

# Do Trade Partners' Labour Standards Affect ASEAN's Labour Standards?

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**Abstract:** *This paper investigates the impact of foreign labour standards on domestic labour standards in ASEAN countries. The study employs a set of cross-sectional time series data that covers the period from 1995-2008 for its empirical analysis. Three different labour standards indicators, namely numbers of strikes and lockouts, cases of occupational injuries, and trade union density rates—are used as a proxy for labour standards. The results evince a race to the bottom for labour standards, represented by cases of injuries. In contrast, the effect of trade partners' trade union density rate is negative and significant; however, the number of strikes and lockouts has an insignificant effect. The findings of the study suggest that there may be a race to the bottom in terms of working conditions among ASEAN countries, but not on the standards that measure the rights of workers.*

**Keywords:** ASEAN, labour standards, working conditions, worker's rights, panel data.

**JEL Classification:** J81, J83, J61, R15

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## 1. Introduction

One of the frequently debated issues in the globalised era is that the mobility of trade and capital flows exerts influence downward convergence (Frenkel & Kuruvilla, 2002; Ross, 2004; Mills et al., 2008) due to greater competition among countries with similar factor endowment (Rudra, 2002) subsequently leading to a race to the bottom of tax regulations and environmental and labour standards (Drezner, 2006; Tonelson, 2000). This issue has led to the utilisation of labour provisions as a trade policy tool in recent years, in which labour provisions are included in bilateral and regional trade and investment agreements. A recent example would be the Trans Pacific Partnership

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Agreement (TPPA) signed by twelve countries in 2016 but was then abandoned by the US in 2017.

A race to the bottom scenario can be defined as a situation in which companies compete with each other to reduce costs by paying the lowest wages or giving workers the worst conditions (Cambridge Dictionary, n.d.). Meanwhile, in the context of welfare economics, Singh and Zammit (2004) view the race to the bottom as a cross-border externality of low labour standards in poor countries for labour in the richer countries. This issue has drawn attention from the International Labour Organisation (ILO), which can be seen through the Preamble to its Constitution notes listed on its website: “[T]he failure of any nations to adopt humane conditions of labour is an obstacle in the way of other nations which desire to improve conditions in their own countries.” (ILO, n.d.).

The issue of race to the bottom in labour standards is indeed crucial for all member countries of the Association of Southeast Asia Nation (ASEAN). ASEAN envisions an equitable economic development alongside reduced poverty and socio-economic disparities. The organisation has introduced the ASEAN Economic Community (AEC) Blueprint to achieve this vision. In fact, from 1980 to 2011, ASEAN countries had experienced an increase in their exports.

Low labour cost is considered one of the factors that contribute to the rise in exports from these countries. Most of the member countries such as the Philippines and Indonesia are labour-abundant and have a surplus of unskilled or low-skilled labour (Thorbecke, 2010). This pool of excess labour not only puts downward pressure on wages but also suppresses the labour standards in these countries. Furthermore, the economic benefits of this excess are largely one-sided. As highlighted in the World Employment and Social Outlook (2015), firms tend to enjoy greater economic benefits due to higher productivity, while workers see less of the benefits (in terms of wages).

In order to improve the workers’ living standards, governments of ASEAN nations have implemented national minimum wages in their respective countries (refer to Table 1). Although these countries have increased the legal minimum wage, or plan to do so, the statistics shown in Table 1 indicate that the region continues to have significant disparities in wages.

ASEAN aims to be a stable, prosperous, and highly competitive region through a series of economic integration processes that transform the region into a single market and production base. However, this target also implies that the member countries are competing with each other to attract foreign investments and trades that drive economic growth. If a country were to maintain a low level of labour standards, the manufacturers would bear lower

production costs, and therefore enjoy a competitive advantage in exporting its outputs.

**Table 1: Legal Minimum Wage in Selected ASEAN Countries**

Country/Region*	Daily Minimum Wage	Monthly Minimum Wage
	In US dollars	In US dollars
<b>Cambodia</b>	5.66 (garment industry)	170 (garment industry)
<b>Indonesia</b>	3.42-8.59	102.74-257.73
<b>Lao PDR</b>	4.33	130
<b>Malaysia</b>	7.64-8.30	229.11-249.03
<b>Myanmar</b>	3.29	98.88
<b>Philippines</b>	4.80-9.61	144.14-288.30
<b>Thailand</b>	9.19-9.85	276-295
<b>Vietnam</b>	4-5.75	120-173

\*Notes: Brunei and Singapore do not have a mandatory minimum wage. The reported USD value is based on the exchange rate as of August 1, 2018. With effect from 1 January 2019, Vietnam's minimum monthly wage rate will increase to VND2,920,000-VND4,180,000.

Source: Rastogi (2018)

In view of the competition faced by ASEAN countries from inside and outside the region while they are working hard to achieve the economic goals described in the AEC Blueprint, two research questions arise, both of which relate to the 'race to the bottom' hypothesis: (a) How will the countries respond to the actions taken by their competitors and trade partners in their attempts to increase trade? And (b) what are the consequences of the actions and responses taken by these countries to the individual and regional economy?

Henceforth, this paper investigates the interactions between labour standards among the ASEAN countries and their trade partners both within and outside the region. ASEAN countries have experienced an increase in exports since the 1990s. The ASEAN-5 (Indonesia, Malaysia, Philippines, Singapore, and Thailand) especially has undergone an export-led growth industrialisation process since that period. In the meantime, the newer members, which include Cambodia, Laos, Myanmar, and Vietnam, are in the process of transitioning into the market economy. As each country is in a different stage of economic development, this paper examines the extent of dependency of labour standards between ASEAN-5 countries and their trade partners that include members of the European Union, NAFTA, and East Asian countries by employing annual observations from 1995 to 2008.

The remainder of this article is organised as follows. Section 2 provides a brief literature review on the research issue. Section 3 discusses the estimation model and variables used for the empirical study, as well as the

source of data. Section 4 presents the estimation results with a detailed interpretation of the estimations. Lastly, a conclusion is drawn based on the findings, and the implications of the study are presented.

## **2. Literature Review**

There is a growing body of literature that examines the occurrence of the race to the bottom in labour standards. These studies offer mixed empirical evidence, which makes debates on the issue open and inconclusive. For instance, two OECD reports (1996, 2000) review this issue and conclude that there is no evidence that the rights of freedom of association are worsened in any of the countries that liberalised trade. The studies discover a positive correlation between successfully sustained trade reforms and improvements in core standards. Other studies perform multivariate tests, revealing no correlation between foreign direct investment (FDI) and labour standards (Rodrik, 1999; Cho, 2002; Jensen, 2006). Two studies even find that openness to trade (Busse, 2004) and FDI inflows (Mosley & Uno, 2007) are positively associated with better labour rights, implying a climb to the top of labour standards.

Labour scholars have singled out several industries that are particularly repressive of workers in the contemporary world economy. These industries include the garment and apparel industries (Ross, 2004), industries operating in illegal and informal markets (Ehrenreich & Hochschild, 2002), and industries established in 'free trade zones' or 'economic processing zones' (EPZ) with minimal labour regulatory standards (Chan & Ross, 2003). Regarding EPZ, Madami (1999) draws an interesting conclusion where the data on EPZ for certain countries not only fail to support the image of a race to the bottom but also show that the opposite is the case. In the study, some countries (Pakistan, Bangladesh, Panama, and Zimbabwe) exempt their EPZs from regulations covering core labour standards. However, this action fails to put pressure on other countries to relax labour standards in their EPZs. In contrast, some countries, including the Dominican Republic and the Philippines, introduce labour standards in their EPZs when none previously existed.

Drezner (2006) suggests that three trends should be observed to determine whether globalisation really does induce a race to the bottom in regulatory standards. First, countries that are more open to trade and investment should have fewer regulations affecting the production costs. Second, there should be a strong negative correlation between capital inflows and a country's standards. Third, when one government lowers its regulatory standards to attract greater investment, other open economies will follow suit.

Meanwhile, several studies support Drezner's (2006) argument that countries that are more open to trade and investment should have fewer regulations affecting production costs should there be a race to the bottom in regulations. Mosley and Uno (2007) discover that trade openness negatively correlates with workers' rights, evincing a race to the bottom. More importantly, the authors discover evidence for cross-national competition, where national respect for labour rights is strongly related to regional respect for labour rights. This finding indicates that governments may pay attention to what regional peers are doing, parallel with the third pattern suggested by Drezner (2006).

Furthermore, Greenhill, Mosley, and Prakash (2009) learn that labour standards in developing countries are influenced by the labour standards of their exporting destinations, and not by their overall levels of trade openness as claimed by the literature. Olney (2013) draws a similar conclusion when his results show a consistent and significant negative impact of FDI on employment protection. The study also reports a significant positive impact of employment restrictions in the foreign country on the host country's employment protection rules. This result suggests that those countries are competitively undercutting each other's labour standards to attract FDI, conforming to the propositions of the 'race to the bottom' hypothesis.

Dewit, Görg, and Montagna (2009) believe that labour market laws and institutions can affect the flexibility with which firms can adjust output and employment to evolving economic conditions. They find that domestic levels of employment protection discourage outward FDI and act as an anchorage device for domestic industry. Their analysis points out the theoretical possibility of strategic inter-temporal use of labour standards, where low employment protection could be used to attract inward investment to a given location, and could subsequently be raised to lock the investment in.

Evidence presented by Davies and Vadlamannati (2013) is inconsistent with the view of Dewit et al. (2009). They obtain results that exhibit a robust positive significant spatial lag which is consistent with strategic complements in both practices and the combined labour rights index, but less evident in labour laws. They emphasise that this pattern indicates that the competition is less in the institution of standards than in their enforcement. For that reason, there is a race to the bottom which is primarily driven by an unwillingness to enforce rather than regulations.

Moreover, Dewit et al. (2009) conclude that industrialised countries with a large industrial base will be able to sustain high levels of firing costs, but developing countries with a small industrial base may instead have an incentive to pursue flexible labour market policies. Additionally, Chan (2003) and Ross and Chan (2002) state that the increasing competition in the production of goods, particularly in labour-intensive commodities, is not so much North versus South, but rather South versus South. The absence of a

mechanism establishing international labour standards is propelling the economies of the South in a race to the bottom in wages and labour conditions (Ross & Chan, 2002).

A study by Kamata (2014) suggests that there is a possibility of labour provisions reducing the trade-promoting effect of regional trade agreements (RTA). The study reveals that middle-income countries are having intensive trade with the partners of RTA that include labour provisions experienced an increase in labour earnings, but the inclusion may reduce their trade, especially when their partners are higher income countries.

Another study that also focuses on the effect of labour provisions in the RTAs is done by Tran et al. (2017). They compare the drafts of the TPPA and European Union-Vietnam Free Trade Agreement (EVFTA). The evidence indicates that a binding labour provision in RTAs is a more effective mechanism for labour reform. Tran et al. (2017) conclude that their enforceability mediates the effects of trade-labour linkages, and thus, the inclusion of labour provisions in RTA as external influence has had a minimal effect in improving labour standards. Also, Giumelli and van Roozendaal (2017) observe that stricter agreement conditions are not correlated with improvement in labour standards. The conclusion drawn based on the findings points into the direction that stricter labour standards clauses included in the RTAs do not guarantee a better outcome if other conditions are not met at the same time.

In sum, the literature no doubt points to a research gap that needs to be filled. It is worthwhile to examine further the ‘race to the bottom’ hypothesis in the context of a group of developing countries in the same region which have less respect for labour rights, commonly regarded as inefficient in the enforcement of laws, and yet are eager to expand the export share for economic growth and development.

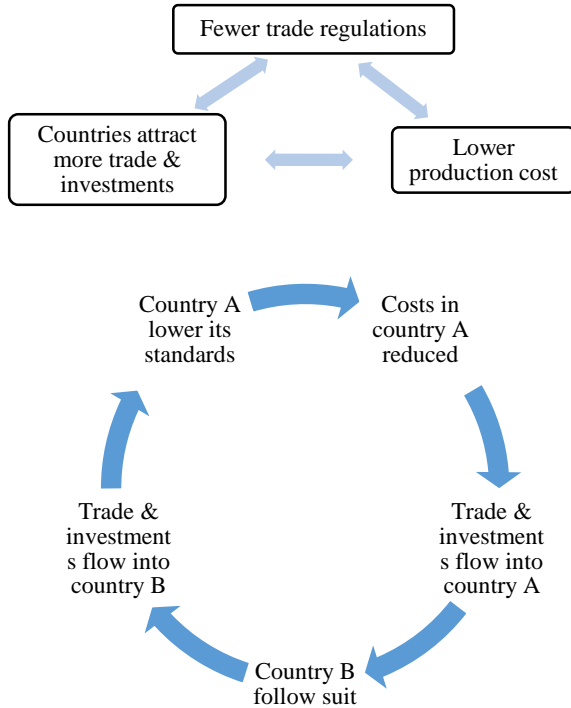
### **3. Model Specification and Data Description**

This paper examines the existence of a race to the bottom of labour standards among ASEAN countries and their trade partners. The study uses a modified model of Olney (2013). Olney’s study focuses on the association of labour market flexibility, while this paper is more concerned with the practice of labour rights provision. Furthermore, this paper concentrates on the linkage between trade and labour standards, rather than foreign direct investment.

Based on the theoretical framework discussed in the literature (Figure 1), this study hypothesises that if countries with lower labour standards tend to perform better in their trade, every country should then be incentivised to lower their labour standards slightly below their competitors to gain competitiveness. Thus, the race to the bottom hypothesis predicts that a

country's labour standards will depend on the labour standards implemented by other countries.

**Figure 1:** Conceptual Framework of Race to the Bottom



The hypothesis can be represented by the following econometric specification:

$$\ln LS_{it} = \alpha_0 + \beta_1 \ln LS_{jt-1} + \beta_2 \ln Y_{it-1} + \beta_3 \ln Tr_{it-1} + \beta_4 \ln N_{it-1} + \varepsilon_{it}$$

where  $i$  refers to the five ASEAN members as domestic countries (Indonesia, Malaysia, Philippines, Singapore, and Thailand), and  $j$  refers to their trade partners within and outside ASEAN.

The dependent variable  $LS_{it}$  refers to labour standards of domestic countries in year  $t$ , and  $LS_{jt-1}$  refers to labour standards of trade partners in year  $t-1$ .  $Y_{it-1}$  is the national income of domestic countries in year  $t-1$ ;  $Tr_{it-1}$  is the trade flows of domestic countries in year  $t-1$ ;  $N_{it-1}$  is the population of domestic countries in year  $t-1$ , and lastly,  $\varepsilon_{it}$  is the error term. All variables

are in natural logarithms. The independent variables are lagged to account for the fact that changes in labour standards are not instantaneous.

The coefficient of  $\ln LS_{jt-1}$  ( $\beta_1$ ) is expected to be positive and significant if domestic labour standards depend on the lagged level of trade partners' labour standards. As Drezner (2006) argues, the domestic governments will respond to trade partners' labour standards by adjusting their policies in the same direction as the foreign ones. The coefficient of national income ( $\beta_2$ ) is also expected to be positive, as wealthier nations are characterised by greater respect for collective labour rights. Meanwhile, the expected sign for the coefficients of trade ( $\beta_3$ ) and population ( $\beta_4$ ) is uncertain. Previous studies obtain inconclusive results to explain both the effects of trade openness and population on labour standards. For instance, on the one hand, Rudra (2002) finds that trade openness is positively associated with labour rights, while Mosley and Uno (2007) evince the opposite case. On the other hand, countries with smaller population may make repression easier to carry out (Mosley and Uno, 2007). Yet, a larger population may also indicate a more complex labour market, which brings difficulties to the implementation of labour standards.

This empirical study employs a set of panel data by using annual observations from 1995 to 2008 from a total of 44 countries (including ASEAN-5 and their trade partners) located in different regions (see Appendix A for a list of countries). Level of labour standards is represented by three different indicators, namely (1) numbers of strikes and lockouts in the manufacturing sector (*StrMan*), (2) trade union density rates (*TUD*), and (3) cases of occupational injuries in the manufacturing sector (*InjMan*). The first two indicators capture the labour rights granted to the workers, while the other indicator capture the working conditions workers faced.

The estimation equation also includes three other control variables. The first variable is a proxy of the lagged national income level of domestic countries by using the data of real gross domestic product (GDP) in constant 2005 U.S. dollar prices. The second variable, total exports of the country, is added into the regression to capture the effect of trade flows on the labour standards. Lastly, the study uses the total population as a proxy of the physical size of the countries.

Labour standards data is retrieved from the Labour Statistic Database, International Labour Organisation (LABORSTA). The author obtains the statistics for national income and population from the World Development Indicators (WDI) of the World Bank, whereas trade data is obtained from the United Nations Conference on Trade and Development (UNCTAD).



#### 4. Estimation Results and Findings

The study first performs panel data analysis, applying the pooled OLS technique on Eq. (1) using a data set of lagged real GDP ( $\ln rGDP2005(1)$ ), lagged total population ( $\ln Pop(1)$ ), and lagged total exports ( $\ln Ex(1)$ ). The three indicators of labour standards are added separately into the regression model, and the estimation results are reported accordingly in column 1, Table 2 to Table 4. The sign and significance level change when different labour standards are added in the regression models. Thus, the estimations indicate that the pooled OLS estimators are biased due to the individual effect, and the Breusch-Pagan LM test statistics support this assumption.

Then, this paper proceeds to estimate the models using both random effect and fixed effect techniques. The Hausman test statistics suggest that there are individual-specific effects in the sample; hence, the fixed-effect model would be the most appropriate specification to explain the results obtained in this study. Therefore, the interpretation and discussion are based on the findings from fixed-effect models presented in column 3 in Tables 2 to 4.

**Table 2:** Results of ASEAN Labour Standard (No. of Strikes,  $\ln StrMan_i$ )

	Pooled OLS	Random Effect	Fixed Effect
$\ln StrMan_j(1)$	0.00049	0.00049	0.0085
$\ln rGDP2005(1)$	-0.00075	-0.00075	1.5965***
$\ln Pop(1)$	0.3278***	0.3278***	-6.4108***
$\ln Ex(1)$	-1.3422***	-1.3422***	-0.9513***
Constant	20.3237***	20.3237***	88.0529***
Breusch-Pagan LM Test, $\chi^2$		27.57***	-
Hausman Test		-	122.09***
No. of Obs.	1138	1138	1138

Note: \*, \*\*, \*\*\* represents significance level of 10%, 5%, and 1% respectively. (1) refers to one period lagged value ( $t-1$ ) and  $j$  indicates the trade partners' labour standards while  $i$  indicates the domestic labour standards.

**Table 3:** Results of ASEAN Labour Standard (Cases of Injuries,  $\ln InjMan_i$ )

	Pooled OLS	Random Effect	Fixed Effect
$\ln InjMan_j(1)$	0.0006	0.1418***	0.1097***
$\ln rGDP2005(1)$	-0.0487***	0.0918	6.8236***
$\ln Pop(1)$	0.723***	-0.0102	-14.0043***
$\ln Ex(1)$	-0.0079	-0.3473***	-1.25***
Constant	-1.5294	12.2135***	96.95***
Breusch-Pagan LM Test, $\chi^2$		355.83***	-
Hausman Test		-	915.02***
No. of Obs.	814	814	814

Note: \*, \*\*, \*\*\* represents significance level of 10%, 5%, and 1% respectively. (1) refers to one period lagged value ( $t-1$ ) and  $j$  indicates the trade partners' labour standards while  $i$  indicates the domestic labour standards.

**Table 4:** Results of ASEAN Labour Standards (Trade Union Density,  $\ln TUD_i$ )

	<b>Pooled OLS</b>	<b>Random Effect</b>	<b>Fixed Effect</b>
$\ln TUD_j(1)$	-0.0089	-0.0089	-0.28***
$\ln rGDP2005(1)$	-0.3199*	-0.3199*	1.537***
$\ln Pop(1)$	-0.2737***	-0.2737***	-4.3206***
$\ln Ex(1)$	-0.5494***	-0.5494***	-0.3953***
<i>Constant</i>	25.3686***	25.3686***	45.2209***
Breusch-Pagan LM Test, $\chi^2$		10.00***	-
Hausman Test	-		67.27***
No. of Obs.	633	633	633

Note: \*, \*\*, \*\*\* represents significance level of 10%, 5%, and 1% respectively. (1) refers to one period lagged value ( $t-1$ ) and  $j$  indicates the trade partners' labour standards while  $i$  indicates the domestic labour standards.

The analysis first estimates the model using the number of strikes and lockouts in the manufacturing sector ( $\ln StrMan_i$ ) as the indicator of labour standards in ASEAN. The study obtains a positive but insignificant coefficient, which implies that there will be more strikes and lockouts activities carried out in the domestic manufacturing sectors when these activities increase in their counterparts abroad. Ross (2006) argues that rights and alliances have helped to sustain the Mexican workers' struggle in the face of potentially mobile and hostile capital in the garment industry. A similar incident also occurred in an Indonesian garment manufacturer, known as PT Sinar Apparel International, in 2005. Under pressure from the Congress of Indonesia Unions Alliance, which is supported by the International Textile, Garment, and Leather Workers' Federation and international brands sourcing from the factory, the factory was eventually forced to reinstate a dismissed union leader, cease all anti-union harassments, and reach a collective bargaining agreement with the union (International Trade Union Confederation *ITUC* 2007). Hence, the positive correlation between domestic and trade partners' strike activities suggests that unions in ASEAN may be inspired by and learn from their alliances in neighbouring countries. However, the magnitude of the influence of their counterparts is small and insignificant.

The result reveals that cases of injuries in the manufacturing sector  $\ln InjMan_j$  reported in trade partners' countries have a significant positive effect on the domestic countries (as shown in column 2, Table 3). More frequent workplace injuries in the trade partners' manufacturing sector (a deterioration in the working conditions) signal a decrease in the level of labour standards in foreign countries. There is a possibility that domestic manufacturers are neglectful in the prevention of workplace accidents as a response to the lax labour standards taking place in their foreign counterparts. Thus, the positive association of the variable suggests that

domestic labour standards do depend on trade partners' standards, and it also supports the hypothesis of the race to the bottom.

Last but not least, the study replaces the indicator of labour standards with trade union density rates (*TUD*) into the regression model. Interestingly, the evidence shows that the trade union density rates in trade partners' countries assert significant negative impact on the domestic variable, supporting the 'race to the bottom' hypothesis. This scenario could be due to a steady declining pattern in the 1990s found in most Asian countries (Kuruvilla et al., 2002). Furthermore, the governments of ASEAN countries generally do not encourage trade union activities, as can be seen from the clauses stated under the labour laws of respective countries (Amante, 2003). For instance, in Thailand, only two types of union are allowed: unions formed in a single company and those formed by employees in the same trade who do not necessarily have the same employer (ITUC, 2011).

The estimated coefficients of national income are positive and significant in all the models, and this result is similar to the finding reported by Busse (2004), who observes that income level is the most important factor in explaining differences among union rights. The positive association between national income and labour standards means that increased national income induces improvement in labour standards, which are represented by numbers of strikes and trade union density rates (as shown in Tables 2 & 4), consistent with the assumption where wealthier nations have greater respect to collective labour rights.

However, the positive correlation between national income and cases of injuries tells us a different story. The evidence in Table 3 shows that more workplace accidents are reported when there is an increase in national income. Malaysia has recorded an increase in GDP (constant 2005 prices) from US\$178.7 billion in 2010 to US\$198.6 billion in 2012 (World Bank, (2013). During the same period, there was also an increase in the cases of occupational injuries in the manufacturing sector, as reported by the Department of Occupational Safety and Health (2013), from 1714 cases in 2010 to 1722 cases in 2012.

The estimated coefficients show that the size of the population is negatively associated with labour standards, measured by numbers of strikes and trade union density rates. These estimates mean that the larger the population of a country, the lower the level of labour standards. As evident in a report compiled by Hayter and Stoevska (2011), the trade union density rate as the proportion of total employment for Malaysia in 2007 was 7.6%, which was higher than the Philippines (1.7%) and Thailand (1.4%), both of which are more populous than the former.

Among the factors listed in Serrano (2005) that lead to a smaller number of "organisable" workers, such as competition and capital mobility, the rise of cross-border production networks combined with outsourcing, and

contraction of the manufacturing sector and expansion of the services sector, are common phenomena found in ASEAN countries. Thus, the argument supports the assumption that larger population creates a complex labour market, where competition among workers to sustain their jobs will, in turn, give manufacturers the chance to ignore the provision of labour rights.

The study obtains an interesting result for the relationship between population and cases of injuries reported in the manufacturing sector. The negative estimated coefficient of population indicates a drop in workplace accidents when there is an increase in the size of the population. Studies by Hymel et al. (2011) and Seabury et al. (2005) provide a hypothesis that could explain this finding. The authors describe that the workplace is connected to the home and to the physical communities in which workplaces exist; thus, health behaviours extend across all three environments. Therefore, if the individual behaviour at work is difficult to distinguish from behaviour away from work, then healthy lifestyle habits cultivated at home could stimulate safety awareness across workplaces through the expansion of the population. The negative correlation between total exports of domestic economies and labour standards (measured by numbers of strikes and trade union density) indicates that the increased competition in the export market leads to the reluctance of exporters to enforce their existing labour rights in order to reduce their costs of production (Greenhill, Mosley, and Prakash, 2009). Meanwhile, the number of injuries reported in the manufacturing sector declines as a result of increased exports. There are two possible explanations for the contradictory findings. Firstly, it suggests that manufacturers are more concerned to the individual rights, supporting the conclusion drawn by Caraway (2009), who observes that labour laws in democracies offer stronger individual labour rights than in non-democracies. The author also finds that the right to strike is the least respected in East Asian countries. Furthermore, several ITUC reports indicate that multinational enterprises (MNEs) and local suppliers have repeatedly participated in collective bargaining processes in bad faith, and used tactics such as intimidation, harassment, and dismissal to impede union activities (ITUC, 2007, 2010, 2011 & 2012a&b).

The second explanation is the interplay of two of the three distinct “logics of action” demonstrated by Frenkel and Kuruvilla (2002). The evidence suggests that the logic of competition, referring to initiatives taken accordingly by capital seeks to maximise profits, is the dominant logic in ASEAN countries. Consequently, the logic of employment-income protection, where labour attempts to limit employer action that adversely affects workers’ ability to generate a continuing stream of socially acceptable rewards, kicks in.

To check the robustness of the findings, this paper performs two sets of sensitivity analysis. In the first sensitivity analysis, all the labour standards

indicators are replaced with another set of statistics, which are number of strikes in all economic sectors ( $StrTot_j$ ), cases of injuries in all economic sectors ( $InjTot_j$ ), and the number of trade unions established in the economy ( $TU_j$ ). The sensitivity analysis results presented in Table 5 reveal that the coefficient of  $StrTot_j$  remains positive and insignificant, but the coefficients for cases of injuries and trade union change. The coefficient of  $InjTot_j$  appears to be negative and insignificant, while the coefficient of  $TU_j$  is positive and insignificant. These results are different from the one shown in Table 2 – 4.

The variances obtained in Table 5 highlight a noteworthy issue: ASEAN countries are perhaps more concerned about the contributions from the manufacturing sector due to industrial reforms in recent decades. There is a significant effect from trade partners' labour standards when the study uses indicators specified for the manufacturing sector. For example, the cases of injuries,  $lnInjMan_{jt}(1)$ , as shown in Table 3. However, when the indicator is replaced with cases of injuries in all economic sectors ( $InjTot$ ), the result changes and trade partners' labour standards have no significant effect on ASEAN's labour standards.

**Table 5:** Results of Fixed Effect Model (Sensitivity Analysis)

	Dependent Variable		
	(1) $lnStrTot_i$	(2) $lnInjTot_i$	(3) $lnTU_i$
$lnStrTot_j(1)$	0.0429	-	-
$lnInjTot_j(1)$	-	-0.0031	-
$lnTU_j(1)$	-	-	0.0141
$lnrGDP2005(1)$	-1.9184***	7.0585***	-1.8846***
$lnPop(1)$	-6.32***	-12.6458***	3.8937***
$lnEx(1)$	-0.1387	-1.3934***	0.428***
Constant	166.289***	72.1625***	-18.8304***
No. of Obs.	1004	1176	573

Note: \*, \*\*, \*\*\* represents significance level of 10%, 5% and 1% respectively.

**Table 6:** Results of Fixed Effect Model (Sensitivity Analysis)

	Dependent Variable		
	(1) $lnStrMan_i$	(2) $lnInjMan_i$	(3) $lnTUD_i$
$lnStrMan_j(1)$	0.036	-	-
$lnInjMan_j(1)$	-	0.391***	-
$lnTUD_j(1)$	-	-	-0.0694
$lnrGDPpc2005(1)$	-0.335***	2.3446***	0.9092**
$lnLFPR(1)$	2.039***	8.3173***	-3.5744***
$lnTotTrade(1)$	-1.4459***	-0.7879***	-1.1103***
Constant	22.9182***	-35.1562***	31.1982***
No. of Obs.	1138	814	633

Note: \*, \*\*, \*\*\* represents significance level of 10%, 5% and 1% respectively.

Moreover, this study also conducts a sensitivity analysis by replacing another set of data for the explanatory variables and reports the results in Table 6. Specifically, the sensitivity analysis uses real GDP per capita at constant 2005 prices (*lnGDPPc2005*) to proxy the national income (Mosley & Uno, 2007), the ratio of total trade to GDP (*lnTotTrade*) as a proxy for trade, and labour force participation rate (*lnLFPR*) as a proxy of the physical size of a country (Davies & Vadlamannati 2013).

The signs and significance level of the labour standard coefficients do not change drastically. The *lnStrMan<sub>j</sub>* remains positive but insignificant, while *lnInjMan<sub>j</sub>* remains positive and significant in the sensitivity analysis. However, the *lnTUD<sub>j</sub>* appears to be positive and insignificant. These findings indicate that the labour standards variables are not sensitive to the control variables used in the estimation process.

In contrast to the robustness of labour standards variables in the sensitivity analysis, the estimated coefficients of explanatory variables provide interesting evidence. The estimated coefficients of national income and trade variables exhibit no difference in terms of the carried sign and significance level, except that the estimated coefficient of income is negatively significant when *lnStrMan* is the proxy of labour standards (shown in column 1, Table 6). Meanwhile, *lnTotTrade* enters into all models with a negative sign and strongly significant, which implies that trade openness negatively correlates with labour standards.

Nevertheless, when labour force participation rate (*lnLFPR*) is used to proxy population in the analysis, the results show that the sign of estimated coefficient changes from negative to positive in the models where labour standards are represented by the number of strikes (column 1) and cases of injuries (column 2). On the one hand, there is a positive association between the labour force participation rate and the number of strikes. A higher participation rate may make it easier for unions to call for a strike as they may gain more consensus and support from the larger pool of workers joining the strike. On the other hand, the fact that the labour force participation rate positively correlates with cases of injuries means that there is an increased possibility of workplace accidents due to the larger workforce.

Overall, the national income has a positive effect on the provision of collective rights, which means wealthier countries respect labour rights more. This finding is similar to that of Dewit, Görg, & Montagna (2009), that industrialised countries with a large industrial base will be able to sustain high levels of firing costs. However, developing countries with a smaller industrial base may be incentivised to pursue flexible labour market policies. Furthermore, this study finds that labour rights are lower in a country that is more open to trade and is larger in physical size. This finding suggests that competitions existing among manufacturers and workers may cause workers

to give up their rights to secure a job voluntarily. Strikingly, both the degree of trade openness and size of the population impose the opposite influence on working conditions, despite the occurrence of suppressed labour rights. The estimates imply that an increase in trade openness and population size lead to a decrease in the cases of injuries. This situation could be partly due to the structural changes experienced by ASEAN countries in recent decades, where the region successfully attracted FDI and multinational corporations (MNCs) to set up their operations in the countries.

ASEAN countries have a large number of supply chain factories for the MNCs that outsource their production in developing countries, seeking for lower production costs. These MNCs are monitored by the public back in their home countries, and they are mainly concerned about their discriminatory behaviours or abuses of workers. Thus, MNCs are responsible for the labour practices and human rights violations of their foreign subcontractors (Spar, 1999), and require contractors to comply with corporate codes of conduct aimed to improve working conditions. Different types of codes and monitoring not only have different effects on the enforcement of labour rights (Rodriguez-Gravito, 2005). Locke, Qin, and Brause (2007) further emphasise that the combination of monitoring for compliance with corporate codes of conduct and other interventions focused on tackling some root causes of poor working conditions could improve working conditions considerably.

## **5. Conclusion**

Based on the findings, this study concludes that the ASEAN governments need to re-examine the investment and trade regulations that link to their labour policies. For instance, governments should respect the workers' rights and provide them with the freedom to organise and bargain collectively. Besides, governments should not restrict workers from conducting strikes, pickets, or boycotts to express their grievances with the excuse that these activities would impede productions and exports. Preferably, such activities should be seen in a broader perspective, wherein allowing workers to exercise their given rights reflects higher labour standards.

Meanwhile, employers should not view the trade union as a rival; instead, trade unions can act as a bridge that facilitates communication between workers and management. An enterprise-level trade union is expected to be able to encourage cooperation between workers and management, resulting in more efficient working practices and improved financial performance. In return, firms would then share the financial surplus with workers through better wages and conditions. This approach has been used in Britain, though its results were not as fruitful as expected.

Furthermore, ASEAN countries should be alerted to the finding discovered in this study pertaining to the cases of injuries in the workplace. This study finds that there is a race to the bottom among the sample countries in terms of hazardous working environments. This finding reflects that workers either have low awareness of occupational safety and health matters, or they give and take in order to be employed and get paid.

This study is unable to address the race to the bottom issue in a narrower scope, such as the effect of labour standards on individual countries and at the level of industries or sectors, constrained by the non-availability of labour standards statistics for developing countries in most of the databases. Further investigation is needed to evaluate the effectiveness of standards harmonisation under the AEC Blueprint in improving the workers' rights and conditions.

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## Appendices

### Appendix 1: Selected Countries

<b>Region</b>	<b>Country</b>
ASEAN (10 countries)	Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam
European Union (17 countries)	Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom
North and Latin America (6 countries)	Argentina, Brazil, Canada, Chile, Mexico, United States
Asia Pacific (11 countries)	Australia, Bangladesh, China Mainland, Hong Kong SAR, India, Japan, Nepal, South Korea, New Zealand, Pakistan, Sri Lanka