International Labor Standards: From Theory to Policy*

Nirvikar Singh
Department of Economics
University of California, Santa Cruz
Santa Cruz, CA 95064

December 2003

Abstract

This paper reexamines the theoretical literature on international labor standards, providing an overview of its main analytical arguments. Among the situations in which a case for labor standards may arise are imperfections in labor markets, market power effects in international trade, and concerns that consumers may have about the working conditions or rights that workers enjoy. The paper emphasizes the importance of making clear the value judgments being used, and discusses the different institutional issues that may arise in considering the implementation of labor standards. While there are contexts in which promoting labor standards through some form of collective action is beneficial, such policies may best be incorporated into a broader perspective on well-being, especially in the case of the poor in developing countries. Finally, the theoretical survey suggests that tying international labor standards to trade through the WTO may not be the best institutional approach – weaker policy implementation through the ILO may be more acceptable to a broad range of countries, while new institutional structures for developing country consensus may ultimately be what is needed.

* This paper summarizes and extends ideas developed as part of a project on international labor standards, initiated and funded by the Swedish Ministry of Foreign Affairs and the Expert Group on Development Issues, Sweden. That work is reported in Singh (2002). I am grateful to Kaushik Basu, Tore Ellingsen, Henrik Horn, Lisa Román, and T.N. Srinivasan for helpful comments and discussions. However, I am solely responsible for all errors and omissions, and the views expressed here are not those of any of the individuals or organizations mentioned.

International Labor Standards: From Theory to Policy

Nirvikar Singh
Department of Economics
University of California, Santa Cruz
Santa Cruz, CA 95064

1. Introduction

What is the justification for international labor standards that emerges from economic theory? In particular, can international labor standards benefit the poor, particularly in developing countries? What are the policy issues that can arise in implementing international labor standards, and what are the appropriate institutions required? This paper seeks to examine these questions, and possible answers. We give an overview of the analytical framework and main arguments provided in the theoretical literature on international labor standards. We emphasize the importance of making clear the value judgments that are being used, and discuss the different institutional issues that may arise in considering the implementation of labor standards. While there are contexts in which promoting labor standards through some form of collective action is beneficial, we argue that such policies ought to be incorporated into a broader perspective on well-being, and a package of policies that can promote the well-being of the poor.

Much of the existing literature on international labor standards focuses on the issue of the appropriateness of linking labor standards with trade.[1] This paper goes back to basics, in some respects, and reviews some of the key economic arguments in favor of labor standards. We emphasize the welfare judgments that are involved, and some of the political economy or collective action issues that arise in considering international labor standards. Perhaps most importantly, we tie the issue of international labor standards to broader perspectives on development and issues of helping the poor.

[1] Excellent recent surveys include those of Brown, Deardorff and Stern (1996), Golub (1997), and Maskus (1997).

The structure of the paper is as follows. In Section 2, we discuss some of the practical ways in which concerns about workers' rights and working conditions have been formulated for policy discussion. We highlight the importance of value judgments in this sphere. Because rights are an important component of how labor standards are framed, we go on to discuss how preference rankings of rights as well as outcomes can be combined. This approach helps in bringing out the potential conflicts or tradeoffs between outcomes and processes, and therefore in evaluating the impacts of labor standards.

In Section 3, we examine possible labor market problems, their consequences in terms of worker welfare, their evaluation in terms of labor market processes, and what the impacts might be of different types of labor standards policy interventions. We consider market power, asymmetric information, and other market imperfections. In Section 4, we consider various economic models that place international and domestic labor standards in the context of the world economy, including the cases of small and large open economies. We examine distributional impacts of trade and international coordination problems, typically clustered under the heading of "races to the bottom".

In Section 5, we examine the questions of "who decides and how?" with respect to international labor standards. We begin with the possibility that consumers in one country may care about the methods used to produce imported goods that they consume. We argue that such consumers ought to be willing to pay more for products that are made according to "acceptable" labor standards, and we discuss the implementation problems that can arise in this case. When concerns over another country's working conditions and worker rights are not tied to consumption of imports there is a public good problem, and we examine collective action problems and possible institutional responses.

Finally, in Section 6, we consider the impact of international labor standards on the poor. We examine the case that international labor standards can end up hurting those they are supposed to help, unless they are part of a broader policy package. We link this to an argument that the proper concern, even where processes matter as well as outcomes, is with a more basic set of capabilities and rights than is typically encompassed by proponents of international labor standards. We argue that policies that promote basic nutrition and health, and broader access to education and credit are likely to help growth, as well as having intrinsic benefits. Labor standards may well be a component of such policies, but must be implemented in context. Section 7 summarizes our main conclusions in the context of current debates on international policy.

2. Formulating Labor Standards

Labor standards can be put into two broad categories. The first specifies standards as procedural rights, emphasizing that individuals or groups may do or not do certain things without penalty. The second defines standards in terms of outcomes, specifying that individuals or groups should be able to enjoy minimum levels of income or consumption in particular dimensions. These two categories overlap. They are also connected respectively to two somewhat different ethical views, which can be (somewhat simplistically) characterized as the "rights" and "welfarist" perspectives. We shall discuss these different perspectives after providing some practical examples of labor standards.[2]

2.1 Examples of Current Labor Standards

Portes (1990) provides a classification of different kinds of labor standards, which is summarized in Table 1[3]. The first category encompasses fundamental human rights, as recognized in various UN declarations. The second category, that of civic rights, deals with workers' positions with respect to their employers. In some respects, these rights are derived from basic rights (e.g., protection from physical coercion is the basis for free association and expression), and are related by involving some aspect of free choice. However, in practice the boundaries of these civic rights are often much less clear than those of basic rights. For example, it may be considered quite acceptable that employers are able to fire and replace striking workers, and this places practical limits on the right to

[2] We shall not go at all into the history and evolution of current formulations of international labor standards, for which see Engerman (2002).
[3] The table is adapted from Maskus, 1997.

collective representation. Hence, almost from the start, we begin to encounter practical problems with what, at first sight, seem to be very straightforward and obvious virtues.

Survival and security rights are the third and fourth categories of rights listed in Table 1. They relate to conditions of work that affect worker well-being, but do not necessarily directly impact freedom of choice. One might argue that being fully informed about job hazards (Fields, 1996) is as fundamental a right as those in the first two categories, and, indeed, a choice that is uninformed as a result of deliberate concealment of information is hardly a free choice. Note, also, that the standards in the third and fourth categories include economic outcomes pertaining to working conditions, such as "a living wage", "limited hours of work" and various kinds of compensation, but they are couched in terms of the language of rights.

Table 1: Labor Standards as Rights

Type	**Examples**
Basic Rights	Right against involuntary servitude Right against physical coercion Right to compete without discrimination Right against exploitative use of child labor
Civic Rights	Right to free association Right to collective representation Right to free expression of grievances
Survival Rights	Right to a living wage Right to full information about hazards of job conditions Right to accident compensation Right to limited hours of work
Security Rights	Right against arbitrary dismissal Right to retirement compensation Right to survivors' compensation

Source: Maskus (1997), Portes (1990)

Perhaps the best-known expression of a fundamental subset of labor standards is the International Labour Organisation's (ILO) list of fundamental principles and rights, laid out in its Declaration (ILO, 1998; OECD, 2000). The core of these standards is:

1. Freedom of association and the effective recognition of the right to collective bargaining
2. Elimination of all forms of forced or compulsory labor
3. The effective abolition of child labor
4. Elimination of discrimination in respect of employment and occupation.

The Organisation for Economic Cooperation and Development's (OECD, 1996) set of core labor standards (CLS), also well known, corresponds very closely with the ILO core standards. The OECD standards are summarized as follows:

1. Prohibition of slavery and compulsory labor, such as bonded labor
2. Nondiscrimination in employment among genders, ethnic groups, etc.
3. Prohibition of exploitative forms of child labor
4. Freedom of association (the right to organize workers' groups)
5. Freedom of collective bargaining over working conditions

We can see that these lists correspond quite closely to the first two categories in Table 1. The second pair of categories in Table 1 is totally omitted, however, from the ILO and OECD CLS lists.

In contrast, the United States' formulation of labor standards, as expressed in various legislation related to international trade, gives working conditions a more prominent role. The following condenses a more detailed list provided in the appendix of Brown, Deardorff and Stern (1996)[4]:

1. Freedom of association
2. The right to organize and bargain collectively
3. Prohibition on forced or compulsory labor
4. A minimum age for the employment of children

[4] This is adapted from Golub (1997).

5. Guarantee of acceptable working conditions (possibly including maximum hours per week, a weekly rest period, limits to work by young persons, a minimum wage, minimum workplace safety and health standards, and elimination of employment discrimination)

Finally, Engerman (2002) provides a categorization of labor standards that very much takes an economist's perspective. He divides standards into three groups:

1. Labor market conditions, such as wages and hours, with different provisions according to age and gender
2. Working conditions pertaining to safety and sanitation
3. The general range of arrangements between labor and management, including general rights as well as some contractual arrangements

Engerman's third category includes most of the general rights that are spelled out in detail in the OECD and US lists.

The ILO, OECD and US lists are appealing in terms of the ideals that they express. Both lists are dominated by considerations of rights and processes, though the working conditions category in the US list includes a mixture of process and outcome concerns. More recently, while the US has still failed to ratify most of the ILO fundamental conventions that underlie the CLS (ILO, 1998; OECD, 2000), it has endorsed the ILO/OECD list, leaving out working conditions, except for nondiscrimination.

As noted earlier, the details can still be quite problematic. Conflicts can arise between different ideals. Defining the practical limits of various rights can be extremely difficult. Since actual policies will require working out such details, it is important to examine the differing justifications for various international labor standards, as well as their potential impacts. It is not clear, for example, that even the two lists combined cover all fundamental issues. For example, neither list explicitly mentions the right to full information about job hazards, which Fields (1996) has argued is a fundamental right.

2.2 Rights and Welfare

We next discuss issues of outcome versus process-based standards, and rights-based versus welfarist ethical perspectives in greater detail. We begin with a discussion of rights and welfare.[5] Standard welfare economics focuses only on the consequences of institutions and policy for individuals who make up a society (however that society happens to be defined). This 'consequentialist' approach has two components. First, the welfare of individuals is typically taken to depend only on their consumption of material goods and services. Individuals are assumed to have rankings over all different possible bundles of such goods and services (e.g., 3 lb. of rice for 4 hours of work in a day is preferred to 2 lb. of rice for 3 hours of work). These rankings, if well behaved enough, can be replaced by 'utility functions', which are simply numerical indices of preference. Consequentialism can be somewhat broader, allowing one individual's utility to depend on the outcomes of all members of society.

The second aspect of a consequentialist approach refers to the evaluation of the welfare of members of a society in the aggregate. Again, a consequentialist is only concerned with the preference rankings or utility functions of the individual members of society in evaluating aggregate welfare. The application of consequentialism to such concerns as evaluating individual welfare and the overall welfare of a group can be termed "welfarism."

To put the above ideas in context, consider the various rights listed earlier when we gave examples of international labor standards. For example, the right to free association is included as a fundamental or core standard. A consequentialist or welfarist position would be that such a right should not matter in itself, but only if it affects the outcomes for the individual. These may be explicitly material, e.g., if they enable the individual to bargain more effectively with an employer, or gather information about job safety from fellow workers. They may also be purely "psychological", such as the pleasure a worker may derive from exchanging banter with colleagues. Ultimately what

[5] Our treatment of this deep area is brief. Selected works that provide more references to the literature include Pattanaik (1999), Sen (1985a, b) and Suzumura (1999).

matters is if the worker through free association is thereby able to make choices that increase her or his utility.

Lindbeck (1988) and Sen (1997) have articulated an alternative view, that the opportunities available to an individual matter, beyond consideration of the value of the best opportunities. In other words, the freedom to choose from a bigger set has intrinsic value. This concern with opportunities, however, seems to mix the general benefits of choice with the issue of the size of the choice set. Being freer to choose, even actions that are harmful to oneself, can instead be viewed as one kind of procedural consideration. It is procedural matters, therefore, that are central to the "rights" perspective. Aside from freedom, fairness may be the other broad category of procedural considerations that matters.

At this point, we may note that the connection between process-based labor standards and rights-based ethical approaches is close but not perfect. A procedural standard may be justified purely because we care about the right to certain kinds of freedom and fairness, or it may be justified on outcome-based grounds. For example, in the former case, the right to be fully informed about job risks is desirable irrespective of whether it has any positive or negative impact on the worker's behavior or utility (he may just feel more anxious, without anything else changing). In the latter perspective, full information is good only if it improves the worker's well being – he directly or indirectly enjoys greater utility.

We next explore some of the possible conflicts between these approaches, and the extent to which one can find pragmatic compromises that will allow one to go forward with practical decision-making. If there were no conflict between the two approaches, our task would be much simpler. However, it is very easy to construct examples where valuing procedures or rights conflicts with consequentialist or welfarist approaches.[6] The problem that arises in such examples is that absolute rights such as freedom over personal choices can lead to outcomes (consequences) that are worse for everyone, in cases where individual welfare depends on the choices of others.

[6] This point was first made in general by Sen (1970), and is illustrated nicely in Pattanaik (1999).

A way around such conflicts is to allow individuals to have preference rankings over combinations of processes and outcomes.[7] This can partially resolve the tension between the rights-based and welfarist perspectives. This expanded approach to evaluating social situations is important in general, but is particularly useful in clarifying the manner in which an important subset of labor standards is framed, since they emphasize basic rights. While the rights to wear the color of shirt or read the book one pleases, used in examples of conflict, may seem trivial, they are illustrative of "[t]he desire to be governed by myself...as deep a wish as that of a free area for action, and perhaps historically older."[8]

Other examples of rights that may be considered important include rights to non-discrimination on the basis of race or gender, the right to practice one's religion, the right not to be imprisoned without due legal process, the right to an education, and so on. Some workplace rights might be deemed to fall easily within the broad class of basic rights: rights to a safe workplace and free association are possible examples. Other rights, such as those to a job or to a 'living wage' may be considered to be less fundamental or absolute. On the other hand, the broader right to the basic means of existence might well be ranked as a fundamental right. While labor standards often focus on rights, we suggest here that, rather than de-emphasizing rights, a broader approach to rights is more appropriate: promoting the broader right to the basic means of existence may be more fruitful than focusing on the right to a job or a 'living wage'. This point will be more fully developed later in the paper.

We have already noted the potential conflict between the rights approach and pure consequentialism. This issue may be more serious than just the color of the shirt one wears. If there are substantial losses in efficiency that result from enforcing some rights, such as can arise when entitlements create moral hazard or other incentive problems, then

[7] More formally, procedural institutions can be modeled as game forms, which specify the set of individual actors, their admissible strategy sets, a set of feasible outcomes, and an outcome function that maps strategy profiles to outcomes. The "rules of the game", such as the admissible strategy sets or outcome function, may result in certain strategies being excluded (denying me a job because of my race) or punished (legal damages against someone who discriminates in hiring on the basis of race), as ways of capturing rights. This approach is originates with Nozick (1974). See Pattanaik (1999) and Suzumura (1999) for further details.

[8] Berlin (1969), pp. 15-16, quoted in Suzumura (1999).

we may be willing to sacrifice some rights in some circumstances. This is precisely what the extended ranking of outcome-process combinations allows – individuals may explicitly incorporate tradeoffs between outcomes and procedures in their judgments. Recognizing these tradeoffs explicitly may sometimes be unpleasant, but it can help to clarify debates over the appropriate nature and enforcement of labor standards.

Furthermore, different rights may conflict with each other: they are rarely completely absolute. For example, the right to free expression is limited by the rights of others not to be injured, including by such free expression. Such conflicts may ultimately boil down to tradeoffs between rights and outcomes, but they may also be pure tradeoffs between different rights. For example, the right to free expression may conflict with someone else's right to be fully informed, if the free expression involves withholding or distorting information, even if that distortion causes no material or psychological harm.[9]

Typically, rights conflicts will be interpersonal (one person's rights conflict with another's), though one can concoct examples where one person exercising a right may harm his ability to enjoy another right. While the ranking of outcome-process combinations solves the problem of single-person rights tradeoffs, the aggregation of individual rankings into a social ranking is required to resolve interpersonal rights tradeoffs. This is a deep issue that also must be faced up to in considering international labor standards. When we have a list of labor rights, how are different rights in the list to be weighed against one another, or ordered in terms of the degree to which they are fundamental? Furthermore, how are these judgments to be made when other rights – not just labor-related rights – are included in the mix? One may respond by throwing up one's hands and saying that only consequences matter, but that does not help the theoretical and practical debates about labor standards.

[9] One can argue that if there is no harm, then the conflict of rights does not matter, but then this is a consequentialist judgment.

3. Labor Markets

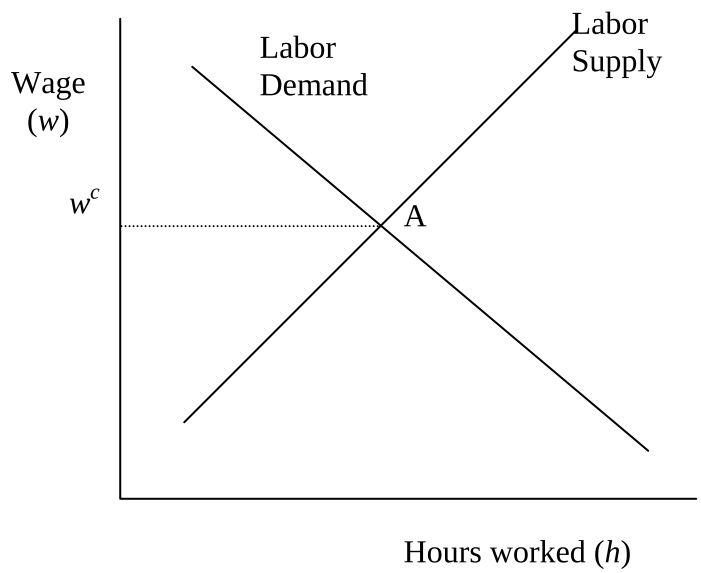
In this section we examine more specific justifications or rationales for various kinds of labor standards. Our starting point in this section is standard models of competitive labor markets. We then explore how market failures may arise, creating a case for government intervention in the form of labor standards. This analysis is couched in familiar welfarist terms. A case for government intervention in the labor market may also be made on grounds of concern for equity. This, too, fits into the welfarist approach. In both these cases, one may also question the ability of governments to effectively achieve objectives of increased efficiency or equity through their interventions. Finally, we examine issues that intersect with concerns for rights, in particular the right to voluntarily engage in labor contracts. Welfarist concerns are not thereby excluded, but tradeoffs between processes and outcomes are explicitly recognized.

3.1 The Competitive Model

In the standard model of competitive labor markets, workers and firms are small relative to the market, and take market conditions, particularly the wage, as given. Workers can specify a quantity of labor they will supply at each possible market wage rate, while firms can likewise specify a quantity of labor they will demand at each possible wage rate. The market wage rate itself is determined by the condition that there be no excess supply or demand in the labor market. This is illustrated in Figure 1, where w^c is the competitive equilibrium market wage rate, determined by the equality of quantities supplied and demanded (point A).

The supply curve of labor in Figure 1 is derived from the worker's simultaneous utility-maximizing choices of market-purchased consumption goods and of leisure. The worker's utility may also be affected by a range of nonpecuniary job characteristics, which we term "working conditions". These are a major focus of the discussion of labor standards in this section. The demand curve for labor in Figure 1 comes from profit maximization by the firm. We assume for the moment that working conditions are fixed by technological factors, but they may affect the productivity of the firm's inputs, and labor in particular.

Figure 1: Competitive Labor Market



It is useful to relate this simple model to Engerman's (2002) three-part classification of labor standards. First, wages and hours here are outcomes determined by the competitive market process, without any other restraint. Second are working conditions, such as safety and sanitation, taken as fixed. Third are the conditions determining labor-management interactions: here these involve atomistic agents, with no bargaining power. In this outcome, there is no efficiency problem, in the sense that, taking all other economic conditions as given, no intervention in this market will improve the allocation of resources.

We may still find the competitive equilibrium of Figure 1 to be unsatisfactory on equity grounds, because we think that the outcome (in terms of the workers' wage, total income, or overall utility) is too low. The 'first-best' theoretical solution to that problem is lump-sum transfers of endowments. However, informational and political constraints can make such policies infeasible in practice, and other, second-best, remedies are used. For example, a minimum wage above the competitive wage will benefit some of the workers in this situation, but hurt others, as firms reduce the hiring of labor, in numbers, hours or both. Alternatively, one might allow workers to bargain collectively with firms. That solution might also be preferred on rights-based grounds. The outcome in that case, however, will also be somewhat ambiguous effects on the welfare of the workers, as firms cut back on hiring. In both cases, the effect on the efficiency of resource allocation is negative. One policy that may not have negative efficiency effects suggests itself if workers' productivity is inefficiently low. It may be best to raise workers' income and utility by making it possible to increase their productivity. This is a simple but important counterpoint to the too-ready imposition of labor standards.[10]

3.2 Compensating Differentials

More pleasant or safer working conditions may affect the productivity of workers, presumably positively. Therefore, we next consider the case where the firm can make choices that affect working conditions. For simplicity, we can assume that while there may be many dimensions of job characteristics, these can be aggregated into a one dimensional index of working conditions that affects output – nothing essential is lost with this assumption. Providing better working conditions will also cost the firm more, at least beyond some point. The firm will then choose the level of working conditions so that the marginal benefit in terms of higher output equals the marginal cost of improving working conditions, provided that such a possibility exists. Otherwise, if the marginal benefit is always too low, the firm will choose a minimum level of working conditions determined by technological constraints. In particular, if there is no impact of working conditions on productivity, then the firm will always choose the minimum feasible level of working conditions, even if workers benefit from better working conditions.

Even where the firm chooses working conditions above the minimum level, its calculations ignore the benefits to workers, and therefore the chosen level of working conditions is not socially efficient. This problem of suboptimal working conditions arises because there is no mechanism whereby the workers' desire for better working conditions

[10] This analysis neglects possible survival constraints on workers, which change the supply curve. See

is incorporated into the firm's choice. Alternatively, workers might be able to purchase improved working conditions in some way. If improved working conditions do not affect output, and if workers can choose their individual levels of working conditions through purchases on competitive markets (e.g., safety glasses, protective clothing, etc.), then this would be efficient. However, this is a limited solution, because neither requirement is likely to be met in practice.

It is more realistic to assume that firms explicitly or implicitly specify working conditions, along with the wages for different jobs. Workers can then evaluate the combinations of wages and working conditions that are available, thus allowing their own benefits from better working conditions to be introduced into their decision-making, and firms' responses. Firms will take account of their own benefits from better working conditions, in terms of higher productivity. The difference from the basic competitive model is that firms do not take wages as determined by competitive market forces. Instead they make offers of wage-working conditions pairs. Competition can still occur in the form of free entry that drives firms' profits to zero. Alternatively, one can consider the case where firms do not compete, but workers instead receive their "reservation utility", the minimum utility from a job that the worker will accept, rather than choosing an alternative occupation. Both formulations are possible under this approach, which is well known as the theory of equalizing differences or compensating differentials.[11]

To illustrate the workings of equalizing differences, assume that firms and workers have already determined what their best choices of other variables (labor and capital levels, hours worked, etc.) will be, for any given wages and working conditions. Suppose that there are many firms and many potential workers. The profit of a typical firm, i, depends on the combination (w, s) of wages and working conditions that it offers. Similarly, the utility of a typical worker, j, also depends on the combination (w, s) that she accepts. A firm will make higher profits whenever w or s is lower, other things equal, while a worker will be better off with a higher w or s, other things equal. If firms are competitive due to free entry, then each firm must make zero profits in the competitive

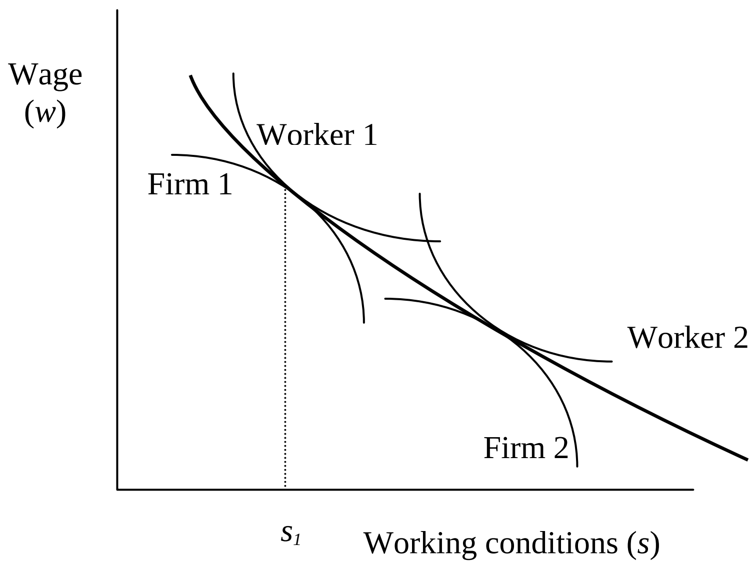
---

Singh (2002) for that extension.

[11] See Rosen (1986), Thaler and Rosen (1975) and Dickens (1984).

equilibrium. In Figure 2, we show the combinations (*w*, *s*) that give two different firms zero profits. The thicker line shows the upper envelope curve for all firms' zero-profit combinations: these are the best combinations of wages and working conditions that the market can provide. Finally, there are two curves showing combinations (*w*, *s*) that give the workers their best choices among those the market can provide.

Figure 2: Compensating Differentials



In Figure 2, worker 1 is best off working for firm 1. Worker 2, who prefers better working conditions, finds them with firm 2, but at a wage that is lower. Alternatively, we can say that worker 1 receives a compensating differential of a higher wage for tolerating worse working conditions. In fact, worker 2 would also have to be compensated with a higher wage for worse working conditions than her choice, but that would require combinations of (*w*, *s*) that no firm can provide and still break even. The main point here is that the outcome is efficient, in the sense that resources cannot be reallocated to make any worker better off, without hurting some other worker. From a strict consequentialist perspective, there is no room here for labor standards.

One could still take the position that worker 1 has a right to some minimum level of working conditions. In this case, imposing a minimum level of working conditions above s_1 will make worker 1 worse off in terms of her ranking over outcomes, because she will be forced to accept a less-preferred combination (w, s), given the constrained choice of combinations offered by the market. Hence there is the kind of conflict between rights and welfare that we have discussed in Section 2. If workers have extended rankings over combinations and procedures, they may agree that procedures that allow workers to accept jobs with poor working conditions are to be ruled out. In this case, how this aggregation of individual rankings over outcomes and processes is made becomes crucial.

There are two further points to consider in this model. First, it may be unrealistic to assume that firms' profits are driven down to zero by competitive entry. In many cases, especially in developing countries, workers may instead be competing for jobs in a manner that pushes them down to their reservation utilities – measures of how well off they would be in alternative occupations (working on the family farm, or being a street vendor).[12] In this case, the thick line in Figure 2 can be interpreted as combinations that give workers their reservation utilities. In the market equilibrium, firms now make positive profits. The market outcome is still allocationally efficient, but it may be considered undesirable on distributional grounds. If worker 1 is in an industry that is inherently unsafe, imposing a higher standard of working conditions while requiring the wage to be maintained at the same level would make the worker better off at the expense of the firm: there is room to do so because the firm is making a positive profit. The combination (w, s) that results from this policy creates an allocational inefficiency, but it improves the equity of outcomes.[13] If the wage condition is not included, however, the firm's response to a higher safety standard would be to lower the wage it pays, reducing the worker to her reservation utility again.

The second point concerns the hiring of multiple workers by a firm. If there are many workers and many firms in many industries, the outcome will be much like Figure 2. Firm 1 will simply be the representative firm in its industry, and each such firm will be able to hire as many workers as it wants at the combination (w, s) that is shown as chosen by worker 1. Suppose, instead, that there are only two industries, with

[12] In fact, a large fraction of the work force in developing countries is self-employed. In such cases, we can think of the worker as owning the firm, as well as being the sole employee, and the efficiency argument applies.

technological possibilities represented by the zero profit combinations available to firms 1 and 2 in Figure 2. A worker with preferred tradeoffs over wages and working conditions that are intermediate between workers 1 and 2 will not be able to select a point on the thick line, but will instead have to select a combination (w, s) that is on one of the two firms' zero-profit curves. This assumes that a firm can offer different levels of working conditions to different workers. It may be that the firm has to choose the same level of working conditions for all its workers (the air quality in the factory, for example). Then the firm has to balance the preferences of its different workers in making its offers – compensating differentials cannot be perfect in this case. The case where working conditions are a good that is jointly consumed by workers raises some significant new issues that are taken up next.

3.3 Public Good Problems

To the extent that the same working conditions are shared by all workers in a firm, and those conditions affect their well-being directly, as well as their productivity, working conditions have the character of a public good. The essence of a public good is that it is shareable or non-rival: in other words, one worker's consumption does not reduce the amount available for other workers to consume. Clean air in a factory, safety information, and general safety procedures are examples that fit this category quite well. A pure public good is also non-excludable, so, for example, if clean air is provided in a building to some workers, other workers in the building cannot be excluded from also enjoying the clean air.[14]

Public goods pose a general problem for market-based resource allocation, because they create incentives for individual to not reveal their true benefit from consuming the public good, and therefore to not pay a share of the cost that reflects their true benefit. This occurs because an individual can benefit from the public good if others

---

[13] Presumably the firm is owned by better-off individuals, so a reduction in the firm's profits is redistribution from richer to poorer.

[14] If there is some exclusion mechanism, even partial, a public good can be termed a club good, with the analogy being to a club where membership is required, but all members enjoy the same amenities. All these ideas are surveyed in, for example, Cornes and Sandler (1986).

are willing to pay for it. This is the well known "free-rider" problem, and it results in underprovision of the public good relative to the efficient level, as measured by standard ways of assessing overall welfare. It does not arise in the case of private goods because there is no shareability or jointness in consumption[15].

Consider first the case where there is just one worker, who benefits from better working conditions. Thus better working conditions increase her utility (her index of material well-being). Furthermore, the same working conditions simultaneously affect the worker's productivity, and hence the profit of the firm (before costs of providing working conditions are factored in). The optimal provision of working conditions requires that the *sum* of the marginal benefits of the worker and the firm be equated to the marginal cost of improving working conditions at the best possible level of those conditions. If the firm and worker can cooperate honestly, they can achieve this best level of working conditions. However, each has an incentive to let the other pay, and free ride, at least partially. This "noncooperative behavior" will lead to underprovision of working conditions, below the efficient level.

Can this resource allocation problem be solved to ensure the optimal outcome? In the Lindahl model, the firm and the worker are assumed to pay personalized prices that reflect their individual marginal valuations. The supplier of *s* receives payments from both parties, and supplies the optimal amount. At first sight, this seems rather unrealistic. However, it is equivalent to a noncooperative situation where each side chooses its contribution taking the other side's cost share as given.[16] Again, this may seem unlikely for the case of a firm and a worker trying to agree on working conditions. However, it may have some relevance to the case of many workers trying to reach an agreement among themselves, or of a union collectively representing workers in trying to reach agreement with a firm. Hence there could be mechanisms for overcoming free-rider problems that do not involve the direct imposition of labor standards by some external policy maker. Appropriate processes or institutions that allow for collective bargaining by

[15] While several aspects of working conditions have the character of public goods, the implications of this have not been explored in analyses of regulation of working conditions such as those of Dickens (1984) and Brown, Deardorff and Stern (1996).
[16] This equivalence is shown in Cornes and Sandler (1986).

workers may have some value in overcoming the public goods resource allocation problem, which is precisely a problem of collective action. Thus labor standards that support rights of collective action by workers may have a justification in terms of promoting more efficient outcomes, as well as a direct justification from a rights-based perspective.[17]

In the case of many workers the problem is essentially the same. The optimal level of working conditions is determined by the condition that the sum of the marginal benefits of all the workers and of the firm be equated to the marginal cost of improving the level of working conditions. There is a free-rider problem not only between the firm and workers, but also among all the workers. It is this latter problem that might be directly addressed by a union as an institution for collective action.

In the compensating differentials model of labor markets, if a firm competes simultaneously for many workers, and faces free entry that will push its profits down to zero, it will choose a wage for each worker and a common level of working conditions so that it maximizes the total utility of its workforce. It must do this to avoid being outbid for workers by a competing firm. In this case, competition also solves the public good problem with respect to working conditions, with the firm acting as a club that maximizes the utility of its membership. Even if firms are not constrained to zero profits by free entry, they will push workers down to their reservation utility levels in an efficient way, as they set wage-working conditions combinations to maximize their profits. This can raise concerns about equity, and workers' tradeoffs between wages and working conditions will be different at lower levels of utility, but there is no longer a straighforward problem of underprovision of working conditions as a public good. Allowing collective action by workers may still be supportable on distributional and rights grounds, but not on the basis of improving efficiency.

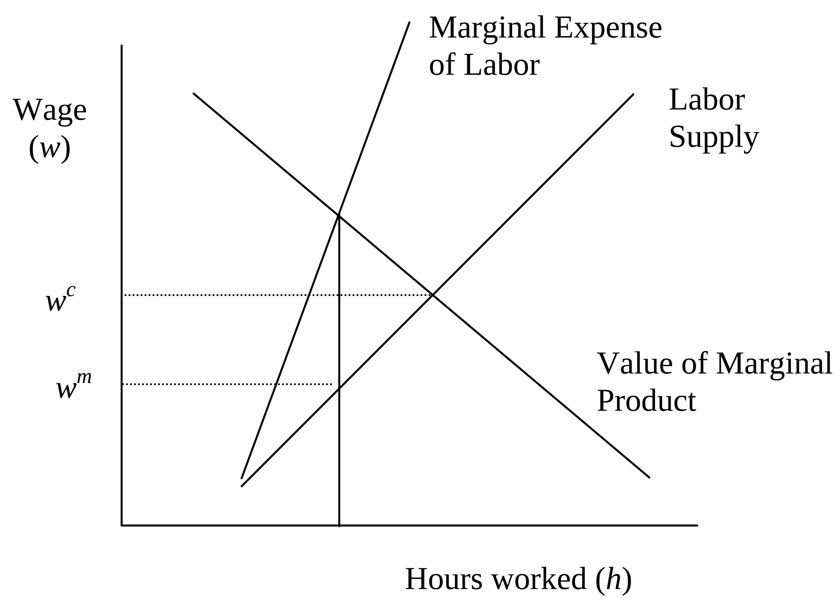
[17] Of course the latter justification is broader, since it presumably applies even when collective action worsens outcomes.

3.4 Monopsony

The model of compensating differentials allows for a kind of perfect wage discrimination by firms. This overcomes inefficiency problems that can be associated with imperfect competition. It is possible, however, that firms may have market power but not be able to discriminate among workers with different tradeoffs between consumption and work/leisure or to pay different wages for different hours worked. In such cases, we have the familiar inefficiency associated with market power, where the market wage does not properly reflect the value of the marginal product of workers.

In fact, market power leads to a wage that is below the value of the marginal product of labor. One can therefore also object to this outcome on grounds of inequity. Finally, the unequal position of the firm and the worker in the labor market might be considered to be unacceptable on the basis of procedural considerations. We will illustrate the market power outcome, and then discuss implications for labor standards policy. The discussion carries over to any firm with labor market power in the sense of a realization that the wage rate that it offers will affect the quantity of labor that is supplied.

Figure 3: Labor Market Monopsony



In Figure 3, the firm faces an upward sloping supply curve of labor. If it seeks to hire more labor (either more hours by a worker or more workers), it realizes that the wage offered must rise. The assumption here is that all hours worked receive the same wage. Hence, in this case, the firm's marginal expense of labor is above the wage rate it pays, and the firm maximizes its profit by choosing the amount of labor that equates its marginal labor expense to the value of the marginal product of labor. This is shown by the intersection of those two curves, and the market wage in this case is w^m, which is the wage at which this amount of labor will be supplied. The inefficiency and the possibly unacceptable distributional aspects of this outcome are both reflected in the fact that the equilibrium wage (the opportunity cost of the marginal hour worked) is less than the value of the marginal product of that hour. This analysis can be extended to allow one to consider the simultaneous choice of working conditions by the firm. It turns out that one cannot say anything in general. The monopsonist may choose working conditions that are too high or too low.

With or without the issue of working conditions, one policy response to the inefficiency illustrated in Figure 3 is to impose a minimum wage. If appropriately chosen, the minimum wage can ensure the conditional optimality of the firm's choice of labor (so that the marginal value product equals the wage). In particular, this efficient minimum wage level is w^c as shown in Figure 3. This is the level at which the value of the marginal product of labor and the opportunity cost of the last hour worked are equated. Of course this does not lead the firm to take account of the marginal benefit to workers in determining its choice of the level of working conditions. The inefficiency in that dimension is not caused by monopsony in the choice of labor input, so it requires a separate policy response.[18] Finally, another option is collective bargaining over working conditions and wages. Ellingsen (2002) sketches a model of bilateral bargaining where some regulation of standards can help workers in the overall bargaining outcome.[19]

[18] Furthermore, Dickens (1984) has shown that the effect on welfare of imposing a labor standard alone (without a minimum wage to correct the monopsony distortion) is also indeterminate.
[19] See also Datta and Chowdhury (1998) and Fairris (1995).

3.5 Information Problems

The smooth working of markets can be derailed by asymmetries of information[20]. Under conditions of imperfect or incomplete information, market outcomes may be inefficient relative to a situation of perfect or complete information. Less obviously, market outcomes may sometimes not even be efficient given the constraints imposed by the available information. Depending on the situation, potential remedies may be policies to directly influence outcomes, or policies that are designed to do so indirectly, by improving the collection and exchange of information. Since information has public good characteristics, some of the issues discussed in Section 3.3 arise in the context of the production and consumption of information. One can also take a rights-based approach, and argue that market participants are entitled to certain kinds of information, independently of the impact on market outcomes. Here, worker outcomes in the labor market are wages, hours and working conditions in general. For employers, outcomes are the productivity or output of their employees. To the extent that employers are relatively privileged and that we care about equity, the focus is typically on the outcomes and rights of workers.

An area where workers and employers may commonly lack full information is that of safety and risks. These may include the possibility of accidents, negative health consequences from chemicals, and so on. One side effect of the industrial revolution has been the vastly greater complexity of the workplace, and the multiplication of potential risks. Even traditional occupations may have unknown long-term consequences, such as injuries from repetitive motions. Given this complexity, it is not surprising that both employers and workers may be uninformed, or poorly informed about safety, risks and so on. Public good problems can hinder the efficient private collection of the relevant information. Even if information is available, participants may not have incentives to disseminate it optimally, or they may not be able to credibly exchange information. For example, workplace risks could conceivably be handled by insurance, but this can be made difficult to achieve efficiently by problems of moral hazard and adverse selection.

In the compensating differentials model, workers are fully informed about working conditions, including on-the-job risks. However, the empirical evidence appears to be that workers commonly underestimate job risks. This can potentially create inefficiencies in the labor market. Oi (1973) shows that the existence of workers who underestimate job risks is not by itself sufficient to cause a misallocation of workers to dangerous jobs – the risk assessments of marginal workers is what matter. Under plausible conditions, however, the market equilibrium does involve suboptimal levels of working conditions. Numerous models[21] support the basic theme that informational gaps may or may not cause problems in the efficiency of resource allocation, in particular, exposing workers to more risk than would be socially optimal in a world of full information, according to any standard welfarist objective.

The rationale for government intervention in cases of nonoptimality must be based on the assumption that the government is better informed or that it can become so at lower cost than individuals or firms. For many kinds of health and safety information, this is plausible and realistic. The natural policy then might be simply to inform workers about the true risks of jobs. However, if this does not succeed in informing workers perfectly (because the government's information transmission is noisy, or because workers do not interpret it perfectly) workers may be worse off with the partial improvement in information (Dickens, 1984). In such cases, government mandated standards (if properly enforced) might be superior.

Imperfect information on the part of workers, and possibly also firms, means that competition where firms offer compensating differentials is not enough to make the market equilibrium efficient. For example, suppose that worker preferences over wages and working conditions are heterogeneous, but that firms cannot distinguish workers according to these preferences. With complete information, firms would be able to vary wages across workers, even if, by assumption, they must offer the same working conditions to all workers. Lacking information on preferences, this is no longer possible, because a worker will always claim the highest wage offered, and therefore a firm must

[20] See Stiglitz (2000) for an overview and references.
[21] See Dickens (1984) for a survey.

pay all its workers the same wage. Even if firms can screen workers by offering them nonlinear wage schedules to induce self-selection, the outcome is not necessarily efficient, and competition can even destroy the possibility of a market equilibrium. More realistically, firms are unlikely to be able to engage in such complex strategies.

3.6 Free Contracting, Rights and Welfare

Now we turn more explicitly to questions that revolve around rights. In Section 2, we noted the importance of rights-based perspectives in practical formulations of labor standards, and we examined the manner in which such perspectives interact with welfarist approaches (focusing on consequences). We examine two models that illustrate these interactions in more specific situations. One right that is often supported is what Basu (1999) has termed the “principle of free contracting”, which asserts that an individual should have the right to voluntarily enter into any contract, since voluntariness implies a welfare improvement. This seems like an eminently reasonable right, supporting free choice, which does not appear to conflict with welfarist objectives. However, the models described here illustrate some possible limitations on the principle of free contracting, and with the argument that no voluntary contracts should be prohibited. Ellingsen (2002) provides two further possible cases for restricting contracting. First, private information about productivity leads to an inefficient “rat race” because of informational externalities.[22] Second, restrictions on giving up workplace and related civic rights may be efficient because they prevent free riding in the provision of a public good (Section 3.3).

Bonded Labor Once bonded, a worker is unfree, but the act of choosing to be bonded can be voluntary. Genicot (2002 shows that the existence of bonded labor can hinder the development of welfare enhancing credit opportunities for laborers. In her framework, the set of opportunities for the worker is so limited that these contracts may represent their best option. One can make a case for banning bonded labor on rights-based grounds alone, with the principle of free contracting subordinated to the right to remain “free to

[22] Thus this model is related to those discussed in the previous sub section. The general analysis of Aghion and Hermalin (1990) has its antecedents in Akerlof’s (1976) seminal article.

choose." Alternatively, one may argue that the workers have limited rationality or incomplete information, possibly combined with moral hazard on the part of employers.

Genicot provides a plausible alternative to some of these justifications. She shows that a ban on bonded labor can enhance the welfare of the laborers affected by the ban. The crux of the argument is that banning bonded labor improves the overall set of options that the worker faces. The way this works is as follows. Formal credit institutions may refuse credit to the poor in the presence of bonded labor, because the presence of the bonded-labor option raises the risk that the borrower will default and switch to that alternative. As a result, the worker is not offered formal credit, and instead must choose the bonded labor contract, where the landlord has greater enforcement power. Since the existence of the formal credit option influences the landlord's choice, he makes a strategic decision that results in bondage, i.e., he chooses a contract that destroys the option of a formal credit contract being offered.

The above argument in favor of banning bonded labor is ultimately based on grounds of equity and not of efficiency. Banning bonded labor makes the worker better off at the expense of the landlord. It is not a Pareto improvement, which would mean that one individual is made better off without reducing the welfare of any other individual. Philosophically, the issue may be deeper. Basu (1999) points out that the distinction between 'coercion' and 'free choice' entails a prior opinion on what constitutes basic human rights. The question in this case is whether the worker's right to borrow from a formal credit institution is such a basic right. However, if this right is conditional on the level of income of the worker, then it seems that it is not really basic. The basic right must be something else, such as that of making choices from a set that allows the chooser to preserve a level of autonomy and dignity, or to achieve a basic standard of living. This illustrates again the broader issue of what rights we should care about.

Working Conditions Basu (1999) also considers problems with the principle of free contracting, in a manner somewhat different than Genicot. He asks, "Is there a case for banning violence and sexual harassment when these occur as a consequence of voluntary contracting?" Here, violence and harassment can be taken as two important examples of a particular category of working conditions. Basu postulates that an entrepreneur advertises for workers, openly saying he will pay a wage above the market wage rate, but this goes with reserving the right to harass his workers (other working condition may be substituted for harassment).[23]

In this case, workers who are averse to harassment will be worse off if harassment is allowed. The supporting argument this assertion is as follows. Suppose there are two types of workers, those with no aversion to harassment and those with an infinite aversion. Each type has an upward sloping supply, as a function of the wage rate. Employers and workers are competitive wage takers. If the employer receives a constant additional benefit per worker that he can harass, this will be the difference in wages in two types of contracts that can be signed (harassment and no-harassment). However, at the margin, the wage is determined by the marginal product to the employer of those who are averse to harassment. Note that freedom from harassment is different from overall working conditions such as safety or sanitation because it is not a pure public good, and can be provided at a cost to a subset of workers. Banning harassment contracts reduces the wage of those who are willing to endure harassment (since their value to the employer is lower), and therefore their equilibrium supply. However, it increases the wage of those who are averse to harassment. Thus the latter are worse off if harassment contracts are allowed: this is a standard pecuniary externality.

Again, banning harassment contracts does not lead to a Pareto improvement. Employers and workers who are not averse to harassment are worse off as a result. Basu notes that the argument hinges on going “beyond economics” to identify preferences that are “fundamental”, in the sense that “no one should have to pay a penalty for having such a preference.” Sexual harassment seems to fit this criterion (for most societies). Minimal levels of safety at work would also seem to be appropriate. However, there are two points to note. First, there is a very explicit value judgment that must be made here. Second, there can be legitimate disagreement on such values, in particular, where one

[23] To the extent that the employer derives different benefits based on worker characteristics that are unrelated to productivity, Basu’s analysis is related to issues of discrimination, another important aspect of the ILO CLS. One can trace through similar issues of equity and rights in that case. See also Maskus (1997) for further analysis of discrimination.

draws the line. Basu argues that the same issues arise in the case of child labor, where households that are averse to sending their children to work can be penalized in the market if child labor is allowed.

4. Trade and Investment

We have provided an overview of possible reasons for labor standards, either as regulations that directly set standards for outcomes (such as wages or working conditions), or as requirements on labor market processes (such as collective action or individual contracting rights). These issues with respect to the working of labor markets arise in a closed economy, and are not necessarily driven by concerns that transcend national boundaries. We now turn to some aspects of the links between international economic flows and labor standards.

4.1 International Trade and Labor Standards

Srinivasan (1994, 1996; see also Bhagwati and Srinivasan, 1996) provides a clear benchmark analysis of the possible links between international standards and international trade. He uses a model of a small open economy with perfectly competitive markets. He shows that labor standards will be chosen efficiently – none of the problems discussed in Section 3 are present. This result, not surprisingly, does not depend on whether international trade occurs or not. In this framework, the small open economy faces a given relative price of the two traded goods. With perfectly competitive markets, the economy's choices of consumption, production and the labor standard are equivalent to those determined by maximizing social utility subject to the production constraint, nonnegativity constraints, and the trade balance requirement. It is a straightforward and standard result that the outcome here is Pareto optimal, *including* the choice of the labor standard: no one can be made better off without making someone else worse off. This is a natural extension of the first welfare theorem of economics to incorporate labor standards. Srinivasan also points out that this Pareto optimal level will diverge across countries whenever preferences and resource endowments are heterogeneous.

This conclusion tells us nothing about distributional issues, since the model is too aggregate to address such concerns. The implementation of standards is uniform within a country, and maximizes some unambiguous measure of aggregate social welfare. Public good problems in implementing standards are also put aside in this formulation. Nor is there any consideration of processes or rights independently of welfare outcomes. Finally, Srinivasan also treats political economy issues separately. Nevertheless, the results provide a useful benchmark for judging international labor standards, both in terms of rationale and implementation. For example, one can argue that any problems are ones that can or should be handled by domestic policies.

Srinivasan also discusses the possibility that one can find a world Pareto optimum even when a minimum global labor standard is required. On the other hand, if the minimum standard is too high, a full Pareto optimum will be ruled out, and a restricted Pareto optimum, with a binding minimum standards constraint for some countries, will instead apply. In this case, there is a wedge between the marginal rate of substitution (MRS) between either consumption good and the standard on the one hand, and the marginal rate of transformation (MRT) in production between the same consumption good and the standard. Srinivasan points out *domestic* taxes and subsidies in countries where the minimum standard is binding will implement the Pareto optimum. There is no role for trade restrictions or other international policies.

Why should a minimum global labor standard be imposed at all, if it reduces welfare? Here one can introduce concerns about rights, taking the approach that the standard represents a consensus that countries agree to impose on themselves collectively, because it represents a concern about more fundamental rights that transcend immediate welfarist concerns. This is not too different from constitutional restraints within countries, which tie the hands of future governments even if they are acting in a "benevolent" manner. In the current example, there is an added international dimension. Srinivasan plausibly equates the minimum global standard in the abstract model with ILO conventions (ILO, 1998; OECD, 2000), and, together with his conclusions on the role of domestic taxes and subsidies, is led to state, "Indeed one could view the international assistance and domestic compliance measures associated with implementing ILO Conventions as precisely the right approach."

International consumption externalities are also considered in Srinivasan's framework.[24] With such externalities, the MRT in production between either consumption good and the standard in a country – call it A – is equated to a weighted sum of the MRS between that consumption good and country A's standard, where the sum is over all countries which care about A's standard. Again, the appropriate policy response to this externality is domestic taxes and subsidies that directly address the externality.

Srinivasan's use of Pigovian welfare economics to analyze issues of international labor standards is a useful benchmark. He extends it to a discussion of other market failures, such as capital market imperfections. Again, he argues that the best policy is to correct the externality at its source. Srinivasan notes that informational requirements may make such policy interventions difficult or impossible. We consider separately a further possible implication of this observation, that second best policies may involve targeting in ways that include a focus on labor standards. The targeting issue also is relevant to income distribution considerations, where efficient direct income transfers may not be feasible because of informational constraints. This may apply to international as well as domestic transfers.

Brown, Deardorff and Stern (BDS, 1996) examine many of the same issues as Srinivasan (1996). They also show that in a small open economy, correcting a labor market externality through a domestic standard improves domestic welfare, using a utilitarian criterion. In an importing sector, imports go up as a result of the standard. A common international standard has potentially different effects. While the loss to domestic producers is partly made up by the increase in the world price resulting from the global reduction in supply, domestic consumers are hurt, and the net gain may now be

[24] We will consider these in more detail in Section 5, along with a discussion of product labeling.

negative. Net exporters, on the other hand, definitely benefit from common standards. Common standards create terms-of-trade effects, and these may by themselves provide a motivation for imposing labor standards in a large country. This examination of terms-of-trade effects distinguishes the BDS analysis from that of Srinivasan.

Bagwell and Staiger (2001; see also Staiger, 2002) also consider the links between labor standards and international trade. As in the BDS analysis, they allow for terms-of-trade effects. Unlike BDS, they assume that countries can choose optimal tariffs as well as their national standards. Standards are assumed to matter directly only at the domestic level in each country. Thus cross-border externalities, such as when consumers in one country care about the production methods used in a different country, are ruled out. The domestic standards can be policies that are applied to production (specifying working conditions, for example) or to consumption (restricting consumption of products made using some kinds of processes).

The Bagwell-Staiger analysis works with reduced-form welfare functions for national governments. National welfare as perceived by a government depends on local prices, world prices, and domestic standards. Since the wedge between local and world prices is created by tariffs, welfare also depends on tariff levels. Each government is able to choose its domestic standards and tariffs. While this reduced form approach is able to accommodate many different assumptions about domestic political economy, it may obscure some features of the model. For example, they focus on the case where an increase in the national standard would worsen the terms of trade for every country. This is at odds with the BDS analysis, in which the direction of impact of a standard on the terms of trade depends on the relative factor intensity of the export good.

The Bagwell-Staiger model also allows efficient policy choices, as measured by any weighted sum of all countries' welfare functions, to include positive tariff levels. Optimal domestic standards are also specified in the efficient outcome. On the other hand, if each government chooses it tariffs and standards independently, the resulting noncooperative Nash equilibrium involves inefficient levels of tariffs and standards. In this equilibrium, trade volumes are inefficiently low. The source of this inefficiency, as one might expect, is the desire of each government to affect the terms of trade in its favor. However, since national standards can indirectly influence the terms of trade, international agreements that only negotiate improved cross-border market access through lower tariffs will distort national standards choices. This makes a theoretical case for tying international negotiations on domestic standards to international trade liberalization.

There are, of course practical difficulties with the connection of domestic issues to international trade, as Bagwell and Staiger acknowledge and discuss. These include questions of where to draw the line in terms of what is included in trade negotiations. They also point out the difference in their analysis from arguments for a WTO "social clause," which proposes linking access to one's markets to the choice of standards by a trading partner, or the meeting of some minimum international standards by all trading partners. Instead, Bagwell and Staiger's approach emphasizes the need to formulate negotiating procedures in a way that will allow governments to *raise* their *own* domestic standards from inefficiently low levels.

4.2 Trade, Labor Standards and Skills

BDS provide some consideration of the distributional impacts of international trade, and the consequences for labor standards within countries. Casella (1996) performs a general equilibrium analysis of labor standards and trade that specializes some of the assumptions as compared to BDS and Srinivasan. This allows a closer consideration of income distribution effects. In Casella's model the two factors are high-skill and low-skill labor, and the two consumption goods each requires labor of only one type: the outputs can be interpreted as high-tech and low-tech goods. As is standard, trade reduces the relative wage of the factor that is relatively scarce in autarky. Trade leads to a rise in the real income for low-skill labor in the country that has a relative abundance of low-skill labor, what we can treat as the developing country. Similarly, it leads to a rise in the real income of high-skill labor in the other, developed country.

Labor standards are modeled as an economy-wide public good, financed through labor taxes. If the technology for producing the public good is such that the relative demand for the two private consumption goods is unaffected, then relative prices are unchanged, and the level of the standard in one country has no effect on the other country. All workers prefer to be taxed proportionally to their income, with the constant of proportionality being the same. This means that higher income workers desire higher standards. If there are fewer high-skill than low-skill workers in each country, then high-skill workers in each country will prefer higher standards than will low-skill workers. This result is driven by income effects alone. Furthermore, since trade can make everyone better off if there are suitable domestic transfers, those transfers will also lead to higher standards with free trade than with autarky. On the other hand, if there are no such transfers, changes in the demand for standards by any group will depend precisely on how their real income is affected by opening up to trade.

In this model, since standards are an economy-wide public good, there is no possibility of a differential imposition of standards. If, on the other hand, standards can be imposed at differing levels across industries, then different groups' ranking of them will differ even more. For example, a standard implemented only in the low-skill sector will not be supported by workers in the high-skill sector (in terms of their willingness to be taxed), even though the latter would prefer a higher level of an economy-wide standard. However, if there were a positive externality, so that workers in the high-skill sector cared about the working conditions or other labor standards for those in the low-skill sector, then this conclusion would change.

4.3 Races to the Bottom

The idea of a race to the bottom – international competition that will drive down standards in all countries to levels that are 'too low'[25] – is pervasive in discussions of international labor standards. There are many different possible formalizations of the race-to-the-bottom idea. For example, much of the literature is situated in the area of

[25] The measure can be in terms of the allocational efficiency of outcomes, their distributional impacts, on the basis of criteria that emphasize rights and procedures, or some subset of all these concerns.

local public economics. Since capital has always been relatively quite mobile within national boundaries, the concern has been that local or other subnational governments would compete for mobile capital by lowering local labor or environmental standards to attract firms to the benefit of local economies. The extension of this argument to the case of countries competing for internationally mobile capital is immediate.

Local public economics also provides a counter-argument to the idea of a race to the bottom. Tiebout (1956) formulated a model in which individuals could move freely between jurisdictions, effectively "voting with their feet". In such a case, local government competition for residents can lead to efficient outcomes, as long as the local governments maximize land values, and have sufficient tax instruments at their disposal. While labor is certainly not freely mobile across countries, the Tiebout insight can be applied to mobile capital. The implication is that inefficiency and a race to the bottom are the result of some restriction on the tax instruments available to competing governments.

Wilson (1996) re-examines and extends a range of models of local government competition to clarify when races to the bottom could conceivably occur.[26] As noted, the starting point of many of these models is a Tiebout-type framework in which jurisdictions compete for mobile capital. A race to the bottom occurs in such models when standards for some aspect of firm operations are set inefficiently low. In general, with perfect competition and a complete set of tax-subsidy instruments, this inefficiency cannot occur. Therefore Wilson examines a range of possible limitations on the policies of jurisdictional governments. One possibility is that mobile capital is taxed, because more efficient tax instruments are not available, and this, in turn, leads to standards that are more lax than is optimal, as a way of attracting capital. This result can occur even in the absence of capital taxation. If a jurisdiction's provision of a public good (even when financed through wage taxes) increases the supply of capital to other jurisdictions, then this externality implies that the public good (which may be related to working conditions, human rights, etc.) is underprovided relative to the optimum.

[26] Relevant models include those of Zodrow and Mieszkowski (1986), Oates and Schwab (1988), Bucovetsky and Wilson (1991), and Revesz (1992).

Alternatively, Wilson considers some different possibilities with respect to imperfect competition, which might be expected to lead to nonoptimal outcomes. If jurisdictions are large enough demanders of capital that they influence the equilibrium after-tax rate of return on capital, net importers of capital have an incentive to tax it to improve their terms of trade. However, the optimal tax on capital does not cause a deviation from choosing optimal labor standards. One has to appeal to inefficiencies in the collection of capital taxes to generate a possible race to the bottom. Complications arise because imperfect competition among firms itself creates inefficiencies, and taxation has impacts on these inefficiencies, as well as on the possible levels of working conditions or labor rights. The conclusion from the local public economics literature appears to be that an international race to the bottom, taken to mean inefficiently low domestic labor standards, is highly dependent on the particular set of assumptions made about competition and policy instruments.

The above conclusion carries over to newer analyses of possible races to the bottom, specifically in the context of international trade and independent choices of domestic labor standards. These international trade models do not have factor mobility, but similar problems can arise as goods are traded across jurisdictions. For example, the Bagwell-Staiger analysis (Section 4.1) has a race-to-the-bottom interpretation. Their model is one of imperfect competition among governments, and terms-of-trade effects are crucial to their analysis. Another illustration of the sensitivity of such results lies in a comparison of Bagwell and Staiger with BDS's analysis, where standards may actually end up being inefficiently *high* – the opposite of a race to the bottom.

General theoretical analyses of possible races to the bottom do not typically distinguish between different levels of development of jurisdictions. This is also true of the Bagwell-Staiger reduced form approach. On the other hand, analyses that relate terms-of-trade incentives to factor endowments can admit the interpretation of differences in development levels. For example, a country that is relatively more labor-abundant, or low-skilled labor abundant (as in BDS or Casella, respectively) can be interpreted as a developing country. Such models may also be used to analyze fears that low labor standards in developing countries (the South) may create a race to the bottom with developed countries (the North).

Chau and Kanbur (CK), take a different perspective, focusing instead on possible races to the bottom among developing country exporters to the North's markets. Their model has two large countries in the South, plus a competitive fringe, all exporting a good to the North. Labor standards have two effects in all exporting countries. They raise production costs, and they provide some utility benefit to the residents of the country (possible reasons for this are taken up in Section 5). In the model, there are two levels of labor standards, high and low. CK assume that the net gain from high labor standards is negative. Thus the competitive fringe always chooses low standards. However, for the two large exporters, there is a positive terms-of- trade effect from high standards. This implies that a high standard may lead to a higher level of welfare for a *large* country.[27]

A key aspect of the model is the nature of the strategic competition between the two large exporters, which depends on the nature of the demand curve in the importing North. Depending on the situation, the Nash equilibrium may involve low standards being set by both large countries, high standards by both, or an asymmetric outcome where the larger country chooses a high standard while the relatively smaller country chooses a low standard. Can the Nash equilibrium be improved upon, and can coordination on a welfare-enhancing outcome be sustained? Smaller countries are always better off with higher standards. The analysis is not extended to the welfare of the importing North, but the concern here is welfare in the South. Furthermore, under some conditions, both countries can be made better off.

CK discuss protectionism in the North, and they show that if such protectionism is an optimal response to Southern standards, high standards equilibria in the South will never exist. The latter conclusion acts as a warning on the use of Northern trade policy to promote standards in the South, if it is likely to end up maximizing Northern welfare. In

[27] Henrik Horn has pointed out to me that an export tax would serve the same purpose more effectively. This illustrates the earlier general point that races to the bottom typically rely on restrictions on policy instruments.

that case, the outcome will instead be damaging to the South's standards – this contrasts with the Bagwell-Staiger results, reflecting their different assumptions. On the other hand, Northern policies to promote cooperative implementation of high standards by large South exporters may be appropriate as a way of achieving that goal.

Finally, Basu (1999) also considers a model that can be interpreted as a race-to-the-bottom situation. In his model, there are multiple equilibria, and an international ban on child labor will lead to coordination on the good equilibrium (which involves a Pareto improvement), whereas the imposition of a ban by a single country will not, due to the mobility of capital. This is therefore a variant of a race to the bottom.

5. Preferences and Policies

Labor standards involve both rights and outcomes. An approach that encompasses both considers individual preference rankings over both classes of concerns. It also permits outcomes to include more than just individuals' own consumption of goods and services, and processes to encompass more than their own enjoyment of particular rights. The question that remains is how different individuals' differing rankings of complex alternatives are to be aggregated to arrive at an overall social ranking. For example, one person may believe that the right to collective representation and action by workers comes before any consideration of their wages, though, given the said right, higher wages are considered better. Another person may view material outcomes as paramount, with the right to collective action nice to have, but not essential. It may be that the set of feasible social situations does not force a sharp tradeoff between these different rankings, but if it does, whose values should carry weight? It almost certainly should matter if one of the individuals is the worker who is affected, and the other is not. Alternatively, does it matter where the two individuals live?

In Section 3, we focused on problems related to the functioning of labor markets themselves. The implicit assumption underlying our discussion was that if a problem could be identified, it could potentially be fixed. For example, if banning certain kinds of voluntary contracts would benefit a majority of people, it should be possible to legislate and enforce such a ban. Here we see how a particular institution for aggregating individual rankings would be used in practice – in this case, majority rule.

In Section 4, we examined the interaction of different economies, where strategic behavior on the part of policymakers could sometimes lead to inefficient or undesirable outcomes. The issue here is also an aggregation problem. While national governments in such analyses are assumed to maximize some aggregate measure of the welfare of their constituents, there is not necessarily any institutional mechanism for balancing the concerns of residents of different countries. In a world of perfect competition without nonpecuniary externalities, this does not matter. Problems arise, however, when there are imperfections in competition, externalities, or both. Caring about rights may almost *require* allowing for externalities, since rights are, by conception, often public or shared in nature. Finally, distributional concerns are not removed by the working of competitive markets. Therefore some form of international coordination in making decisions, which represents aggregation of rankings across countries, *may* be better than purely decentralized behavior.

5.1 Consumers and Products

Consumers of a particular product may care about how the product is made. Even if the choice of production process has no effect on the welfare or rights of workers, or on the cost of firms, if buyers care about it, and are willing to pay for it, these preferences can potentially be accounted for in the marketplace. In this case, working conditions or other aspects of how a product is made are just like a product characteristic, such as whether a shirt is red or white. On the other hand, individuals may have preferences over working conditions or worker rights that are not linked to their own consumption of the products made. This is an externality that is more difficult to accommodate through the market. We discuss both these kinds of preferences, and possible policy responses.

The possibility that labor standards can be an economic commodity has been emphasized by Freeman (1994). If consumers are willing to pay more for products made using higher labor standards, such products are essentially equivalent to “high quality” products. If this quality can be directly and costlessly observed by consumers, then labor standards will be provided at the efficient level from the perspective of meeting consumer wants. High labor standards will prevail in the market if and only if the extra gain to consumers outweighs the extra cost of providing the standards.

The market outcome is optimal if the costs of the firm properly reflect the social costs of production. However, if the firm does not take proper account of all costs, then the consumer’s decision is not based on the socially optimal calculation. For example, if workers are exposed to risks that they are uninformed about, and which are not reflected in the cost of production, consumers’ marketplace decisions will not necessarily capture this. Consumers are guided by market prices, which do not reflect true social costs. This problem is much more general than just with respect to working conditions or other labor market issues. Any externality in production, such as pollution, or other unpriced environmental impacts, will lead to the same conclusion.

Returning to the pure focus on consumer preferences, now consider the case where consumer preferences are heterogeneous. In this case, some consumers may be willing to pay more for higher labor standards, while others are not. Therefore goods may be produced both with high and with low labor standards, and consumers will buy those goods that suit their preferences. As long as information about quality is complete, there is no inefficiency in the product market.

So far, we have implicitly assumed that the cost of higher standards is a variable cost. If higher labor standards are achieved through higher fixed costs, as would be the case where they involve safer or cleaner factories, then the efficient scale of firms may increase. Therefore, it is possible that if there is only a small segment of consumers who are willing to pay more for higher standards, the extra cost of serving them will be quite high, reflecting the inefficient scale of the producers that serve these consumers. This is not inefficient from an allocational perspective, but simply highlights possible benefits of increasing the size of the market for goods produced according to high labor standards.

As Freeman (1994) points out, it is difficult for consumers to assess the conditions under which a product is made. This somewhat distinguishes the consumer's problem from that of the worker. Therefore, now consider the case where consumers cannot identify at all the labor standards used in production. Suppose that their estimate of the probability that a product was produced with low labor standards is α. In equilibrium, this estimate should reflect the true proportion of such products. Based on this probability estimate, a consumer's expected utility is $\alpha u_L + (1 - \alpha)u_H - p$, where p is the price paid. Since high standard producers cannot identify themselves, they receive the same price as low standard producers. Low standard producers earn economic profit, and will enter, driving out high standard producers once the price falls below c_H. In equilibrium, $\alpha = 1$. This is a well-known argument, and can be characterized as adverse selection or moral hazard, depending on the precise assumptions made.[28] One approach to solving this information problem is product labeling. Products can be labeled as meeting certain minimum labor standards. However, firms have an incentive to cheat, and so product labeling cannot be self-enforcing.[29]

A possible enforcement mechanism is third-party certification. If firms use a third party that can monitor labor standards and enforce accurate product labeling, the information problem can be overcome. In fact, if product labeling can be enforced costlessly and perfectly, it restores the full information equilibrium. More realistically, monitoring and enforcement are costly. Firms with high labor standards can pay fees to be certified to cover these costs. Such costs must then be passed on to consumers in the price of the product that is certified to have been produced with high standards.

The remaining problem is that the certification authority has an incentive to cheat, if consumers cannot detect such cheating. Reputation effects will again fail to come into play. The incentive to cheat is particularly strong if the organization's objectives are profit maximization. Alternatively, if those who are responsible for monitoring and

[28] If firms are exogenously low or high standard producers, then we have adverse selection (Akerlof, 1970). If firms endogenously decide their standards, then we have a moral hazard problem, e.g., Shapiro (1982).
[29] In some markets, reputation solves the cheating problem, as consumers discover the true quality of the good after purchase. This possibility is not relevant in the case of labor standards. For practical implementations of labeling, see OECD (2000), p. 77.

enforcement share the preferences of those consumers who want their products made according to high labor standards, the cheating incentive is mitigated. NGOs or public agencies may fit this bill. In the latter case, the enforcement of labeling becomes a public policy matter, requiring legislation.

Note that it would be prohibitively costly for an individual to monitor labor standards directly. Monitoring involves high fixed costs, and has the nonrival characteristic of a public good. However, private provision is at least possible as one method of monitoring, because free rider problems are overcome in including monitoring costs in the product price. Alternatively, we can think of NGOs and government policy as collective action mechanisms that partly overcome free rider problems: consumers pay for the monitoring service through voluntary contributions or through taxes. One could also think of the firm paying the tax, and collecting it from purchasers of the "high standard" product through the higher price they pay.

At some points in the above discussion, we have introduced considerations of worker welfare, which may or may not be complementary to consumer concerns. Workers' welfare may depend not just on working conditions, but also on the rights that they enjoy. They can have an extended ranking of different combinations of their own working conditions and rights. Consumers can also have an extended ranking of social situations that include the working conditions and the rights enjoyed by the workers who make the product they buy. This may be quite different from workers' rankings. For example, workers may only care about their working conditions, whereas consumers may only care about workers having the rights to collective action. The logic of the market is that whoever is willing *and* able to pay can influence the choices made.

The issue of differential willingness and ability to pay also has a bearing on the approach to implementing labor standards. In particular, if the consumers are in developed countries and the workers in developing countries, the potential for consumers to pay for their desire for better working conditions or worker rights has more scope for making a difference than do the preferences of relatively poor workers over the same dimensions. To the extent that a product labeling strategy makes it possible for consumers to pay, it is preferable to policies that put the burden on workers. For example, if labeling cannot be made to work, and the policy response is to ban the good that is produced under low standards, resulting in the industry in the developing country shutting down, workers will be worse off. Policies of quantitative regulation may have very different impacts than price-based mechanisms.

We now consider possible public good problems, which arise when individuals care about working conditions or worker rights, irrespective of whether they purchase and consume the product or not. Thus the externality is not linked to the consumption of a product, but simply to the existence of a situation. In this case, all consumers with these preferences still should be willing to pay for improvement in labor market outcomes or processes. However, paying through the market, even with truthful labeling, is no longer sufficient for efficiency.

Consumers who do not purchase the product do not contribute payments toward improved labor standards, but receive the benefits. This is a free rider problem, which might be solved partially or completely in various ways. Individuals who care might make voluntary contributions that are then used to raise standards. Alternatively, they might agree to be taxed, with the proceeds earmarked for the same purpose. If the workers who are the subject of concern are in a different country, the difficulties and costs of implementation may be great, but the economic logic points in this direction. The difficulties may be viewed as insurmountable, if the other country's political or social structure does not permit implementation.

One might take the view that consumers *ought* to care about worker rights and working conditions, irrespective of whether they purchase the products made or not. In other words, labor standards *ought* to be a public good. At one level, this argument is easy to understand. If we care about human dignity or welfare, then the importance of human rights in the workplace must not be merely dependent on consumer preferences as expressed in the marketplace. At another level, this is a difficult approach to analyze. It involves having a ranking of social situations that encompasses other individuals' rankings in the definition of the social situation. In practice, individual rankings of social situations are rarely fully formed and articulated, and the political process is at least partly about resolving such issues. We take this later in the paper, where we make our own argument concerning what individuals *ought* to care about.

5.2 Political Economy

The discussion on the preferences of consumers, or of citizens in general, with respect to worker rights and working conditions, led into a consideration of how these preferences might be satisfied through collective action when the market mechanism was insufficient to achieve that objective. This is a general problem of political economy, since one aspect of the political process and political institutions is precisely the use of collective action to determine how public goods are to be produced and paid for, how external effects are to be resolved, and what kinds of redistributions (implicit or explicit) are to be made. In fact, the usual emphasis is on how political processes are used to promote pure self-interest, rather than the interests of an altogether different set of individuals.

An important example of the self-interest perspective is the possible danger that enforcing international labor standards through trade policy or related sanctions will result in concerns over human rights being ‘hijacked’ by interest groups that directly benefit from the enforcement of higher standards in other countries. Alternatively these interest groups may gain from the imposition of trade-related sanctions against those other countries that do not conform to the higher standards. Srinivasan (1996, 1998) has been most forceful in articulating the danger of hijacking, though many other economists would agree with this perspective.

It is worth noting that an interest group could conceivably benefit from higher labor standards in another country, without using sanctions or trade policy in general. For example, if soccer balls produced abroad under poor working conditions are being imported to the US, competing with domestic producers, the importers could be paid to not produce, or the workers could be directly “bought off.” One might view this as a form of targeted foreign aid, which happens to help a group of domestic workers and firms.

Even if this seems far-fetched, such thought experiments can help to put policy alternatives in perspective.

Pahre (1998) raises the possibility that hijacking may actually help achieve a humanitarian goal. The essence of Pahre's argument is as follows. Imposing a trade sanction against a human rights violator will create domestic winners and losers, and the credibility of a threat to sanction requires that winners outnumber losers. Interest groups representing those who benefit directly ('protectionists'), as well as human rights groups, are winners if the sanction is imposed against a foreign country that does not raise its standards. This combination of groups with different motivations may create a large enough winning coalition so that the threat to sanction is credible, whereas without this coalition the policy would fail. A credible threat leads to the foreign country raising its standard. If either interest group were large enough on its own, it would choose a different policy (e.g., antidumping for 'protectionists', or direct international transfers for rights groups). International labor standards become an issue that allows the two groups to find common ground when they cannot succeed otherwise. A possible rejoinder to the above argument is that credibility may be achieved by other, better means. However, if credibility requires a large enough coalition of supporters, a policy that benefits enough constituents is required. Two other issues remain. First, is the outcome of higher standards better for the objects of concern, even without the imposition of sanctions? Second, is a unilateral threat of this nature consistent with international norms or conventions?

We next return to the case of individuals (e.g., consumers and human rights groups) who explicitly care about workers in other countries, independently of the impacts that those workers' rights and working conditions may have on the income and consumption of the concerned individuals. The Pahre argument can be bypassed if the coalition of such individuals can be made influential enough to implement a preferred policy directly. We argued earlier that such individuals should be willing to pay for higher labor standards, including the costs of monitoring that would be required. Alternatives to payment would be quantitative regulation. Fung, O'Rourke and Sabel

(FOS, 2001) have presented a proposal that is a hybrid of monitoring through collective action, quantitative regulation, and sanctions.

FOS propose monitoring by third parties, governed by a council that would represent a coalition of interests –concerned individuals in developed countries, as well as multilateral agencies, intergovernmental organizations, NGOs, and representatives of worker interests in the organized and informal sectors of developing countries. Thus they suggest a new collective action mechanism for implementing the preferences of various groups of individuals for better working conditions and/or worker rights, rather than the "unholy" alliance of protectionists and rights advocates. In a standard political economy framework, we can characterize this as a proposal for political entrepreneurship.

Monitoring would be delegated to specialists, and would, if successful, lead to greater transparency and opportunities for comparison across competing producers than are available currently. However, departing from our economic logic, FOS suggest that sanctions be imposed on firms that either do not meet certain labor standards, as well as firms that evade monitoring altogether. The nature of these sanctions is unclear. FOS suggest that sanctions should be more than civic action, but have no specifics to offer on actual institutional details of the nature and implementation of sanctions. Ultimately, therefore, the FOS proposal seems to flounder on some fundamental issues.

The FOS proposal does not give developing country governments or labor unions a significant role. They argue that such bodies would view the FOS council and associated monitors as complements for their traditional activities. In practice, however, the perception of overstepping jurisdictions is likely to be a serious issue.[30] The exclusion of firms from the proposed coalition of interests is also a problem since, even though the multinational firms that are the main target of the proposal care about reputation, unless it is clear that their reputations are at stake in a monetarily significant way through the loss of sales, any serious impact is unlikely. The implementation of

[30] See the comments on FOS by Broad (2001), Levinson (2001) and Moberg (2001).

sanctions on firms seems institutionally improbable.[31] In fact, Bardhan (2001a) points out that the problem of competitive undercutting at the firm level – in cases where the greater willingness to pay of consumers for higher labor standards is not enough – needs to be overcome by cooperation among firms. He cites as a reasonably successful example the agreement among the main sporting goods firms, the ILO, UNICEF, NGOs and the Pakistan government to work toward eliminating child labor in the production of soccer balls. As the analyses of Basu (1999, 2001a) demonstrate, a further coordination issue arises at the level of nations, precisely because the firms have multinational production facilities – Bardhan also highlights this issue.

5.3 Jurisdictions and Governance

Cross-border externalities, whether based on consumption or on general moral concerns, raise complex issues of appropriate jurisdiction. If the residents of one political jurisdiction care about the rights or welfare of residents of another jurisdiction, what policies are appropriate to pursue? One pragmatic answer to this general issue of where to draw the line with respect to policy is that the outcomes of the democratic process properly determine how these concerns are aggregated into social policy. However, this does not solve the problem of what to do where the democratic decision of the citizens of the United States, for example, differs from that of the citizens of India, both with respect to the appropriate level of labor standards for *Indian* workers. To illustrate this issue, and possible solutions, we discuss the approach taken by Dani Rodrik, and subsequent debate.

Rodrik (1996) argues that international labor standards are justified, based on cross-border externalities such as those associated with moral considerations. He argues as follows. He notes that citizens of developed countries have agreed, as expressed in their countries' legislation, that certain production technologies are unacceptable domestically, because workers' rights or working conditions associated with those technologies are unacceptable. This proscription typically extends to all technologies

[31] It is not impossible that a government could pass appropriate legislation. For example, US firms are prohibited by US law from using bribery in doing business abroad. On the other hand, European firms have no such restriction.

within a country's jurisdiction, even if they involve noncitizens. Rodrik argues that importing goods from countries with unacceptably low labor standards is equivalent to importing foreign workers and allowing them to work under unacceptable conditions.

Srinivasan (1998) has countered this view by pointing out that there is a wide range of government regulations that affect the cost of production and the welfare of citizens in the producing country. Environmental regulations, building codes, zoning laws also differ across countries. Are goods produced in an Indian factory that does not meet United States building codes to be deemed unacceptable for import? In fact, regulations may differ across states or regions within a country. If California has a higher minimum wage than the rest of the US, would it be morally justified in prohibiting trade with the rest of the country? California cannot do so, because of the US interstate commerce clause, but the question highlights the fuzziness of what initially seems to be a clear-cut argument.

Can one reconcile the differing positions? Proscribing 'unacceptable' technologies indirectly by restricting the import of goods that use them cannot be a blanket argument, independent of the particular case. This is the point that Srinivasan makes. We can elucidate two separate considerations that limit the scope of Rodrik's argument. First, the extension of moral concerns about rights violations involves an indirect exercise of sovereignty beyond the jurisdiction's borders. In the example of California, the state has explicitly ceded some dimensions of sovereignty to the federal government. In international trade, this issue is less clear, but the country with the lower standard has made a sovereign decision to have that lower standard. If the democratic process in the low standard country is flawed or absent, enforcement of international labor standards may be a possible second-best response, but should be recognized as such.[32] If lower standards are the result of a reasonable aggregation of the preferences of the citizens of the other country, then it seems that the social rankings of the citizens of India with respect to Indian labor standards should take precedence over the ranking of

[32] It is also important to point out that the incursion on sovereignty is asymmetric: the country imposing the standard does not simultaneously provide assistance to those who are adversely affected. As Panagariya (2001a,b) and Winters (2002) point out, this is quite different from a domestic standard, where domestic safety nets are part of the overall policy package.

the citizens of the US, just as the citizens of the US should not determine what religion Indians should profess, even if they care deeply about it. If we accept this, then attempting to enforce international labor standards must appeal only to the second reason, which we discuss next.

The second justification for, as well as limitation on, Rodrik's argument is that the violation of human rights must be serious enough to warrant overriding all other considerations. The use of slave labor, prison labor, or other forced labor is typically considered abhorrent enough that issues of sovereignty and democracy are overridden.[33] Thus, Rodrik's argument is really one about balancing sets of possibly competing rights, and possibly also about enforcing wider sets of rights. It is not based on a neutral extension of an accepted principle. Srinivasan's critique implicitly follows these lines. For example, the reason that Indian building codes and zoning laws are not the subject of discussion with respect to international standards is precisely because US citizens do not (and probably should not) care about them, in whatever rankings they have over combinations of outcomes and processes in other countries as well as their own.

Given that we are dealing with a complex (though usually implicit) problem of social aggregation of complex individual rankings, it is no surprise that there is no easy agreement on where to draw the line. For example, Freeman (1994), taking a self-described pragmatic view, suggests that many "standards that specify processes for determining labor outcomes (freedom of association, use of slave or convict labour) …can be met without high levels of income and thus might be viewed as fundamental social rights", which have a universal character. On the other hand, Sachs (1997) has given the example of South Korea joining the OECD, where he argues that the OECD had "no business pushing Western-European style labor relations" on the new entrant. Even if we can theoretically reconcile the positions of Rodrik and Srinivasan, the practical difficulties remain, whether one is a pragmatist or not.

We have focused our discussion of where to draw the line on the case of direct or nonpecuniary externalities. Bagwell and Staiger (2001) have shown that even pecuniary externalities can matter when there is not perfect competition. This is precisely what we should expect from the theory of competitive markets. As we discussed in Section 4, they suggest a particular way of tying labor standards to trade negotiations, and raise the issue of drawing the line, "Why stop at labor and environmental standards? Virtually all domestic policy choices of large economies…could be the subject of an analysis similar to what we have undertaken here." They sidestep this issue, however, by saying that the WTO "social clause" and minimum standards approach is subject to the same problem of where to draw the line, while being more invasive of sovereignty. This rationalizes the Bagwell-Staiger approach as preferable, but does not address at all the issue of what aspects of domestic standards ought to be tied in some way to international trade negotiations. This is not a *neutral* decision, but involves balancing different and complex sets of rights of different groups of individuals.

6. Poverty and Development

Suppose that the unifying concern of those who pursue international labor standards is an improvement in the lot of those who are less well off, rather than material self-interest. To what extent are international labor standards the appropriate method of meeting this concern? Earlier, we provided some answers to this question in the context of static resource efficiency and the distribution of income. In this section, we examine some longer-run issues in the context of the problem of economic development. In particular we suggest what concerned individuals *ought* to care about, and put international labor standards in a broader development perspective.

6.1 Unintended Consequences

One major concern expressed repeatedly in discussions of international labor standards is whether they will have the impact that is intended. For example, in 1994, the

[33] For example, as Henrik Horn has pointed out to me, forced labor is already included in the GATT (Article XX).

manager of the ILO's Programme on the Elimination of Child Labor stated, "Abolishing child labor in one sector alone, such as the export sector, cannot eliminate child labor in a country – it may simply push it into other activities, including some more hazardous to children." (ILO, 1994, quoted in Freeman, 1994). Such consequences may not be intended by a policy of imposing international labor standards.[34]

Bardhan (2001a, 2001b) clearly argues the case that international labor standards such as banning child labor in exporting industries will only shift the problem out of the export sector. Since the proportion of overall child labor that is in export-related industries is quite low (only 5% in India), just tackling that small proportion has, at best, no significant impact. At worst, it can harm the lives of the displaced children. Similar issues arise with other kinds of labor standards that are implemented for all workers in export sectors of developing countries. Note that, in the case of child labor, the kind of analysis performed by Basu and Van (1998) and Basu (1999), in which a ban on child labor improves welfare (by shifting the economy from a low-wage to a high-wage equilibrium), assumes that the ban is economy-wide. The children who are displaced are taken care of, because their parents' income goes up as a result of the ban on child labor.

The debates about consequences extend to other examples of labor standards, including working conditions and worker rights. These debates ultimately rest on differing assumptions about competition and its effects, and on varying implicit distributional judgments. One extreme with respect to assumptions about competition (e.g., Rothstein, 1994) is that monopsony drives a substantial wedge between marginal products and wages, as outlined in Section 3. In that case, there is room to extract some of the firm's supernormal profits, through higher wages, better working conditions, or

[34] On the other hand, there are cases where one may not care. If consumers in developed countries care only about how products that they consume are made, then such consequences are irrelevant. If the concern is with the welfare of workers in an import-competing industry in a developed country, then again, the impact on workers in developing countries is irrelevant to those concerns. There are plausible theoretical arguments that support the contention that trade between North and South can hurt the incomes of unskilled or low-skilled workers in the North. However, the best response to negative impacts on incomes, according to theory, is to use some form of worker adjustment assistance to deal with the impact of trade (see, e.g., K.C. Fung and Staiger, 1996). In any case, the use of international labor standards explicitly to protect domestic groups violates international trade agreements as currently structured.

both. On the other hand, if firms are competitive, and operate in competitive labor markets, any policy designed to improve the lot of workers will make at least some workers worse off.

The international mobility of capital (and the lack of mobility of labor) poses a problem even where implementing worker rights would otherwise improve workers' bargaining power, and hence their incomes (Bardhan, 2001a). When firms can relocate, the implementation of international standards requires some form of coordination among developing countries. However, coordination is probably much more difficult to achieve in the case of worker rights, as opposed to working conditions. For example, greater competition from workers elsewhere can destroy the high-wage, non-child-labor equilibrium in the Basu-Van model (Dixit, 2000).

Distributional concerns raise different issues from the negative impacts that might follow from international labor standards in the presence of competition. Even if standards improve the lot of workers in the export sector, these workers may be a privileged subset of the privileged subset of workers in the formal sector. This itself is not bad, but the distributional implication that those who are most in need of assistance – according to standard welfare criteria that include a concern for equity – are not being helped, is disturbing. In the kind of situation discussed by Bardhan, while there may be redistribution to poor adults (who would otherwise be unemployed) as a result of banning child labor, this must be weighed against the negative consequences on the displaced children.

6.2 The Longer Run

A dynamic, rather than static perspective is crucial in looking at issues of development. For example, in the case of child labor, investment in children's human capital is important. Basu (1999), adapting Basu and Van (1998), models this as follows. He assumes that children and adults are perfect substitutes after adjusting for the fact that a child is a fraction of an adult in terms of productivity. He assumes that there is a unique equilibrium in a single period case, so that the Basu-Van result does not hold. The model is one of overlapping generations, where each person lives for two periods. Children can either work or go to school, and this is decided by the adult(s) in the household. Productivity, and therefore the wage as an adult is a function of human capital acquisition as a child. If the adult wage is high enough, the adult will not send the child to school, in which case the child becomes educated and earns a high wage as an adult, and so on. There can be multiple stable steady-state equilibria in this model, one where every parent sends his or her child to school and the adult wage is high, supporting this behavior, and another where every parent makes his or her child work, so that the adult wage is low. Policy intervention can move the economy toward the higher equilibrium, through a large effort to educate one generation, getting the economy out of the "child labor trap".

Baland and Robinson (2000) also examine a model in which there is a trade-ff between child labor and the accumulation of human capital. In their model, parents are altruistic, but may run out of resources needed to educate their children. The option of borrowing against their children's future income is not available to them because such intergenerational contracts cannot be enforced.[35] Besides the practicality of such contracts, they are subject to problems of moral hazard by parents borrowing against children's future income and then using the money for their own consumption. This points out some of the difficulties in relying on obvious interventions such as improving capital markets to improve education of children and reduce child labor.

If, as in the Baland and Robinson analysis, child labor is Pareto inefficient, why is it difficult to abolish in practice? The answer that they provide is that heterogeneity may create some losers from a ban, necessitating compensatory transfers that are themselves infeasible or costly to implement. For example, rich people and those firms that have adopted technologies that do not require skilled workers may be affected by a ban, the former by having their wages depressed, the latter by being put at a competitive disadvantage. In the absence of such factors, however, government subsidies of education, financed by a tax on adult earnings, could be Pareto-improving. Baland and Robinson also suggest that foreign bans on imports of goods produced with child labor

[35] A related model is analyzed by Ranjan (1999, 2001).

can be Pareto-improving, but this assumes away some of the problems noted by Bardhan (2001a) and others.[36]

Investment in human capital is relevant for all workers, not just for children, though it is particularly important in their case. Thinking about retraining and education leads to a more general discussion of long run issues in weighing labor standards. Long run development can depend on technological change as well as on investment. Piore (1990, 1994) argues that there can be multiple equilibria in an economy, and that labor standards can move firms and workers out of a "sweatshop" equilibrium. He goes on to suggest that forcing up labor costs induces technological change and growth.

The induced technological change hypothesis is an old one, but hard to justify formally. If profitable opportunities for technological improvement exist, then the firm should be able to take advantage of them irrespective of its current strategy. Tying technological change to current or past factor intensities requires either some kind of localized learning about possible innovations, switching costs that lock the firm into its current technology, or some other reason for path dependence.[37] Alternatively, there must be some positive externality associated with the high wage equilibrium that fuels growth. For example, if workers are better off than the subsistence level of income, they may be able to invest in their own or their children's education. Consumers, who are worse off in the high wage equilibrium, may simply curtail consumption of goods that do not affect growth. This brings one back to the kinds of models analyzed by Basu and Baland and Robinson.

Explicit models of growth appear not to have been considered in the literature on international labor standards. However, Amsden (1995) provides a discussion based implicitly on a structuralist model of developing country economies and their growth. Amsden distinguishes between "wage-led" growth, in which real wages rise with productivity, and this fuels aggregate demand, investment and ultimately higher incomes, and "profit-led growth", in which profits are the source of investment and growth. The

[36] Additional analysis of child labor issues may be found in Brown (2000c) and Brown, Deardorff and Stern (2002).

former economies are identified with large countries that have substantial domestic markets, while the latter are equated to smaller, open economies. Amsden argues that international labor standards would be consistent with, and might even support, wage-led growth, but that they would very probably hurt growth in small, open developing country economies. While Amsden does not provide an explicit model, she appears to assume that there are structural rigidities or imperfect competition effects that create a wedge between real wages and marginal products. Growth is assumed to be determined by investment, and there is no role for endogenous technological progress.

One possibility for formally examining the relationship between labor standards and growth that would allow for endogenous technological progress is the framework of Grossman and Helpman (1991, Ch 10). They consider a two-country model where each country has three sectors: traditional manufacturing, high-tech manufacturing, and R&D, in order of increasing human capital intensity. R&D ultimately determines innovation and growth, and a subsidy to R&D in one country increases its rate of innovation and growth. Production subsidies are more surprising in their effects. A production subsidy to the high-tech sector reduces innovation and growth, because it draws human capital (skilled labor) from the R&D sector. A production subsidy to the low-tech sector in one country spurs growth in that country, but at the expense of the other country. If we interpret a labor standard as analogous to a tax on the low-tech sector, which uses low skill labor more intensively, then the Grossman-Helpman analysis suggests that a labor standard would actually be harmful to growth in the country where it is applied, and therefore to the long run welfare of low skill workers in that country. This perspective suggests some caution in accepting Piore's assertions on labor standards and growth.

In another way, the results of the thought experiment of introducing labor standards into the endogenous growth model are not surprising. Growth in that model is driven by technological progress, and there is nothing tying technological progress to working conditions, or to worker rights. Piore tries to make this connection through a discussion of firms' business strategies, but the argument is ultimately unclear. One

[37] See the discussion of these issues in the context of development in Singh (1994) and Marjit and Singh (1995).

possibility for formalizing this approach (Ellingsen, 2002) is that, in an incomplete contracting framework (Hart and Moore, 1999), workers with no rights may be reluctant to invest in firm-specific human capital (and, to extend the argument, firm-specific innovation). Thus, assigning some control rights to workers might have positive impacts on efficiency and growth.

6.3 Rights and the Poor

A distinguishing feature of the debate on international labor standards is its emphasis on human rights in general, and on the rights of the poor in poor countries, in particular. The emphasis on rights poses some difficulties for standard welfare economics but they are not insurmountable for a rigorous and consistent analysis, incorporating concerns about rights or processes as well as outcomes or consequences. If fundamental rights, including labor rights, are of overriding importance in themselves, then improving the extent to which all workers enjoy such rights provides immediate and lasting benefits. This argument in favor of fundamental rights is tautological. The practical difficulty, as we have seen, comes about in deciding where to draw the line around fundamental rights. Debate is particularly useful here, because it can clarify which rights are to be considered fundamental, and it can help to achieve something that approaches a consensus. The ILO/OECD core labor standards are not necessarily the final word on this topic, as Fields (1996) argues. In any case, it is typically the poor in every country whose rights deserve the most protection, so a general strengthening of concern for fundamental rights would presumably help them the most.

However, there is a further difficulty: a concern for rights may conflict with outcome-based measures of welfare. This is a fundamental problem in the abstract, with regard to situations where preferences are other-regarding (Sen, 1970; Pattanaik, 1999). More concretely, enforcing strict rights of collective bargaining can conceivably deter hiring, and make workers worse off through job loss. We might still argue that such a right is important enough that it must transcend narrow welfarist considerations: this case is easy to accept for prohibitions against slavery or bondage, even if “voluntary”.

A further response could be that in such cases it is not sufficient to enforce the labor right in isolation – human beings are entitled to a set of minimum rights that must be provided or ensured as a bundle. If this bundle of rights includes access or entitlement to sufficient education and credit opportunities, the poor person's bargaining power is increased in a manner that mitigates the possible adverse effect of labor rights. In many poor countries, an even more basic right that is still not universally available is the right to some minimum level of physical or biological well-being. Lack of adequate nourishment and unwarranted exposure to various hazards are examples of a failure to meet such minimum standards.

Highlighting such an approach is not particularly novel. Sen (1985a, 1985b) has stressed the importance of human capabilities in thinking about the objectives of development. Dasgupta (1993), and Ray (1998; also Ray and Streufert, 1993) have examined the importance and consequences of nutritional deprivation. Numerous authors and developmental institutions have emphasized the crucial need to "invest in people", based on a tripartite framework that includes nutrition, skills, and financial assets.[38] In such cases, again, we are emphasizing capabilities, which may include endowments as well as rights, along with outcomes.

How does this impact the debate on labor standards? It suggests that those who care about worker rights and working conditions of the poor in poor countries ought to do so in a broader context. If the fundamental rights at stake are the ability to achieve minimum standards of physical and mental well-being,[39] narrowly focusing on labor standards may not be the right approach to thinking about rights. One needs a broader perspective. To illustrate this concretely, consider once again the case of child labor. Bardhan (2001a, 2001b) reviews several different policies that can be and have been tried to tackle this issue, including making schools more attractive or less costly to attend, having firms employing child labor finance some of these efforts, improving the productivity of adult workers in the same industry, and so on. The focus here is on the

[38] For a comprehensive "textbook" treatment, see Ray (1998). For an overview with recent examples, placed in the context of globalization, see Bardhan (2001a).

[39] In accepting this position, rights advocates are not too far from consequentialists, since consequences are built in to the rights that are classified as fundamental.

broader rights and welfare of the children, rather than on child labor per se. Of course unsafe and unhealthy working conditions are still to be controlled, but this is again properly part of a broader concern with physical well-being. It is the fundamental rights to capabilities that enable achievement of minimum well-being that individuals, whether in developed or developing countries, *ought* to care about.[40]

All this does not imply that labor standards are unimportant, merely that they must be placed in perspective. In general, the interaction of the credit and education markets with the labor market provides examples of how labor standards may be beneficial, or alternatively, where the policy focus may need to be different. In Genicot's (2002) analysis of bonded labor, restricting one set of voluntary contracts that may be signed can help poor workers because it allows another, more attractive set of credit contracts to become available. An alternative approach might be to improve the working of rural credit markets through micro-credit schemes. In the Baland-Robinson (2000) analysis, the credit market imperfection cannot be directly removed to make it possible for parents to finance their children's education and avoid child labor. Banning child labor may solve the problem in the theoretical model, but in practice, targeted subsidies for education for the poor may be a good alternative policy.

The same policies that improve basic capabilities, through access to minimum levels of physical well-being, education, and credit opportunities, are likely to be quite consistent with concerns about outcomes alone. To the extent that outcomes include educational outcomes, the correlation is obvious. Even if we care only about low incomes, and measure poverty accordingly, improving access to nutrition, education and credit may be the proper primary areas of policy focus, rather than labor standards. For example, job provision or protection schemes typically work less well than policies aimed at more fundamental capabilities, even if efficient targeting in the presence of incomplete information requires in-kind rather than cash transfers.[41] These observations are just as true for developed countries as they are for developing countries, and it is safe

[40] This does not diminish concern about rights such as freedom of speech and association: any supposed trade-off between these is likely to be a false one.
[41] See Singh and Thomas (2000) for such an analysis.

to say that they reflect the thinking of most economists, whatever weight they put on non-consequentialist concerns in their own views.

7. Lessons: From Theory to Policy

The lessons of this paper are as follows. First, value judgments and normative concerns about rights can be rigorously incorporated into discussions of international labor standards. This rigor helps bring out the potential conflicts or tradeoffs between outcomes and processes, and allows one to go beyond traditional labor market problems to incorporate concerns about processes and rights. Second, this broad normative approach is entirely consistent with economic theory, which continues to provide a guide for evaluating issues of worker welfare, labor market processes, and the impacts of different types of "labor standards" policy interventions.

The third lesson is that both the first two lessons include the case of international as well as domestic labor standards. There is no neutral, technical case for international labor standards, nor are global ideals always trivial to implement. In fact, additional complications of sovereignty, political economy and governance arise in the international context, making collective value judgments more contentious.

Our fourth lesson is that, if concerns for the poor drive international policy on international labor standards, then the proper objective, even where processes matter as well as outcomes, is with a more basic set of capabilities and rights than is typically encompassed by proponents of international labor standards. Policies that promote basic nutrition and health, and broader access to education and credit are likely to help growth, as well as having intrinsic benefits.

Putting together all these lessons, which are driven by economic theory, one arrives at the most important and final lesson, which has to do with implications for international policy. Theory suggests that, even when cooperation on international labor standards may be desirable, linking such standards to trade negotiations in the WTO remains problematic, in terms of both equity and efficiency of outcomes and of processes. The ILO is the natural forum for building consensus on international labor standards. Despite its lack of enforcement teeth, its promotional and supervisory systems do appear to lead to some progress (OECD, 2000, Part III). International legal efforts may therefore best be spent on gradually strengthening the informational and moral suasion role of the ILO, rather than trying to expand the scope of the WTO to cover labor standards.

Note that the ILO's mandate does not extend to the broader development issues that we have raised in this paper. There, international financial institutions such as the World Bank and the various regional banks (ADB, IDB, etc.) have mandates to tackle development problems, but they have had mixed success, and their track record does not suggest optimism with respect to their inclusion of labor standards in their objectives, as is happening (OECD, 2000, pp. 57-59). Furthermore, these institutions do not have decision-making structures with democratic representation. In this respect, they are even less suitable than the WTO.

A final possibility may be a new international structure that can connect the real concerns of developing countries for the welfare of their workers, with their desire for overall economic development. As Basu (2001b) puts it, "we need to allow Third World nations to develop their own agenda—a consensus from the tropics—of what constitutes minimal labor standards." Developing this idea into formal global institutions that can shape policy will be worthwhile.

References

Aghion, Philippe and Benjamin Hermalin (1990), Legal Restrictions on Private Contracts Can Enhance Efficiency, *Journal of Law Economics and Organization*, 6, 2, 381-409.

Akerlof, George (1970), The Market for Lemons: Quality Uncertainty and the Market Mechanism, *Quarterly Journal of Economics*, 84, 488-500.

Akerlof, George (1976), The Economics of Caste and of the Rat Race and Other woeful Tales, *Quarterly Journal of Economics*, 90, 599-617.

Amsden, Alice (1994), Hype or Help?, *Boston Review*, 20,1, December –January.

Bagwell, Kyle, and Robert W. Staiger, Domestic Policies, National Sovereignty and International Economic Institutions, *Quarterly Journal of Economics*, 116, 2, May 2001, PP. 519-562.

Baland Jean-Marie, and Robinson, James (2000), Is Child Labor Inefficient?, Journal of Political Economy, 108, 4, August, 663-679.

Bardhan, Pranab (2001a), Social Justice in the Global Economy, *Economic and Political Weekly*, February 3-10.

Bardhan, Pranab (2001b), Some Up, Some Down, *Boston Review*, 26,1, February-March.

Basu, Kaushik (1999), Child Labor: Cause, Consequence, and Cure, with Remarks on International Labor Standards, *Journal of Economic Literature*, 37, September, 1083-1119.

Basu, Kaushik (2001a), On the Goals of Development, in *Frontiers of Development Economics: The Future in Perspective*, Gerald Meier and Joseph Stiglitz, eds., Washington, DC: World Bank and Oxford University Press.

Basu, Kaushik (2001b), The View from the Tropics, *Boston Review*, 26,1, February-March.

Basu, Kaushik, and Van, Pham Hoang (1998), The Economics of Child Labor, *American Economic Review*, 88, 412-427.

Basu, Kaushik, and Van, Pham Hoang (1999), The Economics of Child Labor: Reply, *American Economic Review*, 89, 5, 1386-1388.

Berlin, Isiah (1969), *Four Essays on Liberty*, Oxford: Oxford University Press.

Bhagwati, Jagdish (1995), 'Trade Liberalization and 'Fair Trade' Demands: Addressing Environmental and Labour Standards Issues', *World Economy*,18, 745-759.

Bhagwati, Jagdish and Robert Hudec, eds. (1996a,) *Fair Trade and Harmonization, Vol. 1: Economic Analysis*, Cambridge MA: MIT Press.

Bhagwati, Jagdish and Robert Hudec, eds. (1996b), *Fair Trade and Harmonization, Vol. 2: Legal Analysis*, Cambridge MA: MIT Press.

Bhagwati, Jagdish and T.N. Srinivasan (1996), Trade and the Environment: Does Environmental Diversity Detract from the Case for Free Trade?, in Bhagwati and Hudec, eds., 1996a.

Broad, Robin (2001), A Better Mousetrap?, *Boston Review*, 26,1, February-March.

Brown, Drusilla (2000a), International Labor Standards in the World Trade Organization and the International Labor Organization, Discussion Paper 2000-03, Department of Economics, Tufts University.

Brown, Drusilla (2000b), International Trade and Core Labor Standards: A Survey of the Recent Literature, Discussion Paper 2000-05, Department of Economics, Tufts University.

Brown, Drusilla (2000c), A Transactions Cost Politics Analysis of International Child Labor Standards, Chapter 8 in Deardorff and Stern, eds., 2000.

Brown, Drusilla, Alan Deardorff and Robert Stern (1996), International Labor Standards and Trade: A Theoretical Analysis, in Bhagwati and Hudec, eds., 1996a.

Brown, Drusilla, Alan Deardorff and Robert Stern (1997), Issues of Environmental and Labor Standards in the Global Trading System, Working Paper 97-10, Department of Economics, University of Michigan.

Brown, Drusilla, Alan Deardorff and Robert Stern (2001), Child Labor: Theory, Evidence and Policy, in *International Labour Standards – Issues, Theories, and Policy Options*, ed. Kaushik Basu, Henrik Horn, Lisa Román, Judith Shapiro, Oxford: Basil Blackwell.

Bucovetsky, S. and John D. Wilson (1991), Tax Competition with Two Tax Instruments, *Regional Science and Urban Economics*, 21, 333-350.

Casella, Alessandra (1996), Free Trade and Evolving Standards, in Bhagwati and Hudec, eds., 1996a.

Chau, Nancy and Ravi Kanbur (2000), ‘The Race to the Bottom, From the Bottom, Working Paper, Cornell University, November.

Cornes, Richard and Sandler, Todd (1986), *The Theory of Externalities, Public Goods, and Club Goods*, Cambridge: Cambridge University Press.

Dasgupta, Partha (1993), *An Inquiry into Well-Being and Destitution*, Oxford: Clarendon Press.

Datta, S. and P.R. Chowdhury (1998), Management Union Bargaining under Minimum Wage Regulation in Less Developed Countries, *Indian Economic Review*, 33, 2, 169-84.

Deardorff, Alan and Robert Stern, eds. (2000), *Social Dimensions of U.S. Trade Policies,* Ann Arbor: University of Michigan Press.

Deardorff, Alan and Robert Stern, eds. (1998), *Constituent Interests and U.S. Trade Policies*, Ann Arbor: University of Michigan Press.

Dickens, William (1984), Occupational Safety and Health Regulation and Economic Theory, in *Labor Economics: Modern Views*, ed. William Darity, Jr. Boston: Kluwer-Nijhoff.

Dixit, Avinash (2000), Comment on A Transactions Cost Politics Analysis of International Child Labor Standards, Chapter 8 in Deardorff and Stern, eds., 2000.

Engerman, Stanley (2002), An Overview of the Evolution of Labour Standards, in *International Labour Standards – Issues, Theories, and Policy Options*, ed. Kaushik Basu, Henrik Horn, Lisa Román, Judith Shapiro, Oxford: Basil Blackwell.

Fairris, D., (1995), Do Unionized Employers Reappropriate Rent through Worsened Workplace Safety, *Eastern Economic Journal*, 21, 2, 171-85.

Fields, Gary (1996), Trade and Labour Standards: Final Report on the Meeting, Working Paper No. 7, Paris: Organization for Economic Cooperation and Development.

Freeman, Richard (1994), A Hard-Headed Look at Labor Standards, in US Department of Labor.

Fung, Archon, O'Rourke, Dara and Sabel, Charles (2001), Realizing Labor Standards, *Boston Review*, 26,1, February-March.

Fung, Kwok-Chiu, and Staiger, Robert (1996), Trade Liberalization and Trade Adjustment Assistance, in *The New Transatlantic Economy*, Canzoneri, M., W. Ethier and V. Grilli, eds., Cambridge: Cambridge University Press.

Genicot, Garance (2002), Bonded Labor and Serfdom: A Paradox of Voluntary Choice, *Journal of Development Economics*, Feb., 67,1,101-127.

Golub, Stephen (1997), International Labor Standards and Trade, Working Paper WP/97/37, Research Department, International Monetary Fund.

Grossman, Gene and Elhanen Helpman (1991), *Innovation and Growth in the Global Economy*, Cambridge, MA: MIT Press.

Hart, Oliver and John Moore (1999), Foundations of Incomplete Contracts, *Review of Economic Studies*, 66, 1, 115-138.

ILO, Washington Branch (1994), *Washington Focus*, Spring, p. 9.

ILO (1998), *ILO Declaration on Fundamental Principles and Rights at Work and its Follow-Up*, Geneva: International Labour Organization.

Levinson, Mark (2001), Wishful Thinking, *Boston Review*, 26,1, February-March.

Lindbeck, Assar (1988), Individual Freedom and Welfare State Policy, *European Economic Review*, 32, 295-318.

Marjit, Sugata and Singh, Nirvikar (1995), Technology and Indian Industry, in *Indian Industry*, Dilip Mookherjee, ed., New Delhi: Oxford University Press.

Maskus, Keith (1997), Should Core Labor Standards be Imposed through International Trade Policy, Paper prepared for World Bank International Trade Division.

Moberg, David (2001), Unions and the State, *Boston Review*, 26,1, February-March.

Nozick, Robert (1974), *Anarchy, State and Utopia*, Oxford: Basil Blackwell.

OECD (1996), *Trade, Employment and Labor Standards*, Paris, France: Organization for Economic Cooperation and Development.

OECD (2000), *International Trade and Core Labour Standards*, Paris, France: Organization for Economic Cooperation and Development.

Oates, Wallace and Schwab, Robert (1988), Economic Competition among Jurisdictions: Efficiency Enhancing or Distortion Inducing, *Journal of Public Economics*, 35, 333-354.

Oi, Walter (1973), Workmen's Compensations and Industrial Safety, *Supplemental Studies for the National Commission on State Workmen's Compensation Laws*, Volume I, Washington, DC: US GPO, 41-106.

Pahre, Robert (1998), Comments on Conference Version of Paper: Labor Standards, Trade Sanctions and the Hijacking Hypothesis, comments on Chapter 12 in Deardorff and Stern, eds., 1998.

Panagariya, Arvind (2001a), Trade Labor Link: A Post-Seattle Analysis, in Drabek, Zdenek, ed., *Globalization under Threat: The Stability of Trade Policy and Multilateral Agreements*, Cheltenam, UK: Edward Elgar, 101-123.

Panagariya, Arvind (2001b), Labor Standards and Trade Sanctions: Right End Wrong Means, paper presented at the conference, *Towards An Agenda for Research on International Economic Integration and Labor Markets*, January 15-16, 2001, East-West Center, Hawaii.

Pattanaik, Prasanta (1999), Individual Rights and Social Choice, Public Lecture delivered at Deakin University, Victoria, Australia, November.

Piore, Michael (1990), Labor Standards and Business Strategies, in *Labor Standards and Development in the Global Economy*, Stephen Herzenberg and Jorge Perez-Lopez, eds., Washington, DC: US Department of Labor, Bureau of International Affairs.

Piore, Michael (1994), International Labor Standards and Business Strategies, in US Department of Labor.

Portes, A. (1990), When More can be Less: Labor Standards, Development, and the Informal Economy, in *Labor Standards and Development in the Global Economy*, U.S. Department of Labor, Washington, D.C.

Ranjan, P. (1999), An Economic Analysis of Child Labor, *Economics Letters*, Vol. 64, no.1.

Ranjan, P. (2001), Credit Constraints and the Phenomenon of Child Labor, *Journal of Development Economics*, 64(1).

Ray, Debraj (1998), *Development Economics,* Princeton: Princeton University Press.

Ray, Debraj and Streufert, Peter (1993), Dynamic Equilibria with Unemployment due to Undernourishment, *Economic Theory,* 3, 61-85.

Revesz, Richard (1992), Rehabilitating Interstate Competition: Rethinking the "Race-to-the Bottom" Rationale for Federal Environmental Regulation, New York University Law Review, 67, 1220-1254.

Rodrik, Dani (1996), Labor Standards in International Trade: Do They Matter and What Do We Do About Them?, in Robert Lawrence, Dani Rodrik, and John Whalley, *Emerging Agenda for Global Trade: High Stakes for Developing Countries*, Washington, DC: Overseas Development Council.

Rosen, Sherwin (1986), The Theory of Equalizing Differences, Chapter 12 in *Handbook of Labor Economics*, Volume I, eds., Orley Ashenfelter and Richard Layard, Amsterdam: North Holland.

Rothstein, Richard (1994), The Case for Labor Standards, *Boston Review*, 20,1, December –January.

Sachs, Jeffrey (1997), Re-Thinking International Labor Standards, Lecture, January 22.

Sen, Amartya (1970), The Impossibility of a Paretian Liberal, *Journal of Political Economy*, 78, 152-157.

Sen, Amartya (1985a), *Commodities and Capabilities,* Amsterdam: North Holland.

Sen, Amartya (1985b), Well-being, Agency and Freedom: The Dewey Lectures 1984, *Journal of Philosophy*, 82, 169-221.

Sen, Amartya (1997), *On Economic Inequality,* Expanded Edition, Oxford: Clarendon Press.

Shapiro, Carl (1982), Consumer Information, Product Quality, and Seller Reputation, *Bell Journal of Economics*, Spring, 13, 1, 20-35.

Singh, Nirvikar (1994), Some Aspects of Technological Change and Innovation in Agriculture, in *Agrarian Questions*, Kaushik Basu, ed., New Delhi: Oxford University Press.

Singh, Nirvikar (2002), The Impact of International Labour Standards: A Survey of Economic Theory, in *International Labour Standards – Issues, Theories, and Policy Options*, ed. Kaushik Basu, Henrik Horn, Lisa Román, Judith Shapiro, Oxford: Basil Blackwell.

Singh, Nirvikar and Ravi Thomas (2000), Welfare Policy: Cash Versus Kind, Self-Selection and Notches, *Southern Economic Journal*, 66, 4, April, 976-990.

Srinivasan, T.N. (1994), International Labor Standards Once Again!, in US Department of Labor.

Srinivasan, T.N. (1996), International Trade and Labour Standards from an Economic Perspective, in van Dijk and Faber, eds.

Srinivasan, T.N. (1998), Trade and Human Rights, Chapter 12 in Deardorff and Stern, eds., 1998.

Staiger, Robert W. (2002), A Role For The WTO: A Proposal, in *International Labour Standards – Issues, Theories, and Policy Options*, ed. Kaushik Basu, Henrik Horn, Lisa Román, Judith Shapiro, Oxford: Basil Blackwell.

Stiglitz, Joseph (2000), The Contributions of the Economics of Information to Twentieth Century Economics, *Quarterly Journal of Economics*, 115, 4, November, 1441-1478.

Suzumura, Kotaro (1999), Consequences, Opportunities and Procedures, *Social Choice and Welfare*, 16, 17-40.

Thaler, Russell and Rosen, Sherwin (1975), The Value of Saving a Life: Evidence from the Labor Market, in Nestor Terleckyj, ed., *Household Production and Consumption*, *Studies in Income and Wealth*, Volume 40, NBER, New York: Columbia University Press.

Tiebout, Charles (1956), A Pure Theory of Local Public Expenditures, *Journal of Political Economy*, 64, 416-424.

US Department of Labor (1994), International Labor Standards and Global Economic Integration: Proceedings of a Symposium, Washington DC: US Department of Labor.

van Dijk, Pitou and Gerrit Faber, eds. (1996), *Challenges to the New World Trade Organization*, The Hague: Kluwer Law International.

Wilson, John D. (1996), Capital Mobility and Environmental Standards: Is There a Theoretical Basis for a Race to the Bottom?, in Bhagwati and Hudec, eds., 1996a.

Winters, Alan (2002), Trade and Labour Standards: To Link or Not to Link?, in *International Labour Standards – Issues, Theories, and Policy Options*, ed. Kaushik Basu, Henrik Horn, Lisa Román, Judith Shapiro, Oxford: Basil Blackwell.

Zodrow, G. R., and Mieszkowski, Peter (1986), Pigou, Tiebout, Property Taxation, and the Underprovision of Local Public Goods, *Journal of Urban Economics*, 19, 356-370.