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Oslington, Paul

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TRADE AND THE DISTRIBUTIONAL POLITICS OF INTERNATIONAL LABOUR STANDARDS

Paul Oslington*

*Correspondence to Paul Oslington, School of Business, University of New South Wales/Australian Defence Force Academy, Northcott Drive, Canberra 2602, Australia.

Email: p.oslington@adfa.edu.au   Phone: 61-2-6268 8720

Web: http://www.unsw.adfa.edu.au/sbus/staff_cvs/about_paul_osling.html

ABSTRACT

This paper constructs a simple general equilibrium model of the trade and distributional effects of spreading advanced country international labour standards to developing countries. Labour standards (including minimum safety requirements, prohibition of prison and child labour, and rights to unionise) are represented as a floor to the cost of employing labour.   The model shows how the spread of standards affects the terms of trade and pattern of international specialisation, and can shift unskilled unemployment from advanced to developing countries, redistribute income among groups of factor owners in different countries.   Political support for labour standards is predicted to come from a coalition of advanced country unskilled workers with insecure jobs and the secure unskilled in developing countries. Opposition is predicted from owners of other factors. Overall country lobbying positions in international forums will depend on the relative strengths of the groups within the country.

1) INTRODUCTION

The relationship between international labour standards and trade has been vexed in recent years. At the World Trade Organisation (WTO) there have been several strong pushes to include labour standards in multilateral trade negotiations, notably at the Singapore ministerial in 1996 and the ill-fated 1999 Seattle meetings. While linking trade and labour standards seems off the current WTO agenda, recent regional and bilateral trade agreements have included labour standards, for instance the NAFTA side agreement, US-Chile and US-Singapore deals. In fact under the US Free Trade Act of 2002 all future trade agreements must consider labour standards. Labour standards have become more important in Europe also with many new binding EC directives on occupational health and safety, discrimination etc combined with the growing size of the EC. Linking trade and labour standards raises many questions, including whether trade with countries with lower standards is "fair", whether any restrictions on "unfair" trade are appropriate, whether different countries standards should be harmonized, and what are appropriate mechanisms for setting and enforcing labour standards.

The view we take of many of these questions depends our understanding of the effects of international labour standards on incomes of different types of countries and groups within countries. However, despite the prominence of international labour standards on the political agenda, there has been surprisingly little formal modelling. General discussions of international labour standards include Bhagwati and Hudec (1996), Lee (1997), Maskus (1997), Brown (2001), Elliott and Freeman (2003), and Basu (2003). Formal general equilibrium modelling has been carried out in a pioneering paper by Brown, Deardorff and Stern (1996) but there is not yet a consensus about the appropriate way to represent labour standards, nor about their effects on the incomes of various countries and groups within countries.

This paper constructs a simple general equilibrium trade model which captures some important aspects of the spread of labour standards. It differs from existing models in the way the standard is represented, in dealing with the unemployment consequences of labour standards, and in considering the effect of the spread of labour standards on the pattern of international specialisation. Section two will discuss these modelling issues, section three describes the equilibrium in the model before the imposition of the standard, and sections four to six derive effects and discuss the politics of the spread of standards.

2) MODELLING ISSUES

Some issues need to be resolved when modelling the spread of labour standards. The first is the representation of the standard. Maskus (1997) and Brown, Deardorff and Stern (1996 p236-44) suggest particular market failures the standard might be correcting. Brown, Deardorff and Stern (1996 p245-254) then go on to represent standards as an activity which draws resources away from other activities, shrinking the production possibility frontier, but contributing to welfare in other indirect ways. A slightly different specification has the standard increasing costs in a particular industry, with the same indirect contribution to welfare. Under this approach to modelling the standard results hinge on the factor intensity of the standard.

In the present paper the standard will be represented as an exogenous floor to the cost of employing labour that applies to all industries. This means labour standards push up the cost to firms of employing labour to some floor level, and that the standard only affects labour which would otherwise have cost firms less than the floor. The benefit of the standard to workers is assumed to be equal to the extra cost to firms of meeting the standard, and goes directly to the workers concerned. Specifying the standard this way avoids the issue of valuing indirect benefits to society of standards. An important consequence of this representing the standard as wage floor is that it will generate unemployment in the same way as any other wage floor, so that unemployment consequences of labour standards can be considered. Some actual labour standards correspond to a wage floor quite closely (eg minimum safety standards, prohibitions of forced labour and child labour, provisions that support unionization) while others fit less well (eg restrictions on hours worked), but the same is true of the other ways of modeling standards in the literature.

The second issue to be resolved is the type of model in which to embed the chosen representation of the labour standard. General equilibrium trade models seem particularly appropriate as they consider linkages between countries, as well as between factor and goods markets. Several standard competitive general equilibrium models of trading economies were used by Brown, Deardorff and Stern (1996) and a similar framework will be used here. Within competitive general equilibrium trade modelling there are many important choices about numbers of goods and factors, patterns of specialisation, and whether to include non-traded goods and so forth. A crucial question is whether to build factor price equalisation into the model, and while useful simplification for some purposes, it is not appropriate here as effects of the spread of labour standards on different countries wage levels is a central issue.

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3) EQUILIBRIUM BEFORE THE SPREAD OF THE STANDARD

Consider a simple general equilibrium trade model with two goods X and Y, with X the numeraire so that relative goods prices are represented by P^Y. Factors of production are labour L and skill $H^{[1]}$, with prices w and h. Good X is assumed relatively skill intensive, and Y labour intensive. There are two countries, developing D and advanced A, with developing countries assumed to be relatively well endowed with unskilled labour. Production technology is concave and constant returns to scale, and identical in all countries. Throughout it will be assumed that positive quantities of both goods are consumed in both countries.

An initial equilibrium before the spread of labour standards is represented in figure $1^{[2]}$. Here the advanced country has a labour standard and the developing country does not. Unit cost frontiers, apply to both countries since technology is the same in both countries. Factor endowments and labour standards differ in the two countries so they produce different sets of goods and have different factor prices. The developing countries have factor endowments E^D and equilibrium factor prices w^D and h^D. Equilibrium outputs of the two goods in the developing countries are Y^D and X^D. The advanced countries labour standard w̃ fixes their cost of unskilled labour above the cost of unskilled labour in developing countries. At w̃ advanced country firms in the unskilled labour intensive Y industry make less than zero profits and hence there is no active Y industry in the advanced countries$^{[3]}$. The zero profit condition in the X industry sets the price of skilled labour in the advanced countries at $h^{A\ [4]}$. Equilibrium output of the advanced countries is X^A, and with their endowment E^A there is unskilled unemployment of U^A in the advanced countries.

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[1] The second factor is labelled skill, but can be interpreted as an aggregate of other factors (e.g. skilled labour, capital) besides unskilled labour for which the standard binds.

[2] The unit cost diagram is described in Woodland (1982). Unit cost frontiers for the two goods which show combinations of factor prices which equate the cost of producing a unit of the good with the price of the good. Within the diagram factor usage vectors are drawn in factor quantity space with the origin at equilibrium factor prices. Their slopes of these vectors represents factor proportions of the goods and lengths the outputs of the goods.

[3] The necessity of an industry ceasing production in these circumstances was demonstrated by Brecher (1974)

[4] A consequence of the assumptions of identical technology and that initially the minimum wage only applies in the advanced country is that initially the skilled wage is higher in the developing than the advanced country. This unrealistic feature could be avoided by assuming the advanced countries have a factor neutral technological superiority in all industries. Under this assumption figure 1 would be the same as shown, except the scale on the factor price axes for the advanced country would be adjusted by the factor superiority, allowing the skilled wage to be higher in the advanced country than the developing country skilled wage.

4) OUTPUT AND EMPLOYMENT AFTER THE SPREAD OF LABOUR STANDARDS

The effect of extending the labour standard from the advanced to the developing countries is shown in figure 2.   The standard raises the cost of unskilled labour for firms in developing countries to$\tilde{w}$, bringing factor prices into line with the advanced countries. The increase in costs in the labour intensive Y industry in the developing countries pushes up P^Y until the unit cost frontier for Y cuts the X frontier at $\tilde{w}$.   This higher P^Y allows firms in the advanced countries to produce the previously unprofitable good Y, so that advanced country outputs become X^A and Y^A. Unskilled unemployment in the advanced countries is eliminated as a consequence of the labour intensive good Y now being produced alongside good X. In the developing countries the rise in the relative price of good Y pulls all the countries' resources into the Y industry, wiping out the now unprofitable X industry. Equilibrium output falls to Y^D, but this is insufficient to absorb the developing countries endowment of unskilled labour, leaving U^D unemployment.

Trade effects of extending the labour standard follow from these output effects. The higher P^Y switches demand away from good Y, and this combined with the advanced countries now producing Y, implies that advanced countries' imports of Y fall. The fall is not so severe as to reverse the pattern of trade – the advanced countries remain exporters of the skill intensive good X, and the developing countries remain exporters of the unskilled intensive good Y.

The most important point is the way spreading the labour standard to the developing countries shifts unskilled unemployment from the advanced to the developing countries, by pushing up the world price of the unskilled labour intensive good and changing the pattern of specialisation. Spreading the labour standard to the developing countries allows the advanced countries to capture more of the world market for the unskilled labour intensive product, on which depend the fortunes of the countries unskilled workforces[5].

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[5] The advanced countries harmonising labour standards at advanced country levels has a similar effect to the advanced countries imposing a tariff on their imports of the unskilled intensive product. The price of the unskilled labour intensive product rises and unskilled employment rises in the advanced countries. There is no tariff revenue though for the advanced countries from the labour standard.

5) DISTRIBUTIONAL EFFECTS AND THE POLITICS OF LABOUR STANDARDS

Consider the effects on owners of different factors of production within the countries.

(i)   Skilled Labour in the Advanced Countries: Lose, as the skilled wage is unchanged and they face a higher P^Y.

(ii)   Unskilled Labour in the Advanced Countries: Lose from the higher P^Y with an unchanged wage. The unskilled who move into employment though are the big gainers from spreading labour standards.

(iii)   Skilled Labour in the Developing Countries: Lose, both through the higher P^Y, and the fall in the skilled wage.

(iv)   Unskilled Labour in the Developing Countries: The labour standard benefits the unskilled who remain in employment, although some of these gains are eroded by the higher P^Y. Unskilled individuals who lose their jobs as a result of the spread of the labour standard are the big losers.

Does this match up with the political debate over labour standards? We do see organized unskilled labour in the advanced countries supporting the extension of labour standards to developing countries, with other groups in the advanced countries lukewarm or opposed. If these organised unskilled are at the front of job queues and those who benefit from the rise in unskilled employment then the results of the paper match the politics nicely.   In the developing countries situation picture is more complex. The model predicts support for the extension of labour standards from the unskilled with secure jobs, and opposition from skilled labour (along with capital and other factors of production), as well from as unskilled workers at the end of job queues who are at risk of losing their jobs. This again is consistent with the politics of labour standards within many developing countries, especially conflict between labour organisations representing the secure unskilled and owners of skilled labour and capital.

The position of a country in international forums on labour standards will depend on the relative size and political power of the different groups of factor owners within the country. The US enthusiasm for extending labour standards through trade agreements during the Clinton years would be explained by the greater influence of organised labour during this period. In developing countries the skilled labour and capital who lose from the spread of standards tend to be politically dominant, so that most developing countries would oppose harmonisation. The developing countries predicted to support harmonisation of standards would be those where the unskilled workers with secure jobs who gain are numerous or unusually political powerful. The insecure unskilled who are the big losers in developing countries rarely have much voice.

What is particularly interesting is the coincidence of interests of the unskilled who are jobless or hold insecure jobs in advanced countries and unskilled with secure jobs in developing countries. The groups pushing hardest for labour standards are international labour organisations, whose constituency corresponds strikingly with these groups who gain.

6) WELFARE EFFECTS

The main focus of the paper has been the distributional impacts as these link up with the politics of labour standards. Some brief remarks about welfare, defined here as the utility of a representative individual who owns factors in proportion to endowments, and their endowment of unskilled unemployed in proportion to the unemployment rate. From a world welfare point of view the spread of the labour standard will be unambiguously welfare diminishing, like the introduction of any other distortion into a previous undistorted economy. The welfare impact on the advanced countries will depend on the relative sizes of the loss through higher P^Y and the gain through lower unemployment. If the unemployment effects dominate and advanced country welfare rises, then developing country welfare must fall if world welfare is to fall. This is the case even though the price of its export good P^Y rises.

7) CONCLUSIONS

The paper has built a simple general equilibrium model of labour standards in a trading world and shown how spreading labour standards can hurt and help different groups in advanced and developing countries. These predicted effects on the groups correspond nicely to the political positions of the groups. The protectionist aspect of standards has been highlighted, but there are a number of important caveats. Firstly the model has been sharply constructed to emphasise effects on the terms of trade and patterns of specialisation. More general models yield broadly similar but less sharp results. Secondly, the standard has been introduced into a previously undistorted economy, and the conclusions would be different if the standard is interacts with certain other distortions, for example monopsony in developing country labour markets as modelled by Naghavi (2003). Thirdly, imperfect coverage and enforcement of the world labour standard would qualify the results. Given all these qualifications the results offer empirical researchers a number of predictions to formally test about the political positions of different groups and countries.

REFERENCES

Basu, K., Ed. (2003). *International Labor Standards: History, Theory, and Policy Options*. Oxford, Blackwell.

Bhagwati, J. and R. E. Hudec, Eds. (1996). *Fair Trade and Harmonization: Prerequisites for Free Trade?* Massachusetts, MIT Press.

Brecher, R. A. (1974). "Minimum Wage Rates and the Pure Theory of International Trade." *Quarterly Journal of Economics* 88: 98-116.

Brown, D. K. (2001). "Labor Standards: Where Do They Belong on the International Trade Agenda?" *Journal of Economic Perspectives* 15(3): 89-112.

Brown, D. K., A. V. Deardorff and R. M. Stern (1996). "International Labour Standards and Trade: A Theoretical Analysis" in *Fair Trade and Harmonization: Prerequisites for Free Trade?* edited by Bhagwati and Hudec. Massachusetts, MIT Press.

Elliott, K. A. and R. B. Freeman (2003). *Can Labor Standards Improve under Globalization?* Washington, D.C., Institute for International Economics.

Lee, E. (1997). "Globalization and Labour Standards: A Review of Issues." *International Labour Review* 136(2): 173-89.

Maskus, K. E. (1997). "Should Core Labor Standards Be Imposed through International Trade Policy." *World Bank Research Working Paper 1817*.

Naghavi, A. J. (2003). *Asymmetric Labor Markets and the Location of Firms: Are Multinationals Attracted to Weak Labor Standards*. University College Dublin.

Woodland, A. D. (1982). *International Trade and Resource Allocation* Amsterdam, North Holland.
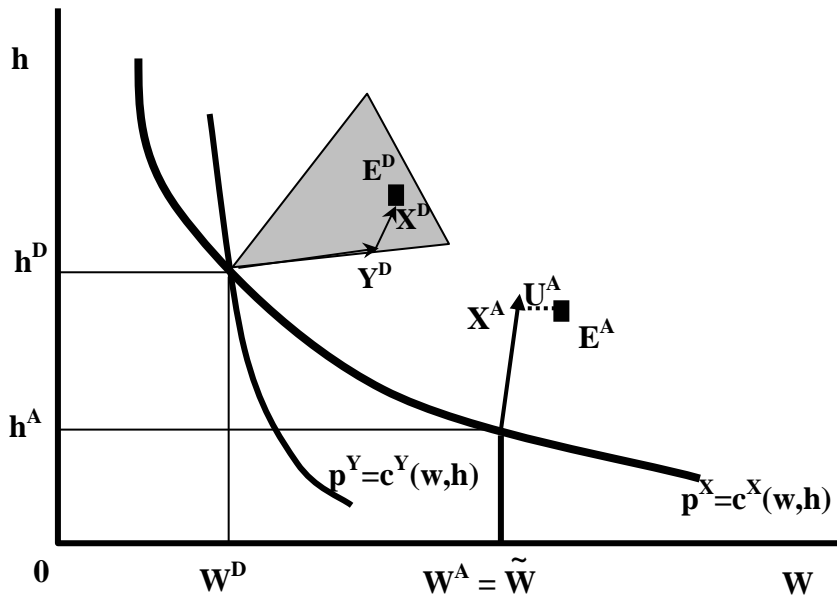
Figure 1-Before Spreading of the Labour Standard

Figure 2-After Spreading of the Labour Standard