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Labor standards, labor-management bargaining and international rivalry

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A B S T R A C T

Using the labor union's bargaining power as an indication of government policy on labor standards issues, we analyze the competition between a domestic (North) firm and a foreign (South) firm, and their relationship with optimal labor standards (LS). First, we show that the optimal level of LS is higher when labor unions are employment-oriented than when they are not. Second, it is higher under free trade than under the optimal tariff system if labor unions are employment-oriented. Third, 'a race to the bottom' of LS occurs in the case of wage-oriented unions. Fourth, the North's imposing a tariff to force the Southern government to raise its LS is effective only if the Southern union is wage-oriented. In order to raise Southern LS, both countries may need some deeper form of economic integration, if the North does not want to abandon its free trade system.

1. Introduction

The issue of Labor standards (LS) has been one of the focal points in meetings of the World Trade Organization (WTO) in recent years. For instance, the U.S. and France discussed LS and proposed a "social clause"[1] at WTO meetings in Singapore in 1996 and Seattle in 1999; The European Union also brought such issues to the WTO's Doha conference in 2001. Labor unions and humanitarian organizations argue that without international agreements, 'a race to the bottom' of LS could arise. This movement has met strong opposition from developing countries, who argue that a higher LS may increase labor costs and thus reduce their competitiveness.

In the existing theoretical literature, LS has been treated broadly as a source of externality in a general equilibrium framework, such that it is assumed to directly increase consumer utility or national welfare.[2] Brown et al. (1996) investigate the welfare effect of LS under free trade. Srinivasan (1996) considers whether different LS levels among countries change

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[1] The 'social clause' would permit restrictions to be imposed on imports from countries not complying with an agreed level of minimum LS.

[2] As a more specific type of LS, the implication of child-labor practices in developing countries for international trade has drawn quite some attention. For instance, see Basu (1999).

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their incentives for free trade. Bagwell and Staiger (1998, 2001a,b) analyze the interaction between negotiations over trade policy and LS. In particular, they show that a positive tariff and a lower LS are policy substitutes. They emphasize the role of international negotiation on trade and LS policies in order to avoid a race to the bottom of LS. Unlike them, Chau and Kanbur (2006) investigate how Northern tariffs affect the incentives of Southern exporting countries to raise LS without international cooperation. They show that whether a race to the bottom of LS arises or not depends on the Northern demand curve, the size of big exporters relative to each other, and the relative size of the competitive fringe of small exporters.

In these analyses, however, neither workers nor firms are explicitly modeled, and thus it is hard to see how they are affected by LS and how governments view LS policies regarding their effects on firm profits, worker utility and consumer welfare. In the present paper, we wish to model these explicitly. We examine the endogenous choice of LS in a model of international duopoly, in which a domestic firm competes against a foreign exporting firm.

In particular, we introduce two different elements. First, we analyze LS in the context of labor-management negotiations, highlighting how LS affects worker utility and firm profits. We treat the bargaining power of labor unions as a government policy variable on LS, emphasizing the role of governments. This treatment is based on some stylized facts and empirical studies. One of the four *Core Labor Standards* proposed by the International Labor Organization (ILO) is 'freedom of association and the effective recognition of the rights to collective bargaining',[3] which basically represents how strong the union is vs. the firm. According to studies by Moene and Wallerstein (2003), Sweden and Norway have experienced almost full employment after World War II. They attribute this extraordinary phenomenon to the union's strong bargaining power, which is seen as a symbol of high LS in Scandinavia.

Second, our model allows the labor union to have a biased preference toward either wages or employment, as in Pemberton (1988), Mezzetti and Dinopoulos (1991), Zhao (2001) and López and Naylor (2004).[4] This consideration allows us to examine different firm performances arising out of the union's preference, how it affects the government's optimal choice of LS, and more importantly the issue of a race to the bottom of the LS in the context of union preferences over wages and employment. Certainly this treatment also has empirical support. In an interesting survey of British trade unions, Clark and Oswald (1993) find that union preferences are more heavily weighted toward employment than would be implied by the so-called rent-maximization behavior (i.e., maximizing the sum of union members' rents), even though union leaders care more about wages than employment. Further, it is argued that unions tend to be employment-oriented during recession, when securing jobs is a priority. In contrast, during business boom, they tend to be wage-oriented and have stronger demands for wage hikes. In addition, in a rich country, unions might be concerned more about increasing the size of union membership than wages, while union workers in poor countries might be more interested in the wage level, given that many non-union workers are earning near subsistence-level wages. Thus, in the present model we assume the union and the firm negotiate over two issues, wages and employment, and the negotiated equilibrium would depend on the union's preference.

Regarding the optimal choices of LS under free trade versus optimal tariff systems and their impacts on firms, unions and consumers, we find that, firstly, an increase in LS can raise the domestic firm's profit and reduce that of the foreign firm if labor unions are sufficiently employment-oriented. This arises because employment-oriented unions are willing to sacrifice some wage demands for higher employment. An increase in LS via a rise in union bargaining power raises the domestic firm's output and reduces that of the foreign firm. The opposite is true, if labor unions are sufficiently wage-oriented.

Secondly, the optimal level of LS is higher when labor unions are employment-oriented than when they are wage-oriented. In our model of duopoly, firms produce "too little" output. Hence, governments have incentives to set higher LS if this raises output, which happens if unions are employment-oriented. In addition, the government is willing to grant higher LS/bargaining power to more employment-oriented unions.

Thirdly, the optimal level of LS is lower under free trade than under the optimal tariff system if unions are wage-oriented. If unions are employment oriented, the opposite is true. Free trade is not an optimal policy for an importing country under oligopoly. In fact, the importing country's government has an incentive to lower LS if it increases the firms' output, which is the case of wage-oriented unions. In contrast, it will choose to raise LS to increase output in the case of employment-oriented unions.

In addition to the above results, we believe that a contribution to the literature is our findings on the race to the bottom of LS. First, we show that we may observe 'a race to the bottom' of LS only in the case of wage-oriented labor unions. Lowering the LS in a country decreases the negotiated wage rate, and with wage-oriented unions, it also strategically reduces the rival's profits by taking some of the rival's market share away. As an optimal response, the other country may also reduce its LS. Second, the importing country's imposing a tariff to force the other country to raise its LS is effective only if the union in the latter country is wage-oriented. Alternatively, in order to raise the latter's LS, both countries may need a deeper form of economic integration (i.e., joint welfare maximization) if the importing country's government does not want to give up its free trade system.

[3] The other three are (i) the elimination of all forms of forced or compulsory labor; (ii) the effective abolition of child labor; and (iii) the elimination of discrimination in respect of employment occupation. See International Labour Office (1999).

[4] They analyze how the domestic labor union's exogenous bargaining power affects the formation of tariffs, trade volume, union utility, national welfare and foreign direct investment. In contrast, we take into account both domestic and foreign labor unions and endogeneize their respective bargaining powers. We explicitly allow the domestic labor union's bargaining power to affect the foreign negotiated wage, output and profits. This enables us to further investigate the interactions between the two countries' choice of optimal LS. Consequently, the Southern government's choice of LS affects the choice of the Northern government and vice versa.