The Economic Implications of Child Labor

A Comprehensive Approach to Labor Policy

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Abstract

People around the world prefer that children not participate in the workforce. However, regulation of child labor remains largely ineffective because it does not address the root causes of the issue. This paper examines the economic origins of child labor, reveals the benefits of reduced child labor, and explores the efficacy of specific types of regulation. The paper ultimately proposes that effective child labor policy must address the economic roots of child labor by developing credit access, financial markets, and general economic growth.

Introduction

Labor standards have been imposed on economies since the 14th century. While such laws initially served the interests of the elite, standards began to address the rights of low-skilled workers during the industrial revolution of the 19th century (Brown 2001). Today, the International Labor Organization (ILO) and several international agreements exist to coordinate global labor standards (Krueger 1996). Domestic laws and international institutions have focused particularly on the issue of child labor. Virtually every country in the world attempts to regulate and limit child employment (Brown 2001). International conventions, such as the ILO's Convention on Child Labor, call for a minimum employment age of 15 throughout the world (Krueger 1996). However, national and international attempts to regulate and/or eliminate child labor have had limited success. Policymakers must better understand the role of child labor in the modern economy in order to create more effective labor regulation. This paper will examine the economic implications of child labor and labor regulation, revealing that economic development is the ultimate path to the elimination of child labor.

Literature Review

Analysis of child labor often focuses on the moral imperative to prevent exploitative labor practices. While humanitarian concerns are relevant to some studies of labor regulation, this paper uses economic theory to model and explain child labor participation and regulation. Krueger's work (1996), which demonstrates a strong correlation between child labor and poverty, has been particularly significant in the literature. Dehejia and Gatti (2003) add, "income is the single most important household-level predictor of child labor" (p. 11). Brown (2001) extends this claim, asserting that child participation in the labor force is negatively correlated with per capita GDP. Considerable literature also explores the relationship between child labor and variables that correlate with income, such as development, family size, and education. Scholars have developed many theories to explain connections between these variables. Evidence suggests, however, that the relationship between income and child labor dominates all others. Edmonds and Pavcnik (2004) claim that 75% of cross-country variation in child labor can be explained by income variation.

The relationship between income and child labor illustrates that child "nonwork" is a luxury good that households "consume" when they can afford to do so (p. 415, Basu and Van 1998). Basu and Van (1998) substantiate this commonly held theory with evidence that children of the non-poor seldom work, regardless of national economic or political factors. Krueger (1996), furthermore, observes that people with high socioeconomic status tend to support government regulation of child labor.

Economists use several models to explain the continued existence of child labor in a world that strongly prefers that children not participate in the workforce. Dehejia and Gatti (2003) determine key explanatory variables for child labor by analyzing the type of bargaining that leads households to a particular outcome. The intra-household bargaining framework describes child labor as an outcome of bargaining between members of a household. In this framework, variables associated with family dynamics affect decisions about child labor. Such variables include wealth, family size, family member age, and gender of children. The extra-household bargaining framework, alternately, considers each household a single unit. This framework asserts that family units bargain with employers to determine the necessity of child labor. Access to credit and other household wealth variables significantly affect the outcome of the extra-household bargaining process (Dehejia and Gatti 2003).

Scholarly work that identifies market failure as the cause of child labor expands on the importance of household-level decision-making and bargaining. Most economists agree that child participation in the workforce results from a household preference for immediate benefits of income rather than possible long term-benefits from human capital accumulation (Dehejia and Gatti 2003 and Beegle et al. 2006). Specifically, the literature suggests that families support child labor because they perceive that the benefits of work outweigh the benefits of school. Beegle et al. (2004), however, note that school and labor are not perfect substitutes. Children may attend school and engage in work during the same time period. Conversely, children may choose not to work or attend school. Nonetheless, most evidence suggests that children participate in either school or labor. Moreover, those who work at a young age are unlikely to return to school in the future.

Assuming that child labor and education are largely substitutable, households engage in a cost-benefit analysis to choose between human capital investment (education) and maintenance of a stable income (child labor). Grootaert and Kanbur (1995) explain that child labor is inefficiently high when private returns to education are lower than social returns. Child labor is also more likely when parents have not attained high levels of education (Beegle et al. 2004).

This evidence suggests that parents may place less value on education due to personal experience, an inadequate school system, or a perception that education does not provide benefits on an individual level. Evidence confirms that the returns to education are not distributed evenly across societies. Beegle et al. (2004) note that education is a better investment than child labor because the returns to education increase with age whereas the returns to work experience decline monotonically. Rural communities, however, may not experience the same benefits from education as urban areas. While primary education raises productivity for all sectors of an economy, secondary education does not increase returns for agricultural activity (Beegle et al. 2004).

A household's choice to support a child's education or to promote child labor also depends on the family's ability to manage living expenses. Households in poverty choose to engage in child labor as a means of survival. Market mechanisms can help households survive in the short-term, providing families the means to engage in long-term human capital investment. For example, Dehejia and Gatti (2003) illustrate that credit access allows households to "trade resources intertemporally" in order to reach an optimal tradeoff between current income and future returns (p. 19). They find a strong link between incidence of child labor and access to credit, even after controlling for a range of confounding variables. Dehejia and Gatti (2003) also discuss the importance of negative bequests, which allow parents to borrow against the future and tend to be linked with lower levels of child labor.

Transitory income shocks, such as accidental crop loss, significantly increase levels of child labor by decreasing household income stability (Beegle et al. 2006 and Dehejia and Gatti 2003). Income volatility, stemming from unstable markets or income shocks, correlates with higher incidence of child labor. Households suffering from sudden income loss and lacking stable financial institutions or credit access resort to child labor as a means of survival. Beegle et al. (2006) find that households with assets can offset shocks without resorting to child labor because they use assets as collateral for borrowing.

The Benefits and Necessity of Intervention

Child labor policy cannot effectively be analyzed using the extensive literature without first determining that child labor limitations are beneficial and that intervention is necessary. The International Labor Organization states that the global benefits of eliminating child labor exceed the costs by a ratio of 6.7 to 1. All regions of the world would experience large net gains if child labor was eliminated, although some regions would benefit more than others (IPEC 2003). Reducing child labor also benefits the economy because child labor is inefficient. Children are imperfect substitutes for adult workers (Ranjan 2001). By definition, children have less experience and are less capable of work than adults. Furthermore, the availability of child labor encourages economic inefficiency by increasing the supply of low-skill workers. Eliminating child labor would encourage development by forcing firms to increase efficiency in order to increase profits (Marshall 1990).

Some claim that international labor standards are a form of protectionism and impede the LDC low-wage advantage. Evidence shows, however, that US legislation supporting international standards for child labor does not stem from protectionist interests. Krueger (1996) finds that legislators who voted for the Child Labor Bill were *less* likely to come from districts whose jobs were threatened by foreign low-skilled labor. Legislative support for broad trade agreements, such as NAFTA and the GATT, does correlate with economic interests of constituents, but policymakers and voters seem to place child labor in a category separate from other labor standards (Krueger 1996). While the concern that labor regulations might reduce the low-wage advantage of LDCs is compelling, comprehensive child labor policy that addresses the root causes of the issue will limit the negative effects of regulation. Policy can provide net gains on a national and global level by addressing economic development in combination with regulation.

Although limiting child labor provides overwhelming long-term economic benefits, child labor will continue unless regulatory policy is imposed because regulation requires short-term sacrifice. For example, although the returns to education eventually dominate the gains from child labor, the payoff is realized at least 10 years after a household would have received earnings from child labor (Beegle et al. 2004). The global benefits discussed by the ILO also do not apply in the short term and are only relevant a decade after policies have been implemented (IPEC 2003). Competitive markets make it difficult for employers to accept short-term losses imposed by child labor standards, even when they understand the long-term benefits (Marshall 1990). The nature of the problem necessitates intervention as a means of ensuring that individuals cooperate to withstand loss and achieve long-term mutual gains.

Basu and Van (1998) explain the mechanism by which labor regulation may achieve long-term economic benefits. According to the economists, child labor policies may achieve Pareto efficient change because labor markets often have multiple equilibria. For example, a market may have one equilibrium in which wages are low and children work, and a second equilibrium in which wages are high and children do not work. Effective child labor policy “jolts” the economy into the Pareto efficient equilibrium (Basu and Van 1998). Comprehensive external intervention is necessary in order to achieve this change. Thus, limiting child labor through regulation is ultimately possible, necessary, and beneficial.

Policies Used to Limit Child Labor

Child Labor Bans

Basu and Van predict that child labor bans might effectively "jolt" an economy into Pareto efficiency. They describe a simple mechanism by which a ban might change the nature of child participation in the workforce of an economy. According to the academics, a ban on child labor creates a shortage of labor because adult and child labor are substitutes. Adult wages increase in response to excess demand for labor. Increased wages reduce the demand for child labor, ultimately eliminating the need for the ban (Basu and Van 1998).

Several flaws exist in Basu and Van's reasoning regarding the efficacy of a simple child labor ban. The economists fail to consider that child labor and adult labor are not perfect substitutes. Basu and Van also do not address the difficulty of enforcing regulations, particularly in underdeveloped nations lacking strong political infrastructure, where child labor is most prevalent. Moreover, bans on child labor are more difficult to effectively implement than other regulations. The literature explains that people around the world already prefer that children not engage in work. Effective policy must do more than encourage an existing preference. Effective policy must help people gain the capacity to engage in this preference. The equilibrium shift described by Basu and Van can therefore occur only through policy that changes the economic opportunities of individuals and societies. Partial bans (created through policy or lack of enforcement) ultimately harm children by shifting labor such that adults work for higher wages in better conditions and children work for lower wages in poorer conditions (Basu and Van 1998).

Education

Policies that improve the education system—directly or indirectly—may limit child labor by increasing its opportunity cost. Households decide to engage in child labor based partially on the perceived costs and benefits of attending school. People are less likely to choose child labor if education is a more attractive option (Krueger 1996). However, education policy alone cannot eliminate child labor. Other factors, such as income and credit access, will affect the household choice between work and school, regardless of the appeal of education. Evidence confirms that educations laws alone do not prevent child labor. Less developed nations with compulsory education laws, such as Brazil, continue to experience significant rates of child labor (Krueger 1996).

Financial Programs—Credit Access, Monetary Transfers

The most effective child labor policies address financial and capital markets. Evidence shows that improvements in financial development are strongly associated with decreased levels of child labor (Dehejia and Gatti 2003). The relationship between financial market development and child labor is particularly large and robust in poor countries with less developed markets and greater levels of child labor (Dehejia and Gatti 2003). Specifically, financial markets can be improved through mechanisms such as increased access to credit, insurance programs, and monetary transfers. Access to credit allows households to borrow against the future, providing families in poverty an increased ability to send their children to school instead of work. Access to credit and strong financial markets also minimize the effects of income variability and instability on child labor (Dehejia and Gatti 2003). Without access to credit, households are forced to rely on child labor during income shocks. Credit access and insurance programs reduce child labor by providing families with income stability in times of crisis (Beegle et al. 2006).

Many nations use conditional cash transfers to stabilize income and enforce human development. These social assistance programs reduce child labor, even when they do not explicitly address labor standards (Tabatabai 2006). Conditional cash transfers promote social services, such as compulsory education, in two ways. The programs increase demand for services by lowering the opportunity cost of participation and providing information about the services. Cash transfers might also increase the supply and quality of social services (Tabatabai 2006). The problems with conditional cash transfers stem primarily from an implementation perspective. Many nations that need such programs lack the resources to sustain them. Furthermore, programs based on transfer of funds may lead to a populace of dependents (Tabatabai 2006).

Trade, Development, and Economic Growth

A recent World Bank study claims that "increases in per capita incomes explain nearly all of the reductions in worldwide child labor since 1950" (Tabatabai 2006). The overwhelming income-child labor correlation suggests that policy that affects income and GDP will have the most significant effect on child labor. Development and trade correspond with child labor and labor regulation primarily because integration into the modern economy correlates strongly with other factors that link to child labor. For example, development and trade are significantly linked to income (Edmonds and Pavcnik 2004). Furthermore, the dynamic effects of trade and development—such as capital accumulation and improved political infrastructure—also discourage child labor and encourage regulation. In a cross-country analysis, Edmonds and Pavcnik find that incidence of child labor is lower in countries that engage in international trade (2004). The relationship between trade and child labor is particularly strong for LDCs that trade with developed countries (Edmonds and Pavcnik 2004).

Increased integration into the world market affects child labor through a variety of mechanisms. Trade primarily affects labor by raising income (Edmonds and Pavcnik 2004). Improving the endowments of unskilled labor and reducing credit constraints decreases the incidence of child labor (Ranjan 2001). Expansion of trade also increases wages via the Stolper-Samuelson theorem and thus reduces supply of child labor as predicted by the Basu and Van model (Edmonds and Pavcnik 2004). However, trade might also induce child labor by increasing demand for products that are low-skill intensive (Edmonds and Pavcnik 2004). The effect that dominates increased trade depends on variables in the market—such as the slope of the labor demand curve, the impact of trade on labor demand, and the elasticity of substitution between child and adult labor –and variables associated with national institutions (Edmonds and Pavcnik 2004).

Sanctions

Multilateral and bilateral trade agreements often link trade and child labor regulation through specific standards (Krueger 1996). While some international conventions do not have compliance mechanisms, nations often accept global norms in order to participate in the global economy. Sanctions are sometimes used to enforce compliance with international treaties, but they are not effective in limiting child labor. Evidence shows that sanctions are more likely to harm workers more than improve working conditions (Brown 2001). Sanctions are generally ineffective because governments lack resources to enact changes in national policy. Households also may not have the ability to change behavior based on international standards. For example, Rogers and Swinnerton (1999) estimate that if GDP per worker falls below $5020, families cannot afford to keep children out of the workforce regardless of the policy. Thus, sanctions cannot effectively change behavior in the case of child labor.

Conclusion

Analyzing the economic roots of child labor and the effects of existing regulation policy illustrates the need for an innovative solution. Effective policy must have the ultimate goal of eliminating child labor—a goal that will benefit individuals, nations, and the international community at large. An examination of the economic implications of child labor illustrates that elimination can be accomplished only through the eradication of extreme poverty and income instability. Effective child labor policy must address the economic roots of child labor by developing credit access, financial markets, and general economic growth. International treaties, bans or sanctions that impose labor standards without addressing economic realities only exacerbate the problem of child labor. The world has a clear interest in eliminating child labor. The international community must therefore encourage economic growth and the development of strong financial markets around the world.

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