p < 0.01$, **$p < 0.05$, *$p < 0.1$.

In Vietnam, it is more common for the union head to be a manager or a human resource staff member, rather than a senior worker. When splitting the union variable into the different union head categories, I find that the union wage gap is driven solely by the case where the head is a

Table 5.   Social benefits within unionised firms

	(1)	(2)	(3)
Union member	0.259***	0.331***	0.356***
	(0.091)	(0.097)	(0.097)
Employee characteristics	Yes	Yes	Yes
Firm characteristics	No	Yes	Yes
Workforce characteristics	No	No	Yes
Observations	476	476	476

Note: Dependent variable: Employee receives social benefits. Probit estimates, marginal effects. Robust standard errors clustered at the firm level (in parenthesis).
***$p < 0.01$, **$p < 0.05$, *$p < 0.1$.

Table 6.   Individual wages by location

	(A1)	(A2)	(A3)	(B1)	(B2)	(B3)
	North	North	North	South	South	South
Union member	0.067	0.023	−0.122	0.195***	0.141***	0.219**
	(0.048)	(0.049)	(0.094)	(0.068)	(0.054)	(0.085)
Employee characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Firm characteristics	No	Yes	Yes	No	Yes	Yes
Firm has a union	No	No	Yes	No	No	Yes
R-squared						
Observations	619	619	243	534	534	233

Note: Dependent variable: log real individual wages. Ordinary least squares. Robust standard errors clustered at the firm level (in parenthesis).
***$p < 0.01$, **$p < 0.05$, *$p < 0.1$.

manager, whereas wages in firms that have a senior worker as head are not significantly higher than in non-union firms (results not reported). This may be related to managers having the power to exert pressure on the central authorities who are in charge of setting the wage level.

5   CONCLUSION

This paper has examined the union wage differential among Vietnamese small and medium manufacturing enterprises using matched employer–employee survey data from 2007 to 2009. Vietnam provides an interesting case study because of the transitional environment in which unions operate, and the fact that union membership is on the rise, contrary to in many developed countries. The results show that union membership is associated with higher individual wages when both firm and employee characteristics are controlled for. When restricting the analysis to unionised firms, the wage premium disappears, except among workers employed in Southern firms—a finding which presumably is related to historical differences between the North and South of the country. Moreover, within unionised firms, union membership is strongly associated with receiving social benefits possibly providing an explanation for why workers choose to become union members. Although this is a positive finding in terms of the effectiveness of unions in protecting the rights of their

members, it should not be the responsibility of unions to ensure that firms comply with regulations. Unionised or not, firms that are formally registered are mandated by the Law on Social Insurance to contribute towards social security for regular workers. Thus, an important policy implication arising from this study is the need to improve the enforcement of regulations, while at the same time enhancing workers' awareness of their rights. Furthermore, given that a large number of firms remain non-unionised, also along this dimension, there is a need for enhanced enforcement.

ACKNOWLEDGEMENTS

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APPENDIX TABLE A. UNION MEMBERSHIP DETERMINANTS

Male	−0.013
	(0.031)
Age	0.030[**]
	(0.013)
Age squared	−0.030[*]
	(0.016)
Higher education	0.036
	(0.045)
Manager	−0.019
	(0.043)
Professional	0.047
	(0.039)
Sales	0.051
	(0.045)
Other	0.013
	(0.040)
Informal	0.028
	(0.040)
Firm size	0.332[***]
	(0.045)

(Continues)

(Continued)

CCP	0.398***
	(0.148)
Limited liability	0.023
	(0.098)
Joint stock company	−0.089
	(0.116)
Urban	0.216***
	(0.065)
South	0.074
	(0.066)
Sector medium value added	−0.075
	(0.081)
Sector high value added	−0.182**
	(0.079)
Owner is male	0.028
	(0.058)
Owner has higher education	0.185***
	(0.072)
Professional share	−0.291
	(0.342)
Female share	0.025
	(0.166)
Year dummy	0.105**
	(0.050)
Observations	1,153

Note: Dependent variable: worker is union member. Probit estimates, marginal effects. Robust standard errors clustered at the firm level (reported in parenthesis). ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$.