GLOBALISATION, BARGAINING POWER OF UNIONS, AND LABOUR MARKET OUTCOMES: A REVIEW OF ISSUES

Ajefu, Joseph Boniface
Department of Economics, University of Leicester
Leicester, United Kingdom
joeajefu@gmail.com

Abstract
This paper synthesizes existing theoretical and empirical evidence on the relations between closer or increased economic integration and the bargaining powers of labour unions, and how the nexus matter for labour market outcomes. Globalisation could make union workers in the labour market vulnerable to increased competition. This is because integration increases the own-price elasticity of demand for labour, and this has the propensity to lead to greater substitutability for firms on the services of domestic workers with those of foreign workers. However, theoretical and empirical evidence shows that direction of effect is not clear-cut. It's an empirical issue that varies from one country to another; hence, general conclusion on the relationship among the variables can't be drawn.

Keywords: Globalisation; Labour unions; Bargaining power; Labour market; Trade

INTRODUCTION
The quest for closer or increased integration among countries has led to the reduction of trade and non-trade barriers alike. As a consequence, Rodrik (1997) pointed out that increased openness over the years has lowered the bargaining power of workers (unions). His analysis came against the backdrop of many years after the implementation of the policy of trade liberalisation by many countries, especially medium and low income countries.

More specifically, he argues that the closer substitutes both domestic and foreign workers are, as a result of trade liberalisation, the lower the enterprise surplus ending up with workers and therefore, unions might have become weaker. Indirect empirical evidence for weaker unions are shown by some of these studies- Slaughter (2001); Hasan, et al. (2007) they
investigate the hypothesis that trade liberalisation has contributed to increased labour demand elasticities. Other papers on the impact of trade liberalisation on labour demand elasticities- Krishna (2001), Krishna and Mitra (1998), Fajnzylber and Maloney (2005).

A more explicit and direct tests of the effect of trade liberalisation on bargaining power of workers comes through increased deunionisation-decline in union’s bargaining power. Reder (1988) and Freeman (1988) identify some of the factors responsible for increased deunionisation: (1) increased competition, both domestic and international; (2) More rapid growth in certain categories of the labour force that are less susceptible to being unionized (e.g., women, white-collar workers); (3) declining efforts of unions to recruit new members; (4) government activity that substitutes for union services (e.g., unemployment insurance and industrial accident insurance); (5) increased management opposition to union organization, motivated by such profit-related factors such as a rise in the union wage premium; (6) unskilled labour-displacing nature of new technology. However, the commonest and most widely accepted explanation for deunionisation is increased economic integration or openness.

Another channel of effect that has attracted a great deal of attention in trade and labour literature and which most often has significant impact on the bargaining power of unions is rent-sharing framework (rents are measured as profits, quasi-rents, or value-added per employee). The outcome of trade liberalisation on labour markets with unionised sector depends on the industry rents (whether it increases or decreases with trade liberalisation), and the union’s preferences in terms of wage/employment decisions (wage-employment trade-off).

Edwards and Podgursky (1986) argue that as the product markets became increasingly exposed to international competition, workers whose wages had been sheltered came under increasing pressure. Therefore, falling wages of union and non-union workers are assumed to be the consequences of openness in unionised labour markets, because of a shift or decline in the economic rents that are shared between the employer and the unions. Abowd and Lemieux (1993) found evidence of falling rents with increase in import competition for Canada and US respectively. However, falling rents alone is not sufficient to explaining how openness affects wages and employment. This depends on the bargaining power of the union vis-à-vis the distribution of rents between workers and employers.

THEORETICAL BACKGROUND
The impact of openness on union bargaining power and consequently on wages and employment is conditional upon the nature of the bargaining process and, specifically, the union’s preference structure. For example, in a right-to-manage framework, where unions and employers bargain only over wages, (the firms set the level of employment unilaterally) a
decline in union’s bargaining position through increased openness will result in declining wages, while employment may remain unchanged.

In an efficient bargaining setting, there exists a trade-off between wages and employment. Therefore, the nature of the bargaining process, the bargaining power of the union, and the union’s preferences determine whether wages will fall or remain sticky with employment falling instead, or whether both wages and employment will fall (McDonald and Solow, 1981; Oswald, 1985; Mezzetti and Dinopoulos, 1991).

Naylor (1998) develops a framework in which international trade occurs between economies with imperfectly competitive product markets and unionised labour markets, focusing on the effects of product market integration on wage determination. He examines how the presence of unions in both countries affects the strategies of the various players, with particular emphasis on the effects of reductions in trade costs on the labour market prospects of union and non-union workers. Moreover, he assumes that each union has the sole aim of rent maximisation, and he comes up with the main finding that integration impacts relatively more on the wage (employment) prospects of union (non-union) workers. Therefore, more competitive product market does not necessarily generate a more competitive labour market. However, the model assumes growing integration of identical economies, the traded good is a homogenous commodity, and international trade occurs as a result of oligopolistic rivalry between firms.

The models of Brander and Spencer (1988) and of Mezzetti and Dinopoulos (1991) consider the presence of unions in only the domestic market. They examine the consequences of unionisation for an international duopoly (two firms; one in the domestic country and one in the foreign country). The agents in the model are: households, firms, a domestic union, and the government. There is union-management bargain in the domestic market and the firm unilaterally sets its output (employment) level, while wage in the foreign country is exogenously set.

The implication of having a union in the domestic firm is that, output and profit are reduced. The firm’s costs rise, lowering profit directly, and, in addition, the firm’s equilibrium output falls, while the equilibrium output of its rival rises. Total rents to union members rise as a result of unionisation, since without unionisation, all workers earn only the competitive wage. They consider the possibility of using tariff to extract rent from a foreign firm in competition with a unionised firm. The effects of domestic unionisation include; both imports and domestic production to tariff tends to be reduced; price responses to tariff changes tend to be greater in the presence of domestic union; and the effect of the domestic union on the size of the optimum tariff is ambiguous.
In a similar vein, Mezzetti and Dinopoulos (1991) develop a cournot duopoly (two firms competition over output) model of a domestic unionised firm and a foreign firm. Unlike in Brander and Spencer (1988), the negotiated wage and employment levels are simultaneously determined through efficient Nash bargaining (efficient bargaining). The unionised firm competes against a foreign firm for sales in the domestic market. The home country government, the union and two firms play a two-stage game. In the first stage, the government announces a specific tariff imposed on the output of the foreign firm. In the second stage, each firm chooses its output in a Nash-Cournot fashion, taking the action of government as given. Another point of contrast between this model and Brander and Spencer model (1988) is the introduction of preferences of unions—whether a union is wage oriented or employment oriented. An increase in bargaining power of unions through trade protection for an employment oriented labour union increases domestic profits and welfare. Therefore, the industry rents to be shared between unions and the employers rises.

Furthermore, Gaston and Trefler (1995) consider the outcome of a foreign firm, that is, a strategic rival to the domestic firm. There are two firms producing for the domestic market, one domestic firm with output $x$ and one foreign with output $y$. The domestic firm bargains with the risk-averse union over wage-output contracts and the competition between the domestic and foreign firms is treated as a Cournot quantity game. Higher wages are associated with greater union bargaining strength and the effect of a tariff on wages and output is ambiguous.

From the theoretical models discussed so far, we have seen that the impact of import competition or trade liberalisation on union wages depends essentially on the assumptions of the model in question. In the words of Freeman and Katz (1991), “As there is reasonable a priori logic for expecting unions to respond less, more, or even ‘perversely’ to shocks due to trade or other factors, but the question of which response pattern dominates wage setting in the United States is an empirical one.”

**REVIEW OF EMPIRICAL LITERATURE**

The empirical evidence is discussed under two headings: The first relates to trade unions and labour market relations, while the second aspect deals with the impact of trade liberalisation and trade unions on labour market outcomes.

**Trade Unions and labour market relations**

Unions exist to the extent that they are able to either demand for higher wages for the members or guarantee certain level employment for its members, or both, depending on the objectives of the union.
Table 1: showing previous studies on trade and labour market outcomes

<table>
<thead>
<tr>
<th>Author(s) and nature of study</th>
<th>Results</th>
</tr>
</thead>
</table>
| Blanchflower, D.G (1996), compared and contrast the role of trade unions in the US with those in other OECD countries. | 1. There is some evidence that unions did better in countries with centralised as opposed to decentralized wage setting systems.  
2. Part-time work is less prevalent in union’s settings than it is in non-unions settings. The size of the union/non-union hour’s differential appears to be lower in the US than it is in most other countries examined (e.g. the UK and Germany). |
| Dabalen (2000) explore the hypothesis that wage inequality in south Africa is partly due to the wage setting practices of unions by measuring the true wage gap due to trade unions. The study measures this gap within population groups and for workers with different observed skills. | 1. The results indicate that the average change in union and non-union wage gap in South Africa is about 10 percent per annum and the gap widens by 10 percent annually.  
2. Workers at the low end of observed skill distribution benefit the most from belonging to unions, although the sizes of within-skill differentials differ significantly across races. |
| Blanchflower, D.G (1986), determines the extent to which unions are able to alter the wages of unionised labour, relative to comparable non-unionised labour in Great Britain. | Wage gaps for semi-skilled manuals and middle managers tended to be higher in the non-manufacturing sectors than in the manufacturing sector. In contrast, wage gaps for skilled manuals and clerical workers are not significantly different from zero in either the manufacturing or the non-manufacturing sectors.  
For both semi-skilled and skilled manuals, evidence was found that the wage gap varied according to the extent of industry unionism. |
| Freeman and Medoff (1985), examines the impact of unions on wages in the US. They used data on May 1979 current population survey to obtain a series of disaggregated estimates using sample of non-agricultural, private sector, blue-collar workers aged 20-65. | 1. They reported that union raise wages for the young, the least tenured (duration), whites, men, the least educated, blue-collar worker in the largely unorganised South and West.  
2. The amount of union monopoly power is related to the wage sensitivity of demand for organized labour.  
3. Wages of unions are less sensitive to business cycles ups and downs. |
| Forth and Millward (2002), examine whether wage premium still exists due to union effects for private sector employees in Britain using matched employer-employee data from the 1998 Workplace Employee Relations Survey. | 1. Their results from the estimation of manual and non-manual occupations separately indicated that manual workers benefit from a wage premium. Among non-manuals, the effect of union bargaining is small and non-significant.  
2. They identified that where less than 70% of employees at a workplace were covered by union/management bargaining, pay was no higher than for employees in workplaces where no-one was covered by bargaining.  
3. They identified other category of employees with a premium, was uncovered employees in the same workplaces. |
They found evidence of an intra-workplace 'spillover effect', whereby union bargaining also benefits those it does not directly represents.


1. Union membership among African workers increases their wages by 145% at the bottom 10th percentile of the wage distribution and by 11% at the top 90th percentile. Among white workers, the relative increase in union wages is 21% at the top 10th percentile but is associated at the 90th percentile with a reduction of 24%.
2. Reducing the union relative wage effect by half could increase African employment by about 2%, roughly equal to an expansion of one-eighth in youth employment (there exists trade-off between union wages and employment).
3. Unions have stronger negative impact for low paid jobs.

Leonard (1991); Blanchflower, et al. (1991) both studies examine the effect of unionism on the rate of employment growth for Californian manufacturing plants and British establishments respectively.

1. They find strong inverse correlation between union strength and employment growth. Trade unions depress the rate of employment growth and increase the extent of employment decline.

Kahn (1978); Holzer (1982); and Montgomery (1989) attempt to calculate the employment consequences of trade unionism by using microeconomic data on individuals.

1. They estimate people’s probability of unemployment, as a function of, among other things, the proportion of union membership in their geographical area.
2. The studies suggest a positive correlation between unionism and unemployment. They are therefore, consistent with the traditional theoretical view that trade unions have detrimental effects on the availability of employment.

Arbache and Carneiro (1999) investigate the importance of trade unions in collective bargaining in the context of Brazilian manufacturing labour market.

1. Under the intermediate centralised bargaining structure, trade unions contribute to increasing rather than decreasing wage dispersion within the union sector.
2. They found a positive correlation between firm size and union density in Brazil, and also that wage premia are paid to all workers irrespective of their affiliation to trade unions.

### Trade Liberalisation, unions and labour market outcomes

Table 2 shows some of the studies carried out on the impact trade liberalisation and trade unions on labour market outcomes.
Table 2: Empirical evidence on trade liberalisation, unions and labour market outcomes

<table>
<thead>
<tr>
<th>Author(s) and nature of study</th>
<th>Results</th>
</tr>
</thead>
</table>
| Baldwin (2003) examines the extent to which increased openness to international trade affects the employment of union workers disproportionately compared with non-union workers. | 1. There was a decline in the share of workers who were union members from 25% in 1977 to 14% by 1997 (44% decline), also total number of union members decline by nearly 4 million despite an overall increase in number of jobs by more than 37 million.  
2. Decline in the number of basically educated (those with 12 or fewer years of schooling) unionized workers in manufacturing activities by 63% during the entire 1977-97 period and by 43% between 1977 and 1987.  
3. Deunionisation had a comparatively small effect on the earnings premium of union over non-union workers.  
4. Shift across most industries in attitudes by employers and workers unfavourable to unions, coupled with the enactment of new anti-union legislation and the administration of existing labour laws in an anti-union manner are the factors in the deunionisation.  
5. Even though changes in the volume of international trade were not the dominant factor in deunionisation during either the 1977-87 or 1987-97, import increases in 1977-87 periods did more adversely, as it affects the employment of basically educated union (those with 12 or fewer years of schooling) workers in manufacturing than that of basically non-union workers. |
| Slaughter (2007) considers the relation between the union-coverage rate with measures of global engagement such as exports, imports, tariffs, transportation costs, and foreign direct investment (broad concept of globalization), using a panel of U.S. manufacturing industries spanning through 1983 through 1994. | 1. He finds a statistically and econometrically significant correlation between falling union coverage and greater numbers of inward FDI transactions.  
2. He finds that lower tariff rates are significantly correlated with higher union coverage. This is contrary to the theoretical prediction that exogenous falls in tariff rates would reduce worker bargaining power because of higher product-market competition and labour-demand elasticities.  
3. Exports, imports, net exports, and transportation costs show no robust correlation with union coverage. |
Brown and Sessions (2001) investigate the relationship between international competition and the labour market prospects of a representative sample of British workers, and testing for the wage and employment implications of increased competition.

1. One of the major findings is that net imports are significantly negatively associated with union, but not non-union, wage premia.
2. The coefficient of union density is significant and negative across all the specifications of – “all individuals”, “union individuals,” and “non-union individuals.”
3. International competition affects the wage, but not employment, prospects of union workers and the employment, but not wage, prospects of non-union workers.

Macpherson and Stewart (1990) using data from the current population survey of 1975 to 1981, they examine the impact of international competition on union and non-union wages with import share as a measure for international competition.

1. International competition was a significant determinant of union wage differential. Import competition had a significant negative impact on the wages of union workers, but no significant effect on the wages of non-union workers- a 10 percent rise in the import share lowers the union-nonunion differential with about 2 percent. 2. The net negative effect of a given import share on both union and non-union wages decrease in absolute magnitude as the percentage organised (unionisation) increases.

Shendy (2009) investigates the impact of tariff reductions on manufacturing wages in South African using micro-level labour data for the period from 1995 to 2004, and controlling for collective bargaining power. One of the achievements in this paper is being one of the first to control for the effect of collecting bargaining power in Sub-Saharan Africa.

1. Finds that the impact of tariffs was conditional on industry’s level of unionisation. Only industries with higher union power were negatively affected by tariff cuts-with increased openness and intensified foreign competition industry rents are compressed. 2. Also, free trade policy in countries with lower union power may have less of a social cost compared to more highly unionised nations.

Dumont et al. (2006) examine the impact of international trade on union bargaining power in five EU countries.

1. Bargaining power estimates are regressed on variables reflecting import competition of OECD countries and NIC (Newly Industrialised Countries) as well as other determinants of union power (e.g. concentration ratio). They find a significant negative impact of imports, with imports of the NIC having a substantially larger impact than imports from OECD countries. 2. It was found that labour unions were most powerful in Germany and France, and Weakest in Italy and the UK. 3. For the five countries considered (Belgium, France, Germany, Italy and the UK), unions exhibit a persistent pattern of wage-oriented behaviour.
Griffith et al. (2007) analyse the impact of product market competition on unemployment and wages, and how it depends on labour market institutions across the OECD countries over the 1980s and 1990s.

1. The results show that higher levels of collective bargaining coverage and / or union density has greater increase in employment (reduction in unemployment)
2. The effect of increased competition on real wages is beneficial to workers, but less so when they have high bargaining power- the intuition is that real wages increases through a drop in the general price level, but workers with bargaining power lose out through a reduction in the rents that they had previously captured.

Shippen and Lynch (2002) examine the effect of import competition on union wages for the period 1983-1994. The estimation was divided into two periods-first was the period 1983-1986, and the second was 1987-1994.

1. They found that import competition as measured by import share, significantly reduced union wages from the period 1983-1986, but the negative impact of import share on union wages and wage growth was mitigated between 1987-1994. Despite having huge increase in import share. This was due to increase in the ability of the unions to protect the wage premiums.
2. They suggested that union wages not being sensitive to increased import competition after 1986 indicates that unions still have significant power in setting wages for workers. This is contrary to the conventional theory and other previous results that increase import competition reduces union's wages.


1. There is a fundamental difference between union and non-union wage responses to trade and trade policy.
2. Unions face a wage-employment trade-off that is unavailable to non-union workers. In response to tariffs, union workers may negotiate a low-wage contract in return for implicit or explicit guarantees of higher employment levels. In contrast, non-union workers do not have this option.

RENT-SHARING AND UNION WAGES

Industry rents have been identified as one of the channels through which trade reforms could affect the labour market outcomes. More often than not, when firms achieve growth in terms of profitability, workers share part of the gains that accrues to such firms. These gains could come in the form of rents to the employers and employees; this is in line with the non-competitive model of labour market.
Teal (1996) identifies two sources of rents: First, wages may be set above the market clearing competitive rate either by labour raising its cost in an imperfect labour market or by firms earning rents from an imperfect product market which the firm then chooses, or compelled to share with the workers. Therefore, the most obvious source of rent is through the unionisation of the industry. Second, the role of ownership; state firms and those with foreign ownership provide mechanisms by which workers can capture rents.

In rent-sharing framework, collective bargaining or presence of unions have strong outcomes/consequences on the bargaining power of the workers. Therefore, bargaining power of the unions in the industry and the level of profitability or quasi-rents per worker determine the resulting wages in the industry. As emphasised by Nickel (1998), this result is independent of the type of bargaining that takes place, whether it is over wages and employment (efficient bargaining), or over wages only (right-to-manage). Hence, the ability of unions to negotiate higher wages is a positive function of the degree of unionisation (Freeman and Medoff, 1981). This positive impact of unions might spill-over to the nonunionized workers if the threat or demand effect offset the supply effect (Hirsch and Addison, 1986). Martins and Esteves (2008) find no evidence in support of rent-sharing in the Brazilian labour market. The reason is due to relative weakness of different labour market institutions prevalent in the country; particularly the unions are segmented and weak.

Furthermore, trade union theory suggests that unions are able to capture excess rent in the presence of trade protection and these rents are absorbed in the form of wage premium by the workers (Lawrence and Lawrence, 1985; Revenga, 1997). It is also possible for trade reforms to bring about increase in industry rents if trade liberalisation is accompanied by productivity gains in the industries or sectors experiencing the reform. However, with increase in openness or foreign competition, workers bargaining power suffers a decline, and consequently a shrinking (reduction) of the industry rents to be captured by firms and workers.

Unions are confronted with a trade-off between lower employment and lower wages and thus may bargain for employment guarantees at the expense of accepting wage concessions (Freeman and Katz, 1991); Dobbelare, 2004; Brock and Dobbelare, 2006).

**CONCLUSION**

Freeman and Medoff (1985) identify two views (perspectives) of the impact of unionism on the labour market. The first is the undesirable monopoly face, which enables unions to raise wage above the competitive level. This reduces national output and distorts the distribution of income, and further leads to loss of economic efficiency; because employers adjust to the higher union wage by hiring too few workers in the union sector. Second, they identify desirable face of
unionism, which is its collective voice face. This enables unions to channel worker discontent into improved workplace conditions, fundamentally altering the social relations of production. The first motivation point for the study is to examine the impact of trade liberalisation on labour market outcomes taking into consideration union versus non-union workers as well production versus nonproduction workers.

Evidence on this aspect, whether it reduces or increases output via employment is far from conclusive-- at best the results are mixed and inconsistent on the effect of international competition on unionised labour markets outcomes, as shown from the different studies listed in the table above.

From the review of evidence, we have seen lack of consensus or consistency on the actual proxy for openness or trade liberalisation. Some studies have used trade policy outcomes to capture openness e.g. Baldwin (2003); Brown and Session (2001); Macpherson and Stewart (1990) while other studies used trade policy instruments or direct policy variables e.g. Shendy (2009); Gaston and Trefler (1995); Brock and Dobbelaere, (2006).

REFERENCES


