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DO LABOUR STANDARDS HAVE A ROLE IN INTERNATIONAL TRADE?: PRIVATE STANDARDS, PREFERENTIAL TRADE AGREEMENTS OR THE WTO

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Abstract

It is now common for producers (economic protectionism), consumers and social advocates (humanitarian motives) to urge for the inclusion of labour standards in international trade agreements. In spite of this, there has been little empirical work to determine whether low labour standards lead to trade distortions. This paper provides some empirical evidence pertaining to this question. Consumer groups, social advocates and traditional *vested interests* such as labour unions have attempted to have labour standards included in WTO disciplines. In the absence of success at the WTO, the relationship between labour standards and international trade has, however, been evolving in the areas of private standards and preferential trade agreements. Given the role that preferential trade agreements sometimes take in establishing future directions in multilateral trade agreements and the increasing dissatisfaction with the WTO's treatment of consumer issues in general, in the future labour standards may well work their way into multilateral trade agreements. The empirical results show that low labour standards lead to trade distortions. These effects appear to be small. Further research in this area is suggested.

Keywords: consumers, food processing, labour standards, preferential trade agreements, trade distortion

1. Introduction

At the time the General Agreement on Tariffs and Trade (GATT) was negotiated in the mid-1940s the framers of the agreement did not expect that consumers would be requesting that their governments put barriers to market access in place. The simple economic model that underlies the tariff reducing objective of the GATT suggested that: if tariffs were removed, prices in an importing country would fall, which would benefit consumers but would be detrimental for producers (Gaisford and Kerr, 2001). Similarly, if the relative international competitiveness of import competing industries deteriorated, meaning stronger competition from imports, consumers would benefit – and thus would have no incentive to ask for measures that limited market access for imports. Of course, producers facing fiercer competition from imports could be expected to seek protection from policy makers. It was recognized in the GATT that policy makers may feel inclined to extend protection to producers in certain instances.

The potential for governments to grant protection, however, considerably increases the risks of engaging in international transactions for exporters (Kerr and Perdakis, 2003). This increase in risk inhibits investment in exporting activities and lowers the benefits from trade that can be expected. Hence, firms that wish to engage in international trade activities lobby for stronger rules – where stronger means that the ability of political decision makers to impose policies that disrupt trade is constrained. Given that the imposition of policies that distort trade can be viewed, from an international relations perspective, as a non-cooperative game (Gaisford and Kerr, 2003), trade agreements represent cooperative attempts to limit the economic cost of granting protection. Thus, at any point in time trade agreements represent the existing balance between the desire of decision makers to have the prerogative to extend protection for domestic political reasons and the desire of firms wishing to invest in international commercial activities for those prerogatives to be constrained.

Given that only producers were expected to ask for protection when the GATT was negotiated, the entire edifice was structured so that it recognized the reality of the political need, at times, to extend protection to producers – it could not be done away with. Existing levels of protection were grandfathered but the ability to extend or expand their use was limited to a considerable degree. For example, no new tariffs could be created and existing tariffs were *bound*. It was also agreed that other trade distorting measures such as subsidies were to be constrained. In the GATT, new *rounds* of negotiations could be agreed periodically. The objectives of these rounds of negotiations would be to erode existing levels of protection and to put in place constraints on the granting of new forms of protection. If a country could not live up to its GATT commitments for political reasons, it was allowed to ignore them; but not without a cost. Either compensation must be paid or the member state not receiving the expected benefit is allowed to retaliate.

Relative international competitiveness is determined by a number of factors – labour cost being only one of them. Given that the production of some goods employs labour intensive technologies, low wage countries may enjoy a competitive advantage over the production of labour intensive goods in high wage countries (Perdakis and Kerr, 1998). As markets globalize, labour intensive production is increasingly concentrated in developing countries. Labour

intensive manufacturing industries in developed countries, such as textiles and clothing, have been heavily protected. For example, until the Uruguay Round agreement, the textiles and clothing industries of developed countries were protected under various multi-fibre agreements that provided a greater degree of protection than the general GATT most-favoured-nation tariffs. The combination of low labour costs combined with climate-based agronomic advantages was often used to justify high levels of protection for agricultural producers in developed countries.

While protection against low wage producers was first grandfathered in the GATT and then, in certain cases, allowed to increase, differences in labour policies were not allowed to become justifications for the imposition of trade barriers. For example, if an importing country chooses to raise its minimum wage, this could not be used as a reason to garner additional protection. Just as higher taxes are taken to be domestic choices that reflect a country's level of development, so too are higher minimum wages. This does not mean, however, that those faced with paying higher minimum wages will not seek protection. Protectionists have been adept at manipulating information (Kerr and Foregrave, 2002) and seeking out allies in attempts to have their vested interests identified with the *general good*.

Labour unions in developed countries, in particular, have argued that a broad range of labour standards can be trade distorting if their levels or the rigour with which they are enforced differs among countries. Lower or poorly enforced labour standards, they argue, can endow a country with an “unfair” international competitive advantage. The argument is often made that labour standards and their poor enforcement in developing countries is the cause of job losses in developed countries. Given that labour standards also have “human rights” attributes, it is sometimes argued that imposing trade barriers against goods produced in situations of low labour standards will provide an impetus for exporting countries to raise and/or better enforce their labour standards.¹ Hence, requests for protection can be identified with generally accepted humanitarian objectives that can be classified as being within the notion of the *general good*. No matter what the rationale for the imposition of trade barriers, however, they will still provide an economic benefit to those who faced competition from imports. Thus, it is not possible to divorce the economic benefit received by *vested interests* – say members of labour unions in developed countries – from other justifications. This creates suspicion regarding the true motives of those advocating protection on humanitarian grounds.

Given the inherent question of *vested interests* that arise regarding protection being granted on the basis of labour standards and the virulent resistance to labour standards being used as a justification for trade barriers, those negotiating the GATT (and subsequently the World Trade Organization – WTO) managed to keep the issue of labour standards off the multilateral negotiating agenda. Instead, the question of labour standards was put under the jurisdiction of the International Labour Organization (ILO) where it is dealt with as a human rights issue rather than an international trade issue. A number of labour standards conventions have been negotiated under the auspices of the ILO. The ILO, however, has no sanctioning power (such as the imposition of barriers to market access). The only labour provision in the

¹ The validity of such assertions, however, is open to question. Bhagwati (2004) provides a review and discussion of the relevant issues.

WTO is GATT Article XX (g) which provides an exception that allows trade restrictions to be put in place in the case of *the products of prison labour*.

At the multilateral level, this *neutralizing* of the issue of labour standards by jurisdictional exclusion has been maintained, but in recent years the traditional *vested interests* in having labour standards included as a justification for the imposition of trade restrictions have gained powerful allies in the form of consumers and social advocates.

One objective of this paper is to discuss the legitimacy of justifications for including labour standards in international trade agreements from producers (protectionism aspect), consumers and social advocates (humanitarian aspect) points of view. Including labour standards in any new trade negotiation agenda is not acceptable unless it can be shown that low labour standards lead to trade distortions. Thus, this paper, also, attempts to empirically address whether developing countries can enhance their comparative advantage (especially in unskilled labour-intensive goods) through the use of low labour standards. The structure of this paper is as follows: In the next two sections consumer and social advocate groups concerns regarding labour practices that are applied in the production of imported products are dealt with; the responses to these concerns in the form of imposing private standards in international supply chains and introducing provisions for labour standards in preferential trade agreements are then presented in sections four and five. A brief presentation of the theoretical framework, an empirical test of the influence of labour standards on exports of labour-intensive goods is reported in section six. Conclusions and a summary of major results are presented in the final section.

2. Consumers and Labour Standards

As suggested above, the framers of the GATT/WTO did not anticipate that consumers would ask for protection and, hence, made no provision for governments to acquiesce to such demands (Kerr, 2004). There are, however, many recent examples where requests for trade protection have come from consumers, environmentalists and other interested parties that cannot be considered traditional producer-based *vested interests*. Labour standards are only one of a range of issues that have sufficiently vexed consumers in recent years that they seek the imposition of trade barriers. In some cases, the desire of consumers for protection has led to conflicts with the WTO rules and the questioning of the appropriate role for the WTO. For example, some consumers in the European Union have been advocating an import ban on seal pelts from Canada and have persuaded the European Parliament to legislate limits on imports. Consumers and environmentalists in the US asked for a ban on both imports of tuna caught in dolphin unfriendly ways and shrimp caught in turtle unfriendly ways (Isaac et al. 2002). Consumers in the EU were successful in banning imports of beef produced using growth hormones – and in having the EU Commission accept retaliation rather than comply with a World Trade Organization (WTO) disputes panel ruling (Kerr and Hobbs, 2005). The latter, while certainly within the EU's rights under the WTO, is an unprecedented action. Environmentalists and some consumers in the EU have been vociferous in their opposition to imports of agricultural products produced using modern biotechnology – genetic modification (Isaac and Kerr, 2007). Consumers in many developed countries demanded broad-based

restrictions on imports from China in the wake of media reports of a spate of product safety problems in 2007 (Liu et al., 2009). Green labelling, leg-hold traps, organic standards, animal welfare and a wide range of other issues have also led to calls for restrictions on imports. As the WTO does not make provision for any group other than producers asking their governments for protection, these issues have not been satisfactorily resolved, the groups involved feel marginalized and frustrated, and the reputation of international trade institutions has plummeted within civil society.

Consumers have also expressed considerable concerns regarding the labour practices that are applied in the production and manufacture of imported products. One of the most prominent cases involved sports manufacturer Nike. It was accused of using child labour in the manufacture of soccer balls in Pakistan in 1996. Its operations in Cambodia were also associated with child labour in the 1990s. Such high profile cases have raised awareness among consumers and have led to a range of responses from direct action such as boycotts of products/firms, labelling initiatives, attempts to influence firms to develop private standards that are enforced for products entering their supply chains and lobbying for the inclusion of labour standards in trade agreements. A range of labour standards advocacy NGOs have arisen in the wake of rising consumer concerns and, in turn, act to raise awareness of labour standards issues relating to imports. Examples include: the Investor Responsibility Research Center, the Ethical Trading Initiative, the Clean Clothes Campaign, Oxfam's Clothes Code Campaign, Free the Children and Human Rights Watch.

3. Social Advocacy and the Application of Trade Sanctions

It is important to distinguish between *social advocacy* and *consumers' right to know*. In reality, the two motivations are often hard to separate and may be embodied in the same individuals. They are, however, very different in the types of trade policy instruments that are advocated. In the case of *consumers' right to know* what is being sought is sufficient information so that the consumer can choose not to consume a product that was produced in ways he/she considers unacceptable. For example, a consumer may wish to forego consumption of a product where child labour was used in its production. In this case, the appropriate trade barrier relates to labelling and supply chain tracing – which can act as significant barriers to trade (Hobbs and Kerr, 2006). It has been a contentious issue at the WTO. In the WTO's Agreement on Technical Barriers to Trade (TBT), a compromise was reached whereby labelling can be applied when a product is *not like* another product based on a discernible physical change in the product but not on the basis of how the product is produced. The latter is known as *production and processing methods* (PPMs). Developing countries perceive any attempt to justify trade restrictions on the basis of PPM as the thin edge of the wedge which would allow developed countries to put trade barriers in place based on the technology used in production (e.g. labour intensive technologies) (Isaac et al., 2002).

Social advocates, in contrast, want labour standards in developing countries to improve. The motivation is altruistic and, typically, preferences are strongly held. As the ILO has no sanctioning power, social advocates often see trade agreements a means to affect change in foreign countries. The threat (or use of) trade restrictions is seen as the mechanism to provide the

incentive for change among uncooperative governments. Social advocate groups in civil society see trade agreements (and organizations) as open to capture. Environmental groups have had some success in capturing international organizations (Kerr, 2001; Gordon et al., 2001, Holtby, et al., 2007) and the case can certainly be made that the inclusion of protection for foreign intellectual property in the WTO through the Agreement on Trade Related Aspects of Intellectual Property (TRIPS) represents the capture of a trade organization by those who have a vested interests in intellectual property (Kerr, 2007). In particular, the way the WTO is structured to have a common disputes mechanism and cross-agreement retaliation institutionalized suggests that the sanctioning power of the GATT was a major motive for having the TRIPS included in the WTO. Cross-agreement retaliation allows GATT authorised trade restriction to be imposed if a country fails to live up to its TRIPS commitments. While the efficacy of trade sanctions in altering the behaviour of governments is far from assured (Kerr and Gaisford, 1994), this has not diminished the enthusiasm of social advocates for co-opting the sanctioning power of trade restrictions.

Sanctioning trade restrictions in contrast to those based on the *consumers' right to know* tend to be punitive – tariffs, duties and import prohibitions. Of course, these types of trade restrictions tend to be those associated with economic protectionism.

As a result of both *consumers' right to know* and social advocacy, there have been attempts to have labour standards issues put on the multilateral trade agenda. For example, in the run up to the 1999 WTO Ministerial Meeting in Seattle, the Clinton Administration tried to have labour standards included in future negotiations. Of course, developing countries strenuously objected and, at least in part, the failure of the Ministerial can be attributed to the conflict over this issue. Since then, the relationship between labour standards and international trade has been evolving in the areas of private standards and preferential trade agreements. In many cases, consumer groups, social advocates and traditional *vested interests* such as labour unions have joined forces to push the labour standards issue in the international trade arena.

4. Private Standards in International Supply Chains

In response to rising consumer concerns, Levi Strauss developed the first corporate code of conduct for labour standards in firms to which it outsourced orders – its Global Sourcing and Operating Guidelines. By the end of the 1990s, the majority of manufactures of apparel and major retailers had put in place codes targeted at labour practices in firms that wished to put products into their supply chains. According to Freeman (1998):

In most cases the codes are a corporate response to consumer concerns and activist pressures about labour standards. Widely publicized reports of poor labour conditions in source factories and accompanying bad publicity led Wal-Mart, The Gap, Liz Claibourne, Nike, JC Penney, Talbots, Starbucks and other major firms to adopt codes. Given the millions of dollars spent on advertizing brand names and the risk of having any particular brand “become synonymous with slave wages, forced overtime, and arbitrary abuse” made it good business practice to take defensive action ...(p. 17).

Over time, these private labour standards arrangements have become more stringent, detailed and proscriptive – for example, requiring that toilet paper be made available for textile workers in India (Khorana et al., forthcoming).

Beyond textiles and clothing, agricultural labour practices in developing countries have been the subject of major corporate standards initiatives. Many are very detailed leaving little to chance. Monitoring is a central element – due to early criticisms that the standards were little more than a public relations exercise unless they were effectively enforced. Of course, these private standards have come under criticism from a trade perspective because of their inherently discriminatory nature. The manifestation of the discrimination is, of course, different from the normal WTO concern relating to discrimination among countries – in the case of private standards the discrimination arises because some producers – often the poorest in developing countries – are prevented from accessing international supply chains if they cannot meet the proscribed standard.

Private standards are often extremely detailed. For example, Starbucks Coffee’s Farmer Equity (C.A.F.E.) scheme lists approximately 75 criteria or indicators that can be seen as labour standards grouped under headings such as: (1) wages and benefits; (2) freedom of association and collective bargaining; (3) hours of work; (4) child labour/non-discrimination/forced labour; (5) access to housing, potable water and sanitary facilities; (6) access to medical care; and (7) worker safety and training (Starbucks Coffee Company, n.d.) . Some of these categories reflect those adopted in ILO agreements² while others extend beyond formal international commitments. A selection of the specific requirements and indicators embodied in C.A.F.E. illustrate the degree of detail that the standards entail:

- Full-time workers are paid at least a living wage as defined by a governmental or non-governmental labour/social rights organization. (If such data do not exist or the government defines minimum wage, the cost-of-living will be established by measuring the average cost of food, shelter, transportation, health care, clothing, energy and education, in accordance with the formula generated by the 1998 International NGO Living Wage Summit.) - SR-HP1.14
 - Financial disciplinary penalties are not assessed against workers - SR-HP1.19
 - CRITERIA REQUIREMENT: Workers can air workplace grievances to management or employer with no fear of reprisal - SR-HP2.2
 - Hours worked on potentially hazardous activities (e.g. pesticide application, very heavy labour) are restricted in accordance with the law. In regions where such laws are not established such activities are limited to six hours per day - SR-HP3.4
 - ZERO TOLERANCE: Employer does not directly contract any persons under the age of 14. (We prefer that our suppliers hire no one under the age of 15.) - SR-HP4.1
 - ZERO TOLERANCE: Management has an enforced policy prohibiting discrimination on the basis of gender, race, ethnicity, age or religion as per ILO Convention 111 - SR-HP4.3
 - CRITERIA REQUIREMENT: Workers do not surrender their identity papers or other original personal documents or pay deposits as a condition of employment - SR-HP4.6

² The provisions of the ILO agreements are discussed below.

- CRITERIA REQUIREMENT: Workers have ready access to potable water - SR-WC1.2
- CRITERIA REQUIREMENT: Where there is insufficient access to public education, schoolchildren (of primary school age) of workers who live on-site have access to primary educational instruction, facilities and materials that meet national requirements - SR-WC2.1
- CRITERIA REQUIREMENT: Employer provides personal protective equipment to all applicable employees at no cost (PPE for farms include: masks/respirators, goggles, rubber boots, water-proof gloves, overalls and ponchos. PPE for mills include: ear plugs) - SR-WC4.1
- Authorized minors and pregnant women are prohibited from handling or applying agrochemicals OR operating heavy machinery - SR-WC4.9 (Starbucks Coffee Company, n.d.)

At the moment compliance rates among Starbucks' suppliers varies depending upon the category – at a minimum about two-thirds – and Starbucks' stated goal is full compliance by 2015.

Globalgap is probably the most ambitious private standards initiative related to *good agricultural practices* (GAP). It grew out of a European agribusiness initiative which included major retailers. Members now include retailers Ahold, Asda, Carrefour, Marks and Spencer, McDonalds, Sainsbury's, Somerfield and Tesco, among others as well as food producers and processors like Carmel, Cargil, Del Monte, Lamb Weston and McCain – in total well over 100 major food companies in both developed and developing countries. According to Globalgap's official website:

The GLOBALGAP standard is primarily designed to reassure consumers about how food is produced on the farm by minimising detrimental environmental impacts of farming operations, reducing the use of chemical inputs and ensuring a responsible approach to worker health and safety as well as animal welfare (Globalgap, n.d.),

A central theme of Globalgap is labour standards. For example, some of the compliance criteria are:

- The living quarters for the workers on farm are habitable, have a sound roof, windows and doors, and have the basic services of running water, toilets, drains. In case of no drains, septic pits can be accepted when proven to be hermetic – AF 3.5.5
- Complete sets of protective clothing, (e.g. rubber boots, waterproof clothing, protective overalls, rubber gloves, face masks, etc.) which enable label instructions and/or legal requirements and/or requirements as authorised by a competent authority to be complied with are available, used and in a good state of repair. This includes appropriate respiratory, ear and eye protection devices and life-jackets, where necessary – AF 3.4.1
- Protective clothing is regularly cleaned, according to a schedule adapted to the type of use and degree of soiling. Cleaning the protective clothing and equipment includes the separate washing from private clothing and glove washing before removal. Dirty, torn and damaged protective clothing and equipment and expired filter cartridges should be disposed of. Single-use items (e.g. gloves, overalls, etc.) have to be disposed of after one use. All the

protective clothing and equipment including replacements filters etc., are stored apart and physically separate from the plant protection products/ any other chemicals which might cause contamination of the clothing or equipment in a well-ventilated area – AF 3.4.2 (Globalgap, 2009).

Again, the detail in the standards is very high. To ensure compliance, inspections are carried out. Private standards have been a double edged sword – they have garnered greater and more secure access to developed country markets – enhanced international trade – for those who are able to comply but have acted as trade barriers for those that cannot. According to Giovannucci (2009):

With the reduction of traditional trade protection measures such as tariffs and quotas, the technical requirements of standards and labelling have become more important instruments of commercial policy and trade policy. As such, the additional costs and capacity required to meet many standards can effectively make them non-tariff barriers and of particular concern to developing countries (p. 9).

It seems clear that, in the absence of government-to-government initiatives in multilateral trade forums to deal with consumer and social advocate concerns regarding labour standards, the private sector has found sufficient incentives to put standards in place – standards that have considerable potential to shape international trade. The sanctions imposed for not complying with private standards – denial of access to international supply chains – are closer to those associated with social advocacy than those such as labelling associated with *consumers' right to know*.

The corporate rationale for the imposition of private labour standards, beyond that of being a *good corporate citizen*, is that they are a response to consumer concerns (with social activists lumped in with consumers). What has never been seriously addressed is whether there is a protectionist motivation, particularly among labour unions and farmer organizations, also at work. Further, even if there has been no *capture* of the private standards mechanism by protectionist vested interests, these interests may have reaped considerable benefits if the net effect of private standards has been trade inhibiting. Such an assessment should be of interest to trade policy makers in government.

In addition to the success in having labour standards included in private standards, the combination consumers, social advocates and protectionist vested interests have had some success in having labour standards included in preferential trade agreements. This is the subject of the next section.

5. Labour Standards in Preferential Trade Agreements

While at the multilateral level, labour standards issues have remained in the purview of the ILO and off of the WTO agenda, this has not been the case with preferential trade agreements. The number of preferential trade agreements has been expanding rapidly over the last decade, in part because real progress at the Doha Round of multilateral negotiations has

been so elusive. A second reason, however, was the major shift in US policy from an almost exclusive focus on multilateral negotiations³ to one where both regional/bilateral trade agreements and multilateral agreements are pursued (Kerr and Hobbs, 2006). This change has allowed the US to capitalize on its economic power much more effectively in negotiations (Kerr, 2005) and allowed the US Congress to insist on a number of its trade concerns being put on the preferential trade agreement agendas. Labour standards are one of the most often heard Congressional concerns. Pushing for the inclusion of provisions relating to labour standards *sells well politically* in Congressional districts because it deflects electoral attention away from issues related to the productivity of US workers and towards supposedly nefarious practices of foreigners. The addition in recent years of the voices of concerned consumers and social advocates to the voices of traditional protectionist vested interests has increased the effectiveness of the labour standards lobby.

While the European Union has always followed a policy that pursued preferential trade agreements, in recent years labour standards issues have been included on the negotiating agenda although not as explicitly as in the US. Labour standards can be included directly in the agreements or in side agreements. Table A1 provides a summary of the labour provisions in recent US and EU preferential trade agreements.

As can be seen in Table A1, all of the US preferential trade agreements since 1994 and almost all of the recent EU agreements include labour standards provisions. Although the provisions vary, they are generally based on ILO core standards although a number provide exceptions for discrimination based on gender.

An agreement on a common list of labour standards simply does not exist. The definition and specification of core labour standards used by the ILO (basic union rights, freedom from forced labour, equal opportunity in employment, and the prohibition of child labour) is used in this paper. The selection of this definition of core labour standards derives from the widespread acceptance and ratification of conventions of the ILO related to human rights and labour standards. There are eight ILO conventions on core labour standards (two conventions for each of the specified core labour standards: union rights, forced labour, child labour, and discrimination in the labour market). These conventions are also reflected in the ILO Declaration on Fundamental Principles and Rights at Work, which was adopted in June 1998. Although the total number of ratifications for each convention differs, they are all in the range of 148–172 countries. All eight conventions have been ratified by 126 countries, which reflect a relatively widespread agreement on the principles of these conventions.

In developed countries, agricultural labour is sometimes exempted from labour standards applied in other sectors (Bruce and Kerr, 1983). The provisions for labour standards in the agreements reported in Table A1 were also examined to see if any special provisions were made for agricultural labour. Was agricultural labour specifically included in the labour standards provisions? Was agricultural specifically excluded or exempted from the labour standards

³ The North American Free Trade Agreement (NAFTA) was a politically motivated one-off agreement rather than a shift in US policy.

provisions? Was no specific mention made regarding agricultural labour? As can be seen in Table A1, no special provisions were made for agricultural labour in any of the agreements. Agricultural labour was not mentioned at all which implies that the provisions are meant to apply to agricultural labour.

As yet, it does not appear that the labour standards provisions in the preferential trade agreements examined in Table A1 have yet formed the basis of trade action or a formal dispute. For most of the agreements, it is however early days. The consistent inclusion of labour standards provisions in preferential trade agreements may have implications for the WTO. Preferential trade agreements are sometimes seen as leading indicators for future directions in the multilateral trade arena. For example, the disputes settlement system in the Canada-US Trade Agreement⁴ was a model for the dispute system devised for the WTO (Apuzzo and Kerr, 1988). Once the Doha Round has reached its conclusion – with or without an agreement – a new agenda for negotiations will eventually have to be agreed at the WTO (Gifford, McCalla and Meilke, 2008). Given the consistency with which labour standards have been incorporated in recent preferential trade agreements and the increasing dissatisfaction with the WTO's treatment of consumer issues in general, labour standards may well work their way onto any new multilateral agenda.

At the moment, however, the member states of the WTO would have a hard time including labour standards in any new trade negotiation agenda unless it can be shown that low labour standards lead to trade distortions. This question is examined in what follows.

6. Do Differences in Labour Standard Affect Trade Flows?

The main objective of this section is to empirically address the question of whether developing countries can enhance their competitive advantage (especially in unskilled labour-intensive goods) through the use of low labour standards. First the theoretical framework is briefly discussed and then the empirical framework as well as the estimation results are presented.

6-1 Theoretical Framework

A standard Heckscher–Ohlin trade model can be adapted to examine the effect of labour standards on trade flows because it is based on different relative factor endowments (skilled and unskilled labour) and, hence, changes in endowments can be incorporated within its structure. In the simple version of the Heckscher–Ohlin model, it is assumed that there are: two goods, two factors (skilled, unskilled labour), two countries (home, foreign), identical production technologies with constant returns to scale in both countries, identical and homogeneous preferences, and no market distortions (Perdikis and Kerr, 1998). In addition, it is assumed that the home country has a proportionally larger unskilled labour force than the foreign country, and one good (for example handbags) is supposed to be unskilled labour-intensive while the other good (for example software) is skilled labour-intensive.

⁴ The precursor to the NAFTA.

First, consider the situation where the countries trade with each other and both have the same labour standards (See Figures A1 and A2 in the Technical Annex - Appendix A). As the home country has relatively more unskilled labour, it is expected that this country will export the unskilled labour-intensive good and import the skilled labour-intensive good.

Now consider a situation where the home country decides to lower its (or reduce enforcement of) labour standards. For example, it might now allow unskilled prison labour to be employed – in other words, this particular type of forced labour becomes acceptable. As a result, the endowment of unskilled labour in the home country will increase, wages then decrease and the number of employed workers increase, which can be interpreted as an outward shift in the Production Possibility Frontier with a bias toward the unskilled labour-intensive good. As Figures A1 and A2 in Appendix A show, declining labour standards (employing prison labour) leads to an increase in consumption, trade, and welfare levels in both countries. To have a comprehensive assessment of the trade effects of core labour standards, the effects of other types of core labour standards should also be examined. It is clear that the effect of each particular type of labour standard on consumption, trade, and welfare levels will depend on the impact of the labour standard on the endowment of unskilled labour. Use of child labour will also increase the unskilled labour endowment which, in turn, will lead to more consumption and trade. Considering that the share of working children aged 10–14 in the employed population in our sample of developing countries is, on average, less than 3% (it is relatively high, however, for a few countries including Niger – 10.67% – and Ethiopia – 10.29%), it is expected that the trade effects of child labour is small.

The effect of discrimination against employment of women on the relative endowment of unskilled labour is not unambiguous, depending on the type of discrimination. Lower salaries relative to male workers despite similar levels of productivity and restrictions on women working in particular sectors of the economy are two different examples of employment discrimination against women. Given that the educational level of females in developing countries is normally lower than the educational level of males, it is expected that discrimination against women will result in a lower relative endowment of unskilled labour, at least in the short run.

Finally, basic union rights such as freedom of association and collective bargaining have no clear effects on labour endowments. The net result relies on the motives and intentions of unions. The following three scenarios can encompass the main motives and intentions of unions. First, unions may play a role in protecting the basic rights of workers and ensuring that working conditions are not exploitative. In this case, the violation of basic union rights can lead to discrimination, employment of child labour or forced labour. Second, unions may cause additional distortions in the labour market. If their efforts raise wages above market levels, the number of employed workers will decrease. This reduction in the endowment, which is likely biased against unskilled labour, in turn, will result in lower consumption, trade and welfare levels. Third, it is possible that labour union activities lead to increases in productivity because workers may be better motivated as a result of improved social relationships between workers and employers. This effect can lead to an outward shift of PPF, but this shift is not necessarily

biased toward unskilled labour-intensive goods. Therefore, basic union rights will lead to a rise or fall in the endowment of unskilled labour depending on the relative size of the three effects. Generally speaking, the effects of a decline in labour standards vary by type of labour standard. To sum up, it is expected that forced and child labour would result in an increase in the endowment of unskilled labour (and thus improve comparative advantage in unskilled labour-intensive goods), while discrimination against women might lead to a decrease in the endowment of unskilled labour and the effect of basic union rights appears ambiguous. Thus, the effect of lower labour standards on trade needs to be examined empirically.

If lower labour standards can lead to an improvement in comparative advantage, in the absence of coordination, each country might lower its own standards in an attempt to be more attractive to foreign investment or to gain a comparative advantage over foreign exporters – a race to the bottom.

6-2 Empirical Framework

Previous empirical studies suffer from two major weaknesses. The first problem is that some studies such as Rodrik (1996) and Mah (1997) have employed the number of ILO conventions ratified or dummy variables for existence of labour standards instead of measures for labour standards enforcement. The second issue is that although studies like Busse (2002) have used some measures for enforcement of labour standards, in general, previous empirical models suffer from misspecification because other country characteristics have not been included as explanatory variables. In other words, worker rights may influence the trade volume, but it is equally possible that omitted economic variables could be central determinants of the volume of trade. In what follows, based on the theoretical framework, the effect of labour standards on trade is examined while the problems in the previous studies are addressed.

The supply of unskilled labour-intensive exports (to represent the comparative advantage in unskilled labour-intensive goods) can be specified as a function of exchange rate, Gross Domestic Production (GDP) and wages. As the exchange rate (domestic currency in terms of major currencies) decreases, production for export become more profitable, and, therefore, exporters will supply more. Carey (1997) argues that a country's capacity to produce should be considered as a determinant of export supply. To control for this effect, GDP is included in the model. It is also expected that an increase in wages will increase the cost of production and, hence, exporters will supply less. Wages, on the other hand, are a function of labour endowment and labour standards.

Since the major goal of this study is to examine the effect of labour standards on trade flows, we estimate the model in reduced form. Specifically, in the empirical model the logarithm of unskilled labour-intensive exports in US dollars is considered as a function of exchange rate, GDP, labour endowment, and core labour standards⁵.

⁵ Note 1 in Technical Annex - Appendix B provides the source of data for the economic variables.

The following measures have been chosen to represent core labour standards⁶: an index ranging from 1–5 was used to represent the extent of forced labour, the number one has been assigned when forced labour does not exist and five when forced labour is used in all forms⁷ (Busse and Braun, 2003)– this index is based on the following definition: Forced or compulsory labour is defined as work or service exacted under the menace of penalty and for which a person has not volunteered (the Forced Labour Convention, 1930, No. 29, ILO); the percentage of working children ages 10–14 in the employed population is used to represent the prevalence of child labour; the unemployment rate for women 15 years and older relative to the average unemployment rate for males and females is used as a proxy for the degree of discrimination against women (World Bank, 2005; Key Indicators of the Labour Market (KILM) programme, 2007); a weighted index scaled from zero to ten that indicates basic union rights such as freedom of association and collective bargaining, with zero denoting the greatest number of violation observed and so the worst possible score, and ten denoting the least number of violations observed, and so the best possible score – this measure is based on 37 evaluation criteria that address both unionisation problems in practice and by law (Kucera, 2004); and the number of ILO conventions on core labour standards that have been ratified by the country in question.

Our sample includes all developing countries for which comparable data are available (48 countries)⁸ for 2003⁹. Table A2 in the Technical Annex - Appendix C presents the estimation results for eight different model specifications. However, the base model is the model in which all economic variables and labour standards measures are included as well as regional dummy variables to control for regional-specific factors¹⁰.

The results of the base model after addressing the endogeneity problem¹¹ indicate that exports in countries that prohibit forced labour decrease, on average, by 1.66 percent. While on theoretical grounds there were no *à priori* expectations regarding the effects of unions, the coefficient is negative, which means that the full existence of union rights will lead to a 0.6 percent (in the base model) decrease in the unskilled labour-intensive exports. The effect of discrimination against women on competitive advantage is negative but it is not statistically significant. Further, the proportion of children working is neither significant nor consistent with our priors in terms of sign. The number of ratified conventions is insignificant with the expected sign. The lack of significance for the number of ratified conventions suggests that ratification is a poor measure of labour standards; in other words, the ratification of conventions without enforcement does not lead to higher labour standards.

⁶ Note 2 in Technical Annex - Appendix B presents more detailed description about measures of core labour standards.

⁷ Dummy variables can be used for each of the categories of forced labour to examine the effect of this variable. The method used in this study, however, is a standard way employed in the literature.

⁸ See the list of countries in note 1 in Technical Annex - Appendix C.

⁹ Since the data for forced labour and union rights are not available for 2003, we used available information for 1999. Considering the fact that these variables are structural and do not change rapidly, their use is not inappropriate.

¹⁰ Regional dummy variables are for Latin America-Caribbean, Sub-Saharan Africa, Middle East-North Africa, Southeast Asia, South Asia, Non-OECD East Asia-Pacific.

¹¹ See the details in note 2 in Technical Annex - Appendix C.

In general, the results suggest that developing countries could improve their competitiveness in unskilled-labour-intensive goods by lowering some labour standards – those relating to forced labour and union rights, although their effect is small. On the other hand, child labour and discrimination against women do not appear to affect comparative advantage.

7. Conclusions

This paper attempts to illustrate the legitimacy of justifications for including labour standards in international trade agreements in addition to providing a discussion about whether labour standards might be included in trade agreements at the multilateral level in future. In particular, this issue is discussed from producers (protectionism aspect) and consumers (humanitarian aspect) points of view.

One of area in which producers' request for protection are consistently heard is goods produced in situations where low labour standards pertain. Producers argue that lower or poorly enforced labour standards can endow a country with an unfair international competitive advantage. The argument is often made that labour standards and their poor enforcement in developing countries is the cause of job losses in developed countries. It is used to justify high levels of protection in developed countries.

Given that labour standards also have “human rights” attributes, requests for protection by consumer and social advocate groups can be identified with generally accepted humanitarian objectives. In recent years the traditional *vested interests* in having labour standards included as a justification for the imposition of trade restrictions have gained powerful allies in the form of consumers and social advocates. No matter what the rationale for the imposition of trade barriers, however, they will still provide an economic benefit to producers faced competition from imports.

The empirical results of this study suggest that developing countries could improve their competitiveness in unskilled-labour-intensive goods by lowering some labour standards – those relating to forced labour and union rights. Specifically, the unskilled labour-intensive exports in countries that prohibit forced labour decrease, on average, by 1.66 percent. Full existence of union rights also leads to a 0.6 percent decrease in the unskilled labour-intensive exports. The effects are small and, hence, do not appear to be sufficiently important to justify a change in the international arrangements whereby the ILO, rather than the WTO, is the institution that deals with labour issues. The results do suggest, however, that more research is required in this important area of economic inquiry.

The ILO, however, has no sanctioning power. As a result, consumer groups, social advocates and traditional *vested interests* such as labour unions in developed countries are trying to find a means that eventually leads to the inclusion of labour standard in WTO disciplines. As a first step, these groups have joined forces to push the labour standards issue outside the multinational trade organization. For example, the relationship between labour standards and international trade has been involving in the areas of private standards and preferential trade

agreements. Given the leading role that preferential trade agreements can play in determining future directions in multilateral trade agreements and the increasing dissatisfaction with the WTO's treatment of consumer issues in general, labour standards may well work their way onto any new post-Doha multilateral agenda. Again, additional research can help inform those discussions.

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TECHNICAL ANNEX

Appendix A: Theoretical Framework

In the simple version of the Heckscher–Ohlin model, consider two goods (X, Y) where good X is an unskilled labour-intensive and good Y is skilled labour-intensive, two factors (skilled, unskilled labour), two countries home and foreign (H, F). First, consider the situation where the countries trade with each other and both have the highest level of labour standards. In Figure A1, which shows the production possibility frontier of H, country H decides to produce Q_1 (maximum outputs of the two goods produced efficiently by all resources) and consume C_1 (creates the highest utility U_1) at an equilibrium price ratio $P = \frac{P_X}{P_Y}$ (P_X and P_Y are the price for goods X and Y, respectively). As country H has relatively more unskilled labour, it is expected that this country will export good X and import good Y. In Figure A1 country H exports (b–a) units of X and imports (c–d) units of Y. Figure A2 shows the equivalent production (Q_4) and consumption (C_4) points for country F.

Now consider a situation where country H has decided to reduce (or reduce enforcement of) labour standards. As a result, the endowment of unskilled labour in country H will increase, wages then decrease and the number of employed workers increase which is reflected in an outward shift in the PPF (PPF_2) with a bias toward the unskilled labour-intensive good X. As a result, the production of X increases relative to the production of Y and it can be concluded that its comparative advantage in the production of X has improved. Additional exports of X will decrease P_X and hence alter $P-P'$ (reflecting a decline in terms of trade for country H). The new equilibrium production and consumption will be at Q_3 and C_3 respectively, with a higher utility level of U_3 . If country H is a small open economy, P will remain unchanged (at world market prices) and, hence, the new equilibrium production and consumption points will be Q_2 and C_2 . In Figure A1, exports of X have increased to (f–e) and imports of Y have risen to (k–g). On the other hand, country F will only experience a change in relative price level which allows it to reach a higher level of utility (U_5). At the new equilibrium, the production of X has decreased because of the lower price of the unskilled labour-intensive good (P_X). In other words, at P' the production of X is less profitable relative to the production of Y and country F will shift its resources toward the production of Y.

Figure A1: Trade and Welfare Effects of Labour Standards, Country H

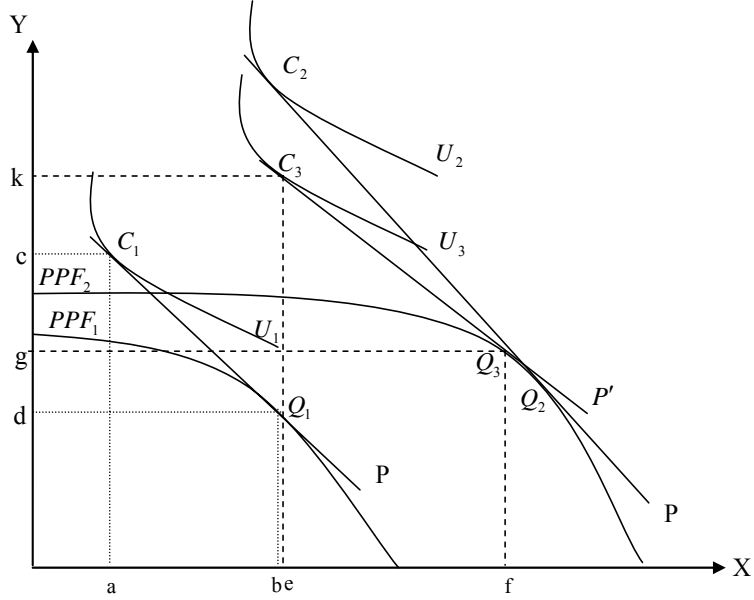
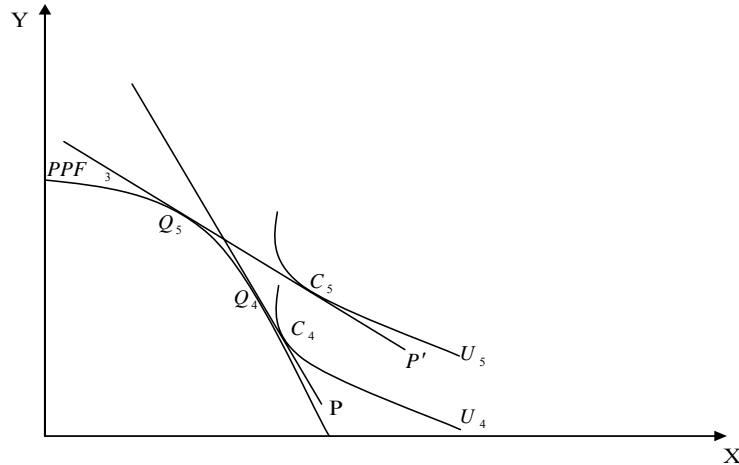


Figure A2: Trade and Welfare Effects of Labour Standards, Country F



Appendix B: Data Sources

Note 1: Unskilled labour-intensive exports contain manufactured goods characterised by both low technology and high labour intensity. By using the technology intensity data provided by the Science, Technology and Industry Scoreboard (OECD, 2001) and labour intensity data based on the value added per worker as applied by Tyers et al. (1987), the following manufactured goods have been selected as unskilled labour-intensive commodities: fabric and textile yarn; glassware, glass and pottery; bedding and furniture; handbags and travel goods; apparel; footwear; games, toys, baby carriages, and sporting goods. The information used to value unskilled labour-intensive exports has been obtained from International Trade Centre (ITC) website.

As a proxy for a country's exchange rate, we have used the bundle of currencies used to determine the unit value of Special Drawing Rights (SDRs) by the IMF – ESDR. The currency value of the SDR is determined by summing the values in US dollars, based on market exchange rates, of a basket of major currencies (the US dollar, Euro, Japanese yen, and pound sterling). The information was obtained from IMF website. Total labour force divided by the land area represents labour endowment which should positively affect the dependent variable. Data on GDP (in US dollars) and labour endowment were collected from the World Bank website.

Note 2: This index for forced labour is based on Bazillier (2008). He uses two indexes constructed by Busse and Braun (2003): the core forms of forced labour (namely slavery and abduction, coercive recruitment systems, bonded labour, and prison-linked forced labour), scaled from 0 – forced labour does not exist – to 5 forced labour applies in all four forms; and all forms of forced labour (compulsory participation in public works, coercive work in private households, forced labour in the military and related authorities, trafficking in persons as well as the core forms of forced labour), scaled from 0-forced labour does not exist- to 9 forced labour occurs in all eight forms. Then, Bazillier proposes the following formula since it is more crucial to focus

here on the core forms of forced labour:

$$FL_{Raw} = Forced_1^2 + Forced_2$$

where $Forced_1$ represents the index of core forms of forced labour and $Forced_2$ shows the index of all forms of forced labour. Then, Bazillier obtains values between 0 and 7.5 and proposes the following classification: FL = 1 for countries with $FL_{Raw} = 0$; FL = 2 for countries with FL_{Raw} between 0.5 and 1; FL = 3 for countries with FL_{Raw} between 1 and 2; FL = 4 for countries with FL_{Raw} between 2.5 and 3.5, and FL = 5 for countries with $FL_{Raw} > 3.5$.

The data for child labour and unemployment rates for female and male have been obtained from World Bank (2005), World Development Indicators, Data on CD-ROM and Key Indicators of the Labour Market (KILM) programme (2007), 5th edition software, respectively.

The 37 evaluation criteria are based on the Freedom of Association and Protection of the Right to Organise (Conv. 87) and the Right to Organise and Collective Bargaining (Conv. 98) and related ILO jurisprudence, as well as violations observed in information sources (International Confederation of Free Trade Unions (ICFTU), Annual Survey of Trade Union Rights for 1996, the US State Department, Country Reports on Human Rights Practices, ILO, Report of the Committee on Freedom of Association). The 37 criteria and the method used to construct the weighted union rights index can be found in Kucera (2004). Kucera's union rights index is based on the information sources that provide systematic and detailed information on trade union rights that is consistent both across countries and over time, therefore this index is more reliable than those constructed by the OECD (2001) and the NGO Freedom House.

The information related to the number of ILO conventions on core labour standards that have been ratified by the country has been obtained from www.ilo.org/ilolex/.

Appendix C: List of Countries, Testing for Endogeneity and Estimation Results

Note 1: Argentina, Bahamas, Bangladesh, Barbados, Bolivia, Botswana, Brazil, Chile, China, Colombia, Costa Rica, Cyprus, Ecuador, Egypt, Ethiopia, Fiji, Guatemala, Honduras, Hong Kong, India, Indonesia, Iran, Israel, Jamaica, Jordan, Kenya, Kuwait, Malaysia, Malta, Mauritius, Morocco, Niger, Pakistan, Panama, Papua New Guinea, Peru, Philippines, Singapore, South Africa, Sri Lanka, Swaziland, Syria, Tanzania, Thailand, Uruguay, Venezuela, Zambia, Zimbabwe.

Note 2: Clearly, other labour standards like working conditions (i.e., wages, working hours) are generally determined endogenously. It is likely that the same exists for core labour standards. Although legislation and enforcement of core labour standards are more easily set by national governments, they could still determine endogenously.

The problem of endogeneity can create a bias in the estimation and has to be considered in the econometric methodology. This problem can be solved by using the Two-Stage Least Square (TSLS) method if we have appropriate instruments for labour standards. The literature has suggested some policy variables as instruments, including democracy, competitiveness of executive recruitment, and operational independence of chief executive (Carothers, 1994; Staerke et al., 1999¹²; ILO, 1998¹³; Bazillier, 2008).

We employed Institutionalised Democracy, Openness of Executive Recruitment, and Executive Constraints (Decision Rules) (Gleditsch, 2007¹⁴) as instruments for labour standard variables in the base model (Model 7). After estimating the base model by TSLS method, the Hausman test suggests that the null hypothesis of the OLS estimator is consistent and efficient and thus cannot be rejected. Therefore, we can rely on the results of the OLS estimator instead of TSLS with polity variables as instruments. This implies that although the model might suffer from endogeneity, the TSLS estimator with available instruments could not provide any more consistent results than the OLS estimator.

¹² Staerke et al. (1999) argue that the members of nondemocratic countries are viewed as accepting more human rights violations than members of democratic countries because of the pervasive impact of information on political judgments on the population.

¹³ ILO (1998) observes that “the expansion of the democracy and of the free market economy has generally improved the context in which freedom of association principles are applied”.

¹⁴ All data have been obtained from Gleditsch (2007).

Table A1: *Labour Standards in US and EU Preferential Trade Agreements*

| AGREEMENT | Labour Standards in the Agreement | Labour Standards in a Side Agreement | Specifically includes Agriculture | Specifically excludes Agriculture | Does not Specifically Mention Agriculture | Summary of Provisions |
|--|-----------------------------------|--------------------------------------|-----------------------------------|-----------------------------------|---|---|
| <i>US Free Trade Agreements</i> | | | | | | |
| Australia-US Free Trade Agreement January 1, 2005 | Yes | - | No | No | Yes | ILO core labour standards (but does not make reference to discrimination based on gender) and includes a reference to acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health. |
| Bahrain-US Free Trade Agreement August 2006 | Yes | - | No | No | Yes | ILO core labour standards and includes a reference to acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health. And procedures for admitting, regulating, and protecting foreign workers. |

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| The US-Dominican Republic-Central America Free Trade Agreement August 5, 2004 | Yes | - | No | No | Yes | ILO core labour standards (but does not make reference to discrimination based on gender) and includes a reference to acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health. |
| The US-Chile Free Trade Agreement January 1, 2004 | Yes | - | No | No | Yes | ILO core labour standards (but does not make reference to discrimination based on gender) and includes a reference to acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health. |
| The US-Colombia Free Trade Agreement Signed on November 22, 2006 | Yes | - | No | No | Yes | ILO core labour standards and includes a reference to acceptable conditions of work with respect to minimum wages, hours of work, and occupational |

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|--|-----|---|----|----|-----|---|
| | | | | | | safety and health. |
| The US-Jordan Free Trade Agreement December 17, 2001 | Yes | - | No | No | Yes | ILO core labour standards (but does not make reference to discrimination based on gender) and includes a reference to acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health. |
| The US-Korea Free Trade Agreement Signed on June 30, 2007 | Yes | - | No | No | Yes | ILO core labour standards and includes a reference to acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health. |
| The US-Morocco Free Trade Agreement January 1, 2006 | Yes | - | No | No | Yes | ILO core labour standards (but does not make reference to discrimination based on gender) and includes a reference to acceptable conditions of work with respect to minimum wages, hours of work, and occupational |

| | | | | | | |
|---|-----|---|----|----|-----|---|
| | | | | | | safety and health. |
| The North American Free Trade Agreement January 1, 1994 | No | Yes The North American Agreement on Labour Cooperation (NAALC) September 14, 1993 | No | No | Yes | ILO core labour standards and includes a reference to acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health. |
| The US-Oman Free Trade Agreement January 1, 2009 | Yes | - | No | No | Yes | ILO core labour standards (but does not make reference to discrimination based on gender) and includes a reference to acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health. |
| The US-Panama Free Trade Agreement Signed on June 28, 2007 | Yes | - | No | No | Yes | ILO core labour standards and includes a reference to acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health. |

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|--|-----|---|----|----|-----|---|
| | | | | | | |
| The US-Peru Free Trade Agreement February 1, 2009 | Yes | - | No | No | Yes | ILO core labour standards and includes a reference to acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health. |
| The US-Singapore Free Trade Agreement January 1, 2004 | Yes | - | No | No | Yes | ILO core labour standards (but does not make reference to discrimination based on gender) and includes a reference to acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health. |
| <i>US Non-Reciprocal Preferential Trading Arrangements</i> | | | | | | |
| US Generalised Systems of Preference (US-GSP) was instituted on January 1, 1976, by the Trade Act of 1974 With developing countries | Yes | - | No | No | Yes | ILO core labour standards (but does not make reference to discrimination based on gender) and includes a reference to acceptable conditions |

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|---|----------------------|---|----|----|-----|---|
| | | | | | | of work with respect to minimum wages, hours of work, and occupational safety and health. |
| The African Growth and Opportunity Act – 2000 (AGOA) | Yes | - | No | No | Yes | ILO core labour standards (but does not make reference to discrimination based on gender) and includes a reference to acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health. |
| <i>EU Free Trade Agreements</i> | | | | | | |
| Europe Agreements (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia) | Yes (not explicitly) | - | No | No | Yes | They have specific provisions which allows Parties to prohibit or restrict imports and exports of goods in transit justified on grounds of public morality. |

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|--|----------------------|----|----|----|-----|--|
| | | | | | | |
| Euro-Mediterranean (Tunisia, Israel, Morocco, Jordan, Egypt, Algeria and Lebanon) Agreements | Yes (not explicitly) | - | No | No | Yes | There are specific provisions relating to respect for the democratic principles and fundamental human rights established by the Universal Declaration of Human Rights. They have specific provisions which allows Parties to prohibit or restrict imports and exports of goods in transit justified on grounds of public morality. |
| The EC- 'Overseas Countries and Territories' (OCT/PTOM II) Free Trade Agreement | Yes | - | No | No | Yes | There are specific provisions relating to respect for the democratic principles and fundamental human rights established by the Universal Declaration of Human Rights. |
| The EC-South Africa Free Trade Agreement January 2000 | No | No | - | - | - | - |

| | | | | | | |
|--|-----|----|----|----|-----|---------------------------|
| The EC-Mexico Free Trade Agreement July 2000 | No | No | - | - | - | - |
| The EC-Chile Free Trade Agreement February 2003 | Yes | - | No | No | Yes | ILO core labour standards |
| <i>EU Non-Reciprocal Preferential Trading Arrangements</i> | | | | | | |
| EU's Generalised System of Preferences (EU-GSP) first introduced in 1971 and recently renegotiated 1 January 2002 With its colonies | Yes | - | No | No | Yes | ILO core labour standards |
| Cotonou Agreement with ACP (African-Caribbean-Pacific) States 2000 With its colonies and gives additional trade preferences | Yes | - | No | No | Yes | ILO core labour standards |

Table A2: Comparative Advantage and Core Labour Standards

| Independent Variables | Dependent Variable: Ln (Unskilled labour-intensive exports) | | | | | | | |
|--|---|----------------------|----------------------|----------------------|----------------------|-------------------|---------------------|---------------------|
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 | Model 8 |
| Ln(exchange rate) | -0.145 (-1.61) | -0.112 (-1.32) | -0.135 (-1.53) | -0.145 (-1.62) | -0.121 (-1.38) | -0.163 (-1.73) | -0.126 (-1.48) | -0.084 (-1.06) |
| Ln(GDP) | 1.099** (6.39) | 0.927** (5.08) | 1.127** (5.80) | 1.100** (6.29) | 0.957** (5.86) | 0.931** (4.73) | 0.592** (2.72) | 0.821** (4.75) |
| Ln(the total labour force/total land area) | 0.525** (3.48) | 0.412** (2.52) | 0.544** (3.38) | 0.525** (3.45) | 0.653** (4.82) | 0.504** (3.30) | 0.495** (2.87) | 0.505** (3.63) |
| Forced labour | | 0.435** (2.88) | | | | | 0.417** (2.43) | 0.369** (2.63) |
| Child labour | | | 0.042 (0.45) | | | | -0.044 (-0.48) | |
| Female Discrimination | | | | -0.0009 (-0.05) | | | -0.007 (-0.45) | |
| Union rights | | | | | -0.060** (-4.10) | | -0.057** (-4.31) | -0.051** (-3.82) |
| Ratification of ILO conventions | | | | | | -0.480 (-1.66) | -0.531 (-1.86) | |
| Constant | -16.610** (-3.93) | -12.829** (-2.83) | -17.524** (-3.43) | -16.651** (-3.83) | -13.304** (-3.26) | -9.389 (-1.56) | -1.217 (-0.18) | -9.717* (-2.26) |
| Prob-F | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| R-squared | 0.62 | 0.65 | 0.62 | 0.62 | 0.67 | 0.64 | 0.72 | 0.70 |
| Number of observations | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 |

t-statistics are in parenthesis. *-Significant at %5 level. **- Significant at %1 level.

Because of suspicion of heteroskedasticity, the robust estimation results have been reported.

In model 1, table A2, only the economic variables (exchange rate, GDP, and labour endowment) have been included, while in models 2–6 each measure of the labour standards has been added separately to our explanatory variables. In model 7 (the base model) all explanatory variables have been included. Finally, Model 8 reports the results of the model after insignificant variables have been omitted.