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Visibility Constraint**

**Lionel Fontagné  
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**JEL Codes: J51, J80**

**Keywords: Labour standards, NGOs, Wage determination**

# The Outcome of NGOs' Activism in Developing Countries under Visibility Constraint\*

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## Abstract

Many Developing Countries ratified ILO Fundamental Conventions and authorized local labour unions. Multinational companies producing in these countries pay more when NGOs campaigns take place and reputation counts. However, whether this external pressure from NGOs benefit local workers *outside* MNEs affiliates in host countries remains an open issue. Segmented and weak local labour unions often rely on external funding from the North and technical assistance by labour NGOs. They need to increase their visibility in the labour intensive sectors targeted by Northern donations and activism. To address these issues we develop a bargaining model adapted to peculiarities of labour market institutions in developing countries, i.e. external funding and the complementarity with labour NGOs. This model is estimated on data on Indonesian manufacturing firms, before and after the authorisation of labour unions, in sensitive and non sensitive sectors. We find that, in sectors with visibility for labour unions, the net outcome on wages of the presence of NGOs is *negative*. The external fundings imply a distortion in the objective of labour unions, confronted with the constraint of increasing the employment in the formal sector.

Keywords: labour standards, NGOs, wage determination

JEL: J51, J80

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# 1 Introduction

In the last decades two major actors of globalization developed: Multinational Enterprises (MNEs) and their network of subcontractors (Antras & Helpman (2004)), and international Non Governmental Organizations (NGOs) (Aldashev & Verdier (2009)). The two interact with each other through the increasing outside monitoring carried on by international NGOs. Civil society and international NGOs accuse MNEs of not complying with labour standards in their affiliates in Developing Countries. Recent studies show how MNEs pay more when NGOs campaigns take place and reputation counts (Harrison & Scorse (2010)). However, there is still an open issue: does this external pressure from NGOs benefit local workers outside MNEs affiliates in host countries?

Due to reputation effect, Developing Countries shifted towards more labour protection (Caraway (2004)). More than 100 developing countries ratified ILO Fundamental Conventions<sup>1</sup>, improved domestic labour laws and authorized local labour unions. However, despite this reshaped regulatory environment, there is still evidences that sweatshops have not been eradicated. Two factors may explain this contrast. First, weak enforcement institutions characterized many developing countries (Boeri et al. (2008)). Second, local labour unions face financing constraints and suffer from lack of expertise in collective bargaining, in countries where labour unions have been banned for long. The role of weak enforcement institutions has been well documented (Martins & Esteves (2007), Bigsten et al. (2003)). We will focus here on the complex relation between NGOs from the North, labour unions in the South, and labour NGOs in the South. This is where financing, training and advise from NGOs to labour unions matters.

In several developing countries labour unions cannot be financed by poor workers. They rely on Northern NGOs' financing. The latter is to large extent dependent on labour union visibility that is related to the number of members employed in formal sector. At the same time, Northern NGOs themselves are financed by public or private money in the North. Therefore, Northern NGOs are inclined to finance labour unions and local labour NGOs operating in specific sectors in order to satisfy a political demand.<sup>2</sup> All along the analysis, we define those sectors as "sensitive sectors". The basic idea is that higher visibility of labour unions earns a premium in sector targeted

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<sup>1</sup><http://www.ilo.org/ilolex/english/docs/declworld.htm>

<sup>2</sup>"Responsible" consumers care on workers conditions in poor countries. While political authority and labour unions in the North might support labour unions in the South in order to raise the level of labour standards and reduce the competitiveness of these countries in the international market. This is a sort of "indirect trade policy". The impact of this kind of measure on labour market in developing countries is an important issue to be analysed.

by Northern donors.

Labour intensive activities are on the top of the list of the sectors targeted by Northern NGOs. Well-known examples are campaigns conducted by Clean Clothes Campaign (CCC)<sup>3</sup>. In 2006, *True Blue* was a joint campaign by the Dutch Clean Clothes Campaign, Amnesty International, Fair Wear Foundation, Goede Waar and Co (consumer organisation) with the aim to raise awareness of working conditions in the Chinese garment industry. According to the General Secretary of the Indonesian Federation of Independent Trade Union, the Clean Clothes Campaign enables them "to join with workers and activists around the world" so they don't have to face "their struggle alone".<sup>4</sup>

Most outside financing comes from international trade unions such as International Trade Union Confederation (ITUC)<sup>5</sup>, or trade union solidarity organizations such as the American Center for International Labor Solidarity (ACILS)<sup>6</sup>. For instance, in 2005, ACILS gave USD 156,624 to strengthen unions' internal democratic mechanisms and the ability of trade unions to organize and represent workers in Latin Region (Paraguay, Argentina, Uruguay, Chile, Brazil). In the same year, ACILS gave USD 236,485 to promote women's rights and improve working conditions for women laborers to a Chinese NGOs.<sup>7</sup> In 2008-09, Union Aid Abroad-APHEDA<sup>8</sup> sent USD 10,000 to the Philippines trade union federation, the *Kilusang Mayo Uno (KMU)*, to assist organisers' training course.

Despite this common source of funding, local labour unions and local NGOs cooperate in various regions of the world, including Southeast Asia. In Thailand, trade unions and NGOs campaigned jointly for improvements in occupational health and safety after a fire killed 188

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<sup>3</sup>The Clean Clothes Campaign (CCC) is an international network that comprises a wide variety of organizations, such as trade unions, consumer organizations, researchers, solidarity groups, women's organizations, church groups, youth movements and world shops. The aim is to improve working conditions in the global garment industry and to empower workers, most of whom are women, "with the ultimate goal of ending the oppression, exploitation and abuse in this sector"

<sup>4</sup>Emelia Ianti Mala Dewi Sihaan, CCC website

<sup>5</sup>The ITUC Solidarity Fund gives assistance to trade union action in the countries where it is most needed. It helps organizations and individuals facing hardship or repression, and supports trade union campaigns, organizing and strengthening capacities and structures. The oversight and management of the Fund is done by the Solidarity Fund Management Board. In 2010, the Fund supported activities to a total of 1 million Euros. The Fund is financed by voluntary contributions from ITUC affiliates

<sup>6</sup>ACILS, a non-profit US organization financed for 96 per cent by US government

<sup>7</sup>Notice that independent labour unions were not allowed in China in this period

<sup>8</sup>APHEDA is the overseas humanitarian aid agency of the Australian Council of Trade Unions (ACTU). The agency, established by the ACTU in 1984 as a means for Australian workers, through their unions, to directly assist international development by supporting projects for workers in developing countries

people in a toy factory in May 1993 and have since developed new alliances (Brown (2004)). In Malaysia, women's NGOs and women's section of the Malaysian Trade Union Congress worked together on many issues (Crinis (2008)). A Jakarta-based grassroots NGO activist states that "the task of NGOs is to encourage workers to form unions, not to control them. NGOs have to raise their self-awareness so that they see the need to organize" (Ford (2005)). While several Developing Countries have recently authorized labour unions, there is often a lack of collective bargaining background. In such context, local labour NGOs provide technical and legal assistance to workers, give informations on domestic labour laws and workers' rights. This suggest the existence of a complementarity between local labour NGOs activity and labour unions.

Therefore, the presence of labour NGOs will change the outcome of collective bargaining in countries lacking a culture of negotiation. We are interested in such outcome. Our point is however that not all workers are employed in affiliates of foreign companies. At the same time, among workers employed outside these affiliates, not all workers are employed in the formal sector where labour unions are active.

While the literature has so far focused on the impact of NGOs activism on labour conditions in multinational affiliates, we focus in this paper on domestic firms to analyze the role of domestic labour NGOs, supporting local labour unions, on workers *outside* MNEs affiliates. Focusing on domestic firms implies that the channel of reputation of the firm is no longer relevant. This is our first departure from the existing literature. Our second departure is to explicitly address the consequences of the dual nature of the labour market in developing countries, with an informal sector offering a convenient way of bypassing the labour laws. In the present analysis, workers' outside opportunity is the wage paid in the formal sectors, the wage in the informal sector and assistance provided by domestic NGOs.<sup>9</sup>

The purpose of this paper is to investigate how the presence of NGOs and "visibility premium" of the labour union interact with each other and their impact on the bargaining power of workers.

We develop a bargaining model studying the interaction between the visibility premium, the bargaining power and the outside opportunity of workers in the individual wage determination in developing countries. As aforementioned, in poor countries local labour unions (where allowed) face financial constraint. They rely on external funding from the North. This imply a distortion

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<sup>9</sup>See Section 2 for more details on the outside opportunity of workers

in the traditional labour union objective (i.e. increase wage). Labour unions want also to increase their visibility, and thus the number of members in the formal sector where labour rights are better respected. As explained above, the labour movement in developing countries is also characterized by a complementarity between local labour NGOs and local labour unions. The basic idea is that local labour NGOs affect the outside opportunity of workers by increasing the available information on labour rights. NGOs cannot directly affect the bargaining power of workers, as NGOs are not accepted by employers within the firm. Then, firms might avoid to comply with labour standards due to weak enforcement institutions and corruption. This is not central to our demonstration and has been extensively documented elsewhere. More importantly, they can resort to the informal sector. Domestic firms are not even concerned about reputation as they do not export, at least directly.

Our two main theoretical results are as follows. Wage increases with the presence of labour NGOs. However, wage decreases with the visibility premium in sensitive sector. The intuition is that local labour unions have two contradictory objectives in "sensitive" sectors: increase their visibility on the top of the traditional wage objective.

To test these predictions, we need data on domestic manufacturing firm in a developing country, belonging or not to sensitive sectors, before and after the authorisation of labour unions, in presence or not of local labour NGOs. Indonesia offers such a combination and will be used to validate our predictions in the following. We will make use of a difference-in-difference-in-difference method, in order to take into account the external shock (before and after the labor law), the role of the complementarity between labour NGOs and labour unions (province with/without labor NGOs) and the visibility premium (textile versus other sectors).

Local labour NGOs played an important role in the Indonesian working-class movement. The post-Suharto era is defined by a strong complementarity between local labour unions and local labour NGOs. Ford (2005) explains how Indonesia's labour non-government organizations (NGOs) are in fact part of a global surge in non-traditional labour activism, in which international and indigenous labour NGOs have played an important role. Most local NGOs and labor unions are financed by foreign NGOs. These donations are either project or time based. Over the last years, Northern NGOs have focused on workers condition in Indonesian labour intensive sectors,

such as textile, footwear and apparel.<sup>10</sup>

We test our theoretical predictions by analysing Data of the Indonesia Manufacturing Industry over the period 1991-2005. This period covers the Trade union Act of 2000, that authorised independent labour union.<sup>11</sup>

Our main results are as follows. Wages are higher in provinces with labour NGOs with respect to provinces without labour NGOs. Therefore, the complementarity between labour NGOs and labour union has a positive impact on wage. The presence of NGOs gives power to labour union (increase the outside option of workers). However, in sectors on the radar screen of Northern NGOs, labour unions have also the objective to increase the number of member employed in formal sector, i.e. increase their visibility. We show that the *net* outcome on wages of the presence of NGOs in sector with visibility premium for labour union is negative.

The remainder of the paper is organized as follows: Section 2 presents the bargaining model, Section 3 the empirical analysis based on manufacturing industry in Indonesia, while Section 4 concludes.

## 2 Bargaining Model

In Indonesia, after the Trade Union Act of 2000, all specific issues concerning wages and employment are bargained at the enterprise level. The regional and national level has no influential role<sup>12</sup>. This institutional context motivates our choice to analyse wage determination at the firm level. We rely on rent-sharing literature (Hildreth and Oswald, 1997; Dobbelaere, 2004; Martins and Esteves, 2006). More specifically, we rely on the efficient bargaining model where firm and union bargain over wage and employment (Blanchflower et al, 1996). This model predicts a positive relation between profit and wage if labour union has some bargaining power.

Wages are determined as in a Nash problem in which  $0 \leq \phi \leq 1$  represents the workers bargaining

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<sup>10</sup>For more detail on this issue see section 3.1

<sup>11</sup>During the Suharto Regime only one labour union was officially recognized by the government. Independent labour unions were not only banned but also severely repressed. The Trade Union Act of 2000 permitted groups of 10 or more workers to form union also at firm level.

<sup>12</sup>*Collective bargaining in Indonesia*, ILO- Japan Multi- Lateral Project, 2006



power. The maximisation problem is the following:

$$[wn + an - u(\bar{w})n]^\phi [\pi^{1-\phi}] \quad (2.1)$$

where  $w$  represents the wage if bargaining succeeds and  $\bar{w}$  the outside earnings of workers if they are not employed in the firm;  $a \geq 0$  represents the *visibility premium* of the labour union;  $n$  indicates the employment level and  $\pi$  denotes profit.

The outside option of workers can be described by the function

$$\bar{w} = f(w^o, b, I, \tau)$$

where  $w^o$  is the alternative wage in other sectors,  $b$  the wage in the informal sector,  $I$  the informality rate and  $\tau$  the presence of labour NGOs, i.e. NGO working on labour issues.

The utility of unionized non-employed workers (i.e. the member reservation utility) used in the Nash bargaining model is quite standard in the rent-sharing literature (Blanchflower et al, 1996). We add some specifications to take into account features of Indonesian labour market institutions. In Indonesia, one of the problems in delivering the right of freedom of association and collective bargaining is the lack of capacity and understanding of the basic laws and procedures on collective bargaining and labour relation (ILO Report, 2006). In the last decades, labour NGOs have played an important role in Indonesia on labour rights issue (Ford 2003). Therefore, NGOs activity has an impact on labour market outcome in Indonesia. In this respect, we assume that the NGOs activity affects the outside option of workers. The basic idea is that the NGOs activity increases the outside option of workers by providing more information on labour rights and job opportunities. Indeed, the threat of local NGOs on domestic firms is not credible since reputation does not account for those firms. The available and credible instrument whose dispose labour NGOs is the advocacy activity in order to inform workers on their rights. Moreover, in Indonesia the majority of the workforce works in the informal sector. In 2004 almost 70 percent were employed in traditional jobs in the informal sector.<sup>13</sup> Due to the lack of social security and the high informal rate in Indonesia, we consider the informal sector and wage instead of the unemployment rate and benefit

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<sup>13</sup>Indonesia's Urban Studies, <http://indonesiaurbanstudies.blogspot.com/2007/05/urban-planning-and-informal-sector-in.html>

generally used in the literature.

The interpretation of this outside option is that  $\bar{w}$  is expected income and  $I$  determines the probability of receiving  $b$  instead of  $w^o$  (Blanchflower et al, 1996).

By solving the maximisation problem and after substitution we get the wage equation:

$$w^* = f(w^o, b, \tau) + \frac{\phi}{1 - \phi} \frac{\pi}{n} - a \quad (2.2)$$

**Lemma 1:** *Under bargaining, the equilibrium wage is a decreasing function of the visibility premium ( $a \geq 0$ ) of the labour union; increasing function of profit per employees; an increasing function of workers' outside option.*

The intuition is that local labour unions have two contradictory objectives: increase their visibility on the top of the traditional wage objective. The visibility is represented by the number of members employed in the formal sector. Higher visibility implies more donors' fundings. We keep as exogenous ( $a > 0$ ) the outside funding. For the present analysis other assumptions on the outside funding mechanism are not necessary. This visibility earns a premium  $a > 0$  in sectors where donors' (i.e. consumer and policy makers) interest in the North is higher. In Indonesia, after the Trade Union Act of 2000, Northern donations targeted footwear, textile and garment sectors. Due to the large number of new labour unions, it is plausible to assume that Northern donations finance larger unions with a higher probability to bargain over better workers conditions at firm level within sensitive sectors. Therefore, due to the high competition among them, labour unions will bargain over employment to be more *visible*. In developed countries labour unions care about wage because they have to collect dues from their members. In sector targeted by northern donations in Indonesia, the dues' collection is not an issue for the local labour union. Therefore, the employers could internalize this effect of size on the bargaining position of unions since this might occur through lower wages.

In the empirical analysis we test our theoretical predictions. We want to analyze the role of the complementarity between domestic NGOs and local labour unions when the latter face a visibility constraint. It is worth noting that our model is a partial equilibrium analysis, where the environ-

ment outside the representative firm is assumed to be the same whatever bargaining outcome is realized. Our results could be different in a general equilibrium framework.

### 3 Empirical Analysis

#### 3.1 Background

Indonesia is an ideal case study of our theoretical settings, due to the variability over time in labour market relations. President Suharto's<sup>14</sup> resignation in may 1998 changed deeply Indonesia's industrial relations landscape. The new government ratified eight ILO Conventions; one of them was *Convention N. 87* on the "Freedom of Association and the Protection on the Right to Organise". During the Suharto Regime only one labor union was officially recognized by the government. Independent labor unions were not only banned but also severely repressed. The Trade Union Act of 2000 permitted groups of 10 or more workers to form union also at firm level.<sup>15</sup> By August 2000, 24 national union organisations and over 10,000 enterprise unions had registered with the Department of Manpower. Federation and confederation of labour unions exist but enterprise union is considered to be more important due to the direct relationship with both workers and management. A *Collective labour agreement* (CLA) shall be made between one (or several) registered trade union and an employer.<sup>16</sup> An alternative system used by firm is the *Company regulation* (instead of the CLA) with the agreement of labour union.<sup>17</sup> As reported by the *ILO Survey on Collective Bargaining in Indonesia* (2006): "the frequent failure of labour unions to secure CLA at the enterprise level results from a lack understanding of the concepts of collective bargaining, poor negotiation skills of the parties and inadequate preparations." Therefore, the technical and legal support of labour NGOs must affect the role of weak labour unions.<sup>18</sup>

Caraway (2004) argues that labour success in the immediate post-Suharto years can be explained by the international pressure to restore basic labour rights and the early remobilisation of

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<sup>14</sup>Suharto was the second president of Indonesia, holding the office from 1967 to 1998.

<sup>15</sup>There were two other important labour laws in these years. The "Manpower Act" (law n.13/2003) and the Law 2001 on minimum wage. The "Manpower Act" defines rules on the right to strike while the Law 2001 the right to set the minimum wage was transferred from the central government to the local government (at province level).

<sup>16</sup>The validity of CLA is 2 years expendable for 1 year.

<sup>17</sup>The CLA and the company regulation are almost the same as both tend to follow the legal minima (Julia & Putranto (2006))

<sup>18</sup>Notice that the Department of Manpower could still withdraw official recognition of union that didn't meet administrative requirements, and the courts could dissolve unions whose leaders deemed to "threaten national security".

labour in contrast to employers after the Asian financial crisis.

However, despite this reshaped regulatory environment, there is still a limited impact not only due to weak enforcement institutions,<sup>19</sup> but also due to labour market features, in particular the lack of tradition in terms of labour market negotiations. In absence of free labour unions, the last period of the Suharto regime was characterized by radical and violent movements. After the Trade Union Act was passed in 2000, the lack of expertise on collective bargaining and technical skills reduced the impact of independent labour unions on workers' conditions. To some extent, this lack of expertise has been compensated by the activism of local labour NGOs. Such NGOs have played an important role in Indonesia society and particularly in the working-class movement. The pro-labour NGOs provided important services to workers and labour organizations. They offered legal advice and legal services, teaching about labour law, and helping to release workers from jail when they are arrested. Indeed, NGOs were the most important source of support to workers (Botz (2001)). To summarize, the cooperation with labour NGOs was important to rebuild a negotiation capacity of labour unions. Most local NGOs and labor unions rely heavily on international donors for funding. Most outside financing comes from Northern NGOs such as ACILS, a non-profit US organization (financed for 96 per cent by US government), NOVIB-Oxfam (Dutch), Friedrich Ebert Stiftung (German) and APHEDA (Australia), (Ford (2005)).<sup>20</sup>

In the last years, consistent with our sensitive sector hypothesis, the main sectors targeted in Indonesia were textile, footwear and apparel. APHEDA gave donations to labour unions in Bandung for several years, where much of the workforce is employed in the footwear, clothing and textile industries. ACILs in 2005 assigned USD 90,000 to work with local garments and textile unions. Novib support Clean Clothes Campaigns (CCC) a network organization whose its aim is also supporting workers, trade unions and NGOs in producers countries.

To identify the mechanism we are interested in, remind that we need three dimensions in our data. We need a time dimension to control for the introduction of labour unions. We need a

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<sup>19</sup>In our empirical analysis, we control for weak enforcement institutions by using the Difference-in-Difference method. In our sample the external shocks are the new labour laws, while enforcement institutions did not change over time.

<sup>20</sup>As aforementioned, despite this common source of funding, there exist also in Indonesia a strong complementarity between labour NGOs activity and labour unions. Some large trade unions saw labour NGOs as a useful source of technical and other kinds of assistance (McKay (2006)). Leaders of trade unions associated with the Congress of Indonesian Trade Unions (Kongres Serikat Pekerja Indonesia, KSPI) agree that such NGOs can play a valuable and ongoing role in the labour movement Ford (2009). Activists also emphasized the "synergy" and "symbiosis" between trade unions and NGOs Ford (2005).

sectoral dimension to control for the visibility premium. We also need a regional dimension to control for the presence of local NGOs within Indonesia.

### 3.2 Data summary

The Dataset used in this analysis is derived from the annual manufacturing survey of Indonesia collected and compiled by the Indonesian government's statistical agency BPS (*Badan Pusat Statistik*). The BPS submits a questionnaire annually to all registered manufacturing establishment with 20 or more employees. The data cover the period before and after the Trade Union Act of 2000. The number of observation is around 20,000 firms per year. As aforementioned, we restrict our analysis to domestic firms, around 18,000 firms. There is information about employees (wages) and each firm (industry, region, size, ownership, etc.). We also rely on a detailed database on Indonesian NGOs, publicly available on the website of SMERU, an Indonesian non-profit organization, to collect informations on the regional presence of local NGOs specialized in labour issues.

Column (1) in Table 1 shows the mean of the real wages in Rupiah for the manufacturing sector for year 1991-1996 and 2004-2005. We define the average wage as the total wage of production workers at firm level divided by the number of production workers. As Harrison and Scorse (2010) we focus on production workers wages, which we use as a proxy of unskilled workers.

We consider the period 1991-1996 before the Trade Union Act (2000) as opposed to the period 2005-2006. We focus on these years, since the financial crisis in 1997 and the fall of the Suharto Regime in 1998 makes the analysis of post 1996 problematic (Harrison & Scorse (2010)). The economic situation pre-crisis was re-established just after 2002 (Rahayu & Sumarto (2003)).

Table 1 shows the mean of the wage, profit-per-employees and the number of workers (unskilled and skilled) in the period analysed. Rows (1) and (2) of Table 2 report the average wage in province without labour NGOs, our control group, and in provinces with labour NGOs, our treatment group. Results of t-test reported in rows (3) of Table 2 shows that the difference in mean of wage between provinces with labour NGOs and provinces without labour NGOs are not statistically significant. Hence, we do not risk an identification error.

To summarise, the trends presented in Table 2 indicate no difference in wage between treatment and control group before the labour law. This suggest that during the Suharto regime domes-

tic firms payed the same wage.

### 3.3 Empirical Strategy

#### 3.3.1 Wage equation

We first estimate the simple wage equation inspired by the theoretical model in order to measure the bargaining power of workers in domestic firms.

From equation (2.3), we can consider the following wage equation:

$$\ln w_{ijrt} = \beta_0 + \beta_1 \frac{\pi_{ijrt}}{n_{ijrt}} + \beta_2 TFA_i + \eta_t + \epsilon_{ijrt} \quad (3.1)$$

$\ln w_{ijrt}$  is the log of the average wage in firm  $i$ , in sector  $j$ , in province  $r$  and in period  $t$ ;  $\pi_{ijrt}$  is the profit of the firm  $i$ , in sector  $j$ , in province  $r$  and in period  $t$ ;  $n_{ijrt}$  is the number of employees in the same firm;  $TFA$  is a sector dummy with  $TFA = 1$  if the firm is in textile, footwear or apparel sector and  $TFA = 0$  if otherwise;  $\eta_t$  is fixed effect per year. We proxy the visibility premium ( $\alpha \geq 0$ ) with the sector dummy variable  $TFA$ . The evidences described above on Northern donations to labor unions operating in textile, footwear and apparel sectors in the period under study motivate our assumption of  $\alpha$ , i.e. the visibility parameter, equals zero outside the garment sector.<sup>21</sup> The parameter  $\beta_1$  indicates the bargaining power of workers.

Following an approach similar to Martins (2004), we proxy rents using "gross profits" <sup>22</sup> (i.e. profits before subtracting the wage bill). This avoids the bias due to the fact that firms that share more rents will also have lower net profits (Martins (2004)).

Our initial results, presented in Column (1) in Table (3), are obtained using an unbalanced panel regression. We include in the regression fixed effect per year.<sup>23</sup> Table (3) presents the results for gross profits, indicating a positive and significant coefficient. This first result suggests that rent sharing is indeed an existing factor in the Indonesian labour market. The sector dummy,

<sup>21</sup> Obviously, the outside funding depends on economic interest from the North. The North targets sectors having significant import penetration and compete with domestic producers in industrialized countries. Therefore, we cannot exclude that in the future donations might target other sectors (other than garment, textile and footwear) in Indonesia as well as other developing countries where the competition from low standards countries threat domestic producers in the North.

<sup>22</sup> Results do not change even if we consider net profit.

<sup>23</sup> We use the robust/cluster feature of STATA at firm level to have robust errors.

TFA, is positive but not significant.

### 3.3.2 Instrumental Variable

It is necessary to consider the simultaneity between profit and wage in estimating equation (3.1), where the equilibrium wage is determined by the level of profit-per-employees. Indeed, profits and wages are simultaneously determined. We use an instrument in order to deal with endogeneity.

The instrumental variable used is a component of the revenue of the firm, related to financial investments, participation in other firms, and non-operational activities. Our identification assumption followed the approach used by Martins & Esteves (2007). Those components do not affect directly wages, while they are correlated with profits. The basic idea is that bargaining over wages is generally related to profits in the firms mainstream activities, e.g. the sales of garments in a garment industry (Martins & Esteves (2007)). If profits of the firm increases due to activities that are not related to the production of garments, unions will typically be less likely to bargain over those profits (Martins & Esteves (2007)). Our identification strategy is motivated also by the lack of transparency and information sharing between workers and employers in Indonesia on the financial status of the company. As reported by the *ILO Survey on Collective Bargaining in Indonesia* (2006): "Unions would like to have informations on the financial status of companies to assist them in setting attainable targets during collective bargaining".

Column (2) in Table (3) presents our results using 2SLS method, considering our instrumental variable. We start by investigating the strength of the instrument in the first-stage equation, as measured by the values of the t-test of the coefficient of the instrumental variable: the coefficient is highly significant.

In terms of the main equation, we find that the coefficients is not longer significant. These findings show that the traditional rent sharing is not an important feature of the Indonesian labour market. Therefore, the evidence of rent sharing presented in the simple model that does not consider the endogeneity of profits can be misleading. The higher wages of employees of more profitable firms are artificially driven by the simultaneous determination of profits and wages (Martins & Esteves (2007)).

This result is in line with the previous papers on rent-sharing in developing countries (Martins & Esteves (2007); Bigsten et al. (2003)). Such absence of rent-sharing is explained by the weak-

ness of labour market institutions in Indonesia, which is consistent with our line of reasoning. Indeed, before and after the Suharto Regime Indonesia has not strong institutions; there are still violations on unions rights. Moreover, the informal sector in Indonesia accounts for most of the total employment.

### 3.3.3 The role of the Trade Union Act of 2000

In the previous section, we found no empirical evidence of traditional rent-sharing in Indonesia. However, in the period examined there was an external shock. During the Suharto regime independent labour unions were banned, while the Trade Union Act of 2000 guaranteed the right to organise, permitted groups of 10 or more workers to form an union. The huge increase in the number of labour unions in the seven years since the new regulation must have had some visible impact. We now look for the related empirical evidence. We want to investigate whether the Trade Union Act of 2000 increases the bargaining power of workers. We interact the variable profit-per-employees with a time dummy  $T$ .  $T$  equals 0 for the period before the Trade Union Act of 2000 and equals 1 for the period after the law is passed.

The wage equation estimated is the following:

$$\ln w_{ijrt} = \alpha + \beta_1 \frac{\pi_{ijrt}}{n_{ijrt}} + \beta_2 \frac{\pi_{ijrt}}{n_{ijrt}} T + \beta_3 T + \beta_4 T F A_i + \beta_5 X_{irt} + \eta_t + \epsilon_{ijrt} \quad (3.2)$$

Column (1) in Table (4) shows the results. The coefficient of the interaction term is positive but not significant. This result indicates that the Trade Union Act of 2000, did not affect the "traditional" bargaining power of workers. This result is explained by weak enforcement institutions in Indonesia and limited knowledge of negotiation by labour unions. The lack of collective bargaining background and the lack of accountability of labour unions might explain this result. In the following section we investigate the issue of the lack of negotiation culture, while in section 3.3.5 we analyse the lack of accountability.



### 3.3.4 The complementarity between labour union and local labour NGOs

As aforementioned, there exists a strong complementarity between labour unions and local labour NGOs. Labour unions are relatively new and unexperienced in Indonesia. The collective bargaining was banned and repressed since 1998 (the fall of Suharto). Moreover, the last period of the Regime was characterized by radical movement and violent demonstration. The role embodied by local labour NGOs was to rebuild a negotiation capacity. Labour NGOs provide technical and legal assistance to workers, inform them on domestic labour laws and on workers' rights. Therefore, the presence of local labour NGOs might affect the role of labour unions within the firm, due to this strong complementarity.

Importantly for our estimation strategy, in Indonesia local labour NGOs are not present in every province.<sup>24</sup> We use a difference in difference approach in order to investigate the role of labour NGOs after the labour laws (Trade Union Act 2000) in a country with lack of individual background of negotiation. We consider the difference in wage between provinces with local labour NGOs and province without local labour NGOs, for the period before and after the Trade Unions Act of 2000. Therefore, we construct a variable interacting the time dummy  $T$  and the province dummy  $NGO$ , where  $NGO = 1$  for province with labour NGOs and  $NGO = 0$  for province without labour NGOs.

The wage equation estimated is the following:

$$\begin{aligned} \ln w_{ijrt} = & \alpha + \beta_1 \frac{\pi_{ijrt}}{n_{ijrt}} + \beta_2 \frac{\pi_{ijrt}}{n_{ijrt}} T + \beta_3 T + \\ & + \beta_4 T F A_i + \beta_5 X_{irt} + \beta_6 NGO_{rt} + \beta_7 T NGO_{rt} + \eta_t + \eta_j + \epsilon_{ijrt} \end{aligned} \quad (3.3)$$

Column (2) in Table (4) presents the results, with Treatment defined as firm located in a province with labour NGOs. The dependent variable is, as before, the average wage. Column (2) reports coefficient estimates when we include export dummy, the minimum wage, and other control at firm and province level (e.g. the size of the firm, the number of skilled workers). The coefficient of the Treatment is positive and highly significant. This result shows that the comple-

<sup>24</sup>We observe the location of labour NGOs in Indonesia on a dataset of Indonesian NGOs constructed by SMERU, a research non-profit organization located in Indonesia. The province with local labour NGOs are: Nanggroe Aceh Darussalam, Sumatera Utara, Riau, DKI Jakarta, Jawa Timur I, Nusa Tenggara Barat, Sulawesi Tenggara

mentarity between labour NGOs and labour unions has a strong and positive impact on wage. The role of labour NGOs to rebuild a negotiation capacity is indeed realized. Notice that we control for export since this might affect the decision of the firm to pay higher wage due to reputation effect in province with outside pressure of NGOs. The export dummy is positive and highly significant. This result is in line with the analysis of Harrison & Scorse (2010).

### **3.3.5 The visibility premium of labour unions**

In the previous section, we analysed the impact of labour NGOs on the outcome in a country with lack of individual background of negotiation. However, we did not control for sector. Our theoretical findings show that labour unions have two contradictory objectives *in sensitive sectors*, due to financing constraint : increase their visibility (i.e. the number of members employed in the formal sector) on the top of the traditional wage. Our analysis above suggests that textile, garment and footwear are sectors where the visibility of a labour union earns a premium.

The intuition is that the presence of NGOs increases the capacity of labour unions (increase the outside option of workers). The results in the Difference-in-Difference estimations are consistent with this idea. However, labour union uses this power to increase the number of workers in formal sector, in order to be more visible.

Therefore we want to investigate if the financing constraint (the quest for visibility) of the labour unions translates into higher or lower wages where the presence of NGOs increases outside option of workers. We have shown above in our model two opposite effects: the positive impact of labour NGOs on wage and the negative impact of the visibility premium of labour unions. We tested empirically this hypothesis of a net negative outcome on wage in province with labour NGOs and in sector with visibility. We use a Difference-in-Difference-in-Difference method, in order to take into account the external shock (before and after the Trade Union Act 2000), the role of the complementarity between labour NGOs and labour unions (province with/without labor NGOs) and the visibility premium (textile versus other sectors).

The equation estimated is the following:

$$\begin{aligned}
lnw_{ijrt} = & \alpha + \beta_1 \frac{\pi_{ijrt}}{n_{ijrt}} + \beta_2 \frac{\pi_{ijrt}}{n_{ijrt}} T + \\
& \beta_3 T + \beta_4 NGO_{rt} + \beta_5 T NGO_{rt} + \beta_6 T NGO_{rt} TFA_i + \\
& \beta_7 T TFA_i + \beta_8 TFA_i NGO_{rt} + \beta_9 X_{irt} + \eta_t + \eta_j + \epsilon_{ijrt}
\end{aligned} \tag{3.4}$$

Column (3) in Table (4) presents the results. The coefficient of the interaction term variable  $T * TFA * NGO$  is *negative* and highly significant. This suggests that *in sectors where the visibility of labour unions can be rewarded, the net outcome on wages of the presence of NGOs is negative.*

Indeed, the external fundings imply a distortion in the objective of the labour union : increase their visibility (i.e. the number of member employed in the formal sector) on the top of the traditional wage. With the outside financing, labour unions are accountable with respect to their donors. The lack of accountability with respect to their members joint to the distortion in the traditional labour union objective explain this negative result. We include in all estimated equations year dummy to control for any aggregate shocks in year 1991-1996 and 2004-2005. We include as well sector dummy to control for any sector specific shocks. Even after controlling for sector and year fixed effect, results do not change.

### 3.4 Employment

We have shown that the complementarity between labour unions and labour NGOs and the outside funding of labour unions affect wage in domestic manufacturing firms. The net outcome on wage of the presence of NGOs is negative in sector with visibility for labour union, as labour unions rely on Northern NGOs donations. This result might depend on the outside pressure from the North on labour union to increase labour standards on the top of wage, i.e. compensate wage differentials. However, on one hand, donations to NGOs or other institutions usually lack of auditing and monitoring mechanism. On the other hand, this negative outcome might depend on the lack of accountability of labour unions with respect to their members. Labour unions might have an incentive to increase their visibility to get access to external funding.

By following Harrison and Scorse (2008), in Table 5 we replace the log of production workers wage with the log of production worker employment as dependent variable. The coefficient of

T\*NGO is positive but not significant. This suggests that the role of labour NGOs does not imply employment declines. However, the results in Table 5 show a robust and positive coefficient for T\*NGO\*TFA. This result suggests a positive impact on employment in sector with visibility for labour union and in province with labour NGOs. This is in line with our theoretical predictions. The outside funding from the North implies a distortion in labour unions objective: increase their visibility (i.e. the number of members employed in formal sector) on the top of the traditional wage objective. Therefore, this reduction in wage corresponds to an employment increase. This result suggests the existence of peculiarities in labor market institutions in developing countries.

## 4 Conclusion

In the present paper we developed a simple bargaining model specific to developing countries in order to analyse the interaction between the visibility premium, the bargaining power and the outside opportunity of workers in the individual wage determination. In poor countries local labour unions face financial constraint. They rely on external fundings from the North. At the same time, labour movement is characterised by a complementarity between local labour NGOs and local labour union. The basic idea is that local labour NGOs affect the outside opportunity of workers by increasing the available information on labour rights. Indeed, several developing countries have just recently experienced labour unions authorisation. Therefore, there is often a lack of collective bargaining background. Local labour NGOs provide technical and legal assistance to workers, give information on domestic labour laws and workers' rights. Therefore, the presence of labour NGOs will change the outcome of collective bargaining in countries without a culture of negotiation.

We focused on domestic firms to analyse the role of local NGOs on workers outside MNEs affiliates and with local labour unions. We investigated how the presence of NGOs and "visibility premium" of the labour union interact with each other and their impact on the bargaining power of workers. In this respect, we emphasized two main results. Wage increases with the presence of labour NGOs. However, wage decreases with the visibility premium. The intuition behind this negative result is that local labour unions have two contradictory objectives in "sensitive" sectors: increase their visibility on the top of the traditional wage objective.

Our theoretical findings highlight two contradictory effects: the positive impact of labour

NGOs on wage and the negative impact of the visibility premium of labour unions. We tested empirically this hypothesis of a net negative outcome on wage in provinces with labour NGOs and in sectors with visibility. Indonesia was an ideal case study since there was an important labour law in 2000, the Trade Union Act, that authorised independent labour unions after 30 years of authoritarian regime. We used Data on Indonesia manufacturing industry covering the period before and after the labour law. First, we estimated the simple wage equation derived from the theoretical model in order to analyse the bargaining power of workers. We found no evidence on the traditional bargaining power of workers. Weak labour institutions and the high informality rate in Indonesia might explain this result. Then, we investigated if the Trade Union Act increased the bargaining power by using a simple difference methodology. We interacted the profit-per-employees variable with a time dummy indicating the period before and after the law. However, results suggested that the Trade Union Act did not affect the outcome on wage. This result could be explained by weak enforcement institutions in Indonesia, as well as by the lack of a collective bargaining background and the lack of accountability of labour unions.

In Indonesia, as other developing countries, there is a strong complementarity between labour NGOs and labour unions. Labour NGOs provide technical assistance and additional information on labour rights. Indeed, the role embodied by local labour NGOs was to rebuild a negotiation capacity. Therefore, the presence of local labour NGOs will affect the role of labour unions within the firm. We used a Difference-in-Difference method in order to study the difference in wage between province with labour NGOs (our treatment) and province without labour NGOs (our control), before and after the labour laws (Trade Union Act 2000). We found that the presence of NGOs has a positive impact on wage. Therefore, this complementarity between labour unions and labour NGOs benefit workers in a country with lack of individual background of negotiation.

However, labour institutions in Indonesia are also characterized by the external fundings of labour unions. This outside funding implies a distortion in the traditional labour union objective, as show our theoretical findings. Therefore, we used a difference-in-difference-in-difference method in order to study the net outcome on wage in provinces with labour NGOs and in sectors with visibility for labour unions. We analysed the difference between the period before and after the Trade Union Act of 2000, in provinces with labour NGOs with respect to provinces without labour NGOs and in TFA sector (i.e. sensitive sectors) with respect to other sectors. The results suggest

that in sectors with visibility for labour union (sensitive sectors), the net outcome on wages of the presence of NGOs is negative. Indeed, the external fundings imply a distortion in labour union objective: increase their visibility (i.e. the number of member employed in the formal sector) on the top of the traditional wage. With the outside financing, labour unions are accountable with respect to their donors. The lack of accountability with respect to their members joint to the distortion in the traditional labour union objective explain this negative result.

This work opens many avenue of research, as it highlights the complexity of relations on the labour market in developing countries progressively reorienting their attitude towards more workers-friendly institutions. For instance, there could be some form of competition among labour unions in the South and also between labour unions and local NGOs. The outside funding mechanism and its impact on labour institutions in developing countries is an important issue for further research. Another important issue is about the outside option of workers and the relative wages in the formal and informal sector, taking into account the compensation offered in the informal sector for harsh working conditions. The first issue is not necessarily relevant for Indonesia given the good complementarity between labour unions and labour NGOs in this initial phase of the changes on the labour market. The second issue is important even for Indonesia but unfortunately hardly empirically documented.

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**Table 1: Mean of wage, profit-per-employee, number of production workers and number of skill workers for years 1991-2005**

<b>year</b>	<b>wage</b>	<b>profit-per-employee</b>	<b>nbworker</b>	<b>nbskill</b>
1991	5,938.20	477.51	153.50	23.26
1992	13,237.26	1,147.51	157.17	25.20
1993	8,353.82	646.74	160.32	23.40
1994	8,026.54	686.72	164.06	25.63
1995	9,574.06	785.47	159.51	23.85
1996	15,498.04	1,299.08	149.46	23.42
2004	59,013.42	5,511.16	166.67	26.00
2005	60,659.13	5,785.65	159.68	24.24
<b>Total</b>	<b>22,994.80</b>	<b>2,084.51</b>	<b>158.69</b>	<b>24.36</b>

All values are in real Rupiahs

Table 2: **Comparison of Treatment Groups relative to Controls Prior to Treatment (1991-1996)**

<b>NGO</b>	<b>wage</b>	<b>profit-per-employee</b>	<b>nbworker</b>	<b>nbskill</b>	<b>EXP</b>	<b>TFA</b>
(1) Control	10,040.83	848.66	166.99	25.58	0.16	0.25
(2) Treatment	10,754.10	877.70	144.43	22.20	0.12	0.21
(3) t-test diff	-1.77	-1.01	5.50***	4.63***	20.87***	17.01***
Total	10,351.72	861.32	157.16	24.11	157071	157071

A \* indicates the difference in means is statistically significant at 0.05; a \*\* indicates the difference in means is statistically significant at 0.01; a \*\*\* indicates the difference in means is statistically significant at 0.001. All values are in real Rupiahs

Table 3: **Panel regression for year 1991-2005; IV Estimates for year 1991-2005**

Dependent variable: log plant average unskilled wage		
	Panel (1) Coef./se	IV Estimates (2) Coef./se
profit-per-employee	0.003* (0.001)	0.003 (0.002)
TFA	0.019 (0.02)	0.019 (0.02)
minwage	0.004*** (0.00)	0.004*** (0.00)
nbworker		-0.06*** (0.00)
r2	0.692	0.693
N	142093	134644
Controls	No	Yes
Year fixed effect	Yes	Yes
Sector fixed effect	Yes	Yes

Panel B: First stage - Dep.Var.: Profit-per-employee

other income		0.000885*** (0.000)
Year fixed effect	Yes	Yes
Sector fixed effect	Yes	Yes

*Standard error in parentheses, with \* indicating significance at 0.05, \*\* indicating significance at 0.01 and \*\*\* indicating significance at 0.001. Constant term included in all specifications but not reported here. Notes: Instrumental variable: income received from non-operational activity. Note: cluster at firm level*

Table 4: **Simple Difference; Difference in Difference; Difference in Difference in Difference**

Dep var: Average unskilled wage			
	D	DD	DDD
	(1)	(2)	(3)
T*profit-per-employee	0.007 (0.00)	0.007 (0.00)	0.007 (0.00)
profit-per-employee	-0.004 (0.00)	-0.004 (0.00)	-0.004 (0.00)
nbworker	-0.05*** (0.00)	-0.05*** (0.00)	-0.05*** (0.00)
TFA	0.029* (0.02)	0.043*** (0.02)	
minwage	0.004*** (0.00)	0.005*** (0.00)	0.005*** (0.00)
T	2.071*** (0.02)	1.990*** (0.03)	1.976*** (0.03)
EXP	0.024*** (0.01)	0.023** (0.01)	0.024** (0.01)
<b><u>T-NGO</u></b>		0.165*** (0.03)	0.184*** (0.03)
<b><u>NGO-T-TFA</u></b>			-0.087*** (0.03)
T-TFA			0.074*** (0.02)
r2	0.681	0.681	0.681
N	127917	127917	127917
Controls	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes
Sector fixed effect	Yes	Yes	Yes

Standard error in parentheses, with \* indicating significance at 0.05, \*\* indicating significance at 0.01 and \*\*\* indicating significance at 0.001. Constant term included in all specifications but not reported here. Notes: Instrumental variable: income received from non-operational activity. Note: cluster at firm level.

Table 5: **Difference in Difference; Difference in Difference in Difference**

Dep var: log production workers		
	DD (1)	DDD (2)
T*profit-per-employee	-0.006 (0.00)	-0.006 (0.00)
profit-per-employee	0.012** (0.00)	0.012** (0.00)
<b><u>T-NGO</u></b>	0.043* (0.02)	0.032 (0.02)
T	0.051** (0.02)	0.060** (0.02)
TFA	-0.098*** (0.01)	
minwage	-0.0002 (0.00)	-0.0003 (0.00)
EXP	0.129*** (0.01)	0.129*** (0.01)
<b><u>NGO-T-TFA</u></b>		0.053* (0.03)
T-TFA		-0.117*** (0.02)
r2	0.019	0.019
N	128092	128092
Controls	Yes	Yes
Year fixed effect	Yes	Yes
Sector fixed effect	Yes	Yes

Standard error in parentheses, with \* indicating significance at 0.05, \*\* indicating significance at 0.01 and \*\*\* indicating significance at 0.001. Constant term included in all specifications but not reported here. Notes: Instrumental variable: income received from non-operational activity. Note: cluster at firm level.