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The Political Economy of Child Labor

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Abstract

Concerns about the welfare of working children has over time produced a wide range of international and national interventions in the child labor market, culminating most recently in a commitment to eradicate the worst forms of child work via the attainment of target 8.7 of the Sustainable Development Goals. While the literature on the causes and consequences of child labor is voluminous and well established, research that explores the political economy of such interventions is disproportionately scant. This chapter puts the relatively less prolific literature on the political economy of child labor under conceptual and empirical scrutiny. It starts by looking briefly into the theoretical case for interventions into the child labor market and then verifies whether such interventions are justified in practice. It then presents two types of political economy explanations of potential mismatches between economic theory and practice, one in the domain of international interventions and a second one in the realm of national policy making.

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JEL codes: P48, O14, O15, J13, J24

1. Introduction

ILO (2017) statistics indicate that there are 152 million working children in the world today. 73 million of them are employed in hazardous activities. Concerns about their welfare have produced a wide range of what Basu (1999) categorizes as intra-national, supranational and extra-national interventions, culminating most recently in a commitment to eradicate the worst forms of child labor via the attainment of target 8.7 of the Sustainable Development Goals. A vast and well-established academic literature has explored the causes and consequences of child labor and has left few remaining conceptual dilemmas. The incidence of child labor is explained by either poverty (Basu and Van, 1998) or market imperfections (Baland and Robinson 1999; Bhalotra and Heady 2003). The negative consequences of the most intensive forms of child work in terms of health and educational impairment are well documented (Beegle et al. 2009; Edmonds 2008). Although there is a growing consensus that economic development is the surest and - in comparison to piecemeal policy interventions – the most uncontroversial route towards the elimination of child labor (Edmonds and Pavcnic 2005), a relatively smaller proportion of the literature has focused on why such interventions continue to proliferate, what the political economy behind them is and to what extent they are justified.

The disproportionately small focus on the political economy of child labor is perhaps not surprising given conceptual and practical problems in researching this topic. On the one hand, there is disagreement about the very definition of child labor and the reliable measurement of not only its incidence in general, but also and especially that of its worst forms (Basu 1999; Edmonds 2008; Marrow V and Boyden J 2018). The task is complicated further by the fact that rising activism against child labor has coincided with the new wave of globalisation, which intensified the inflow of relatively cheaper labor intensive products from the Global South in the markets of the Global North. The real difficulty there is in distinguishing genuine concern about poor working conditions and exploitation of workers (including children) in less developed countries from protectionist motivations by developed countries' lobbyists most affected by cheaper imports.

Before attempting to disentangle these two opposite motives behind international (largely international trade oriented) interventions into the child labor market and look into their national policy counterpart, the chapter will start by developing a small conceptual

framework of the need of the effectiveness of a child labor ban. It will then present some empirical evidence to verify whether some of the most popular interventions aimed at eliminating child labor are justified in practice. Next, we shall look for explanations of the potential mismatch between theory and practice within the political economy of international initiatives and shall finally delve into the political economy of national policy making in the area of child labor.

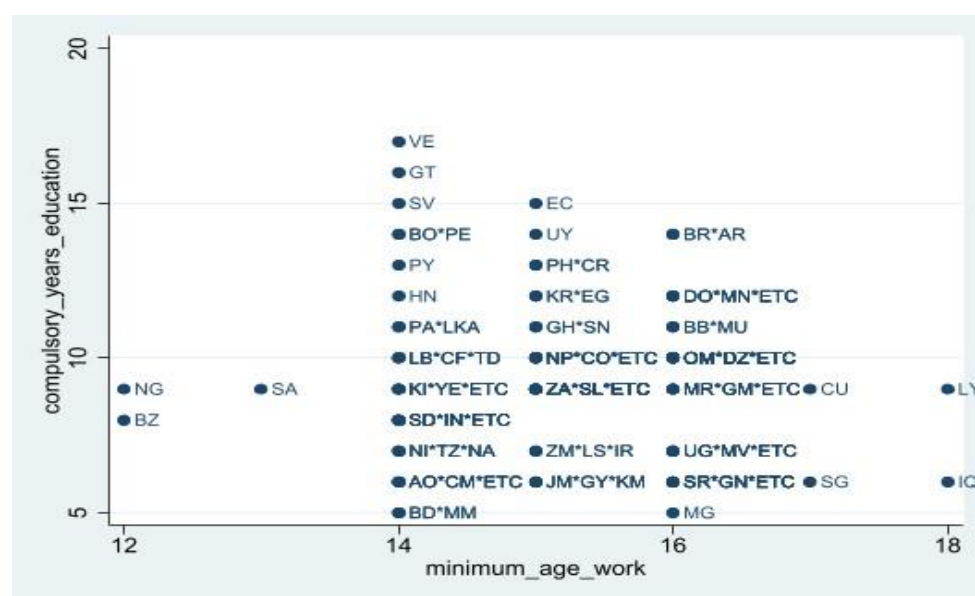
2. The theoretical case for interventions in the child labor market and its practical implications

Most attempts to identify a theoretical blueprint of the benefit of a legal ban on child labor bring to the fore the model of the Basu and Van (1998). The model is built around two key axioms, the *luxury axiom* according to which (altruistic) parents would not send their children to work if the non-child labor income of the household is sufficiently high, and the *substitution axiom*, whereby child and adult labor are substitutes. In a simple labor demand and supply setting, this framework produces multiple equilibria, one with child work and one without, depending on the position of the supply curve of labor. The possibility of child work shifts the supply curve of labor to the right, lowers the going wage and obviates the need for child labor. A binding legal ban on the other hand, shifts the supply curve of labor to the left, increases wages and allows altruistic parents to withdraw children from the labor market.

In the international arena, one of the most high-profile realisations of the ban- on- child-labor logic is the minimum age of work rule, enshrined in ILO's Convention 138. Article 1 of this convention requires its members to pursue national policies that lead to effective abolition of child labor and progressive rise of the minimum age of work in conformity with the healthy physical and mental development of young people. Further articles specify concrete age groups as bars below which certain types of work should not be allowed. For example, Article 7 allows for work in the 13-15 age bracket under the condition that it does not jeopardise the physical and human capital development of a child. Given that Convention 138 thus leaves a lot of leeway to countries to define by themselves what is an appropriate minimum age of work for a range of work categories, in 1999 the ILO introduced a new Convention 182 calling for the end of the "worst" forms of child labor. This includes several forms of illegal work such as prostitution, forced labor, bonded labor and slavery. Very recently the organisation celebrated the universal ratification of this convention, with Tonga being the last country to approve it for implementation in 2021.

In the next section we shall verify to what extent setting minimum age bars for employment are justified in practice. But before doing that and before delving deeper into the political economy of the issue, it is worth mentioning the conceptual debate on whether the elimination of child labor should be addressed directly or via interventions in the education sector. One of the most cited studies in this context is that of Weiner (1991) which postulates that compulsory schooling may be more effective in combatting child labor than direct ban on it, the rationale being that the presence of a child at school is easier to monitor than the child's presence at work. This study has attracted a fair amount of criticism and the argument continues to be under empirical scrutiny, some of which we shall refer to later. This has not precluded a wide range of interventions in the education sectors of less developed countries, of which compulsory years of schooling is among the most popular. In the pursuit of the Millenium Development Goals developing countries have achieved 91% enrolment in primary education as a result of such interventionsⁱ.

Figure 1: Cross-tabulation of compulsory years of education and minimum age of work by country



Source: United States Department of Labor (2018).

Notes: The sample includes compulsory years of education and minimum ages of work indicators for 107 non-OECD and non-East European countries: Nigeria (NG), Belize (BZ), Soudi Arabia (SA), Venezuela (VE), Guatemala (GT), El Salvador (SV), Bolivia and Peru (BO*PE), Paraguay (PY), Honduras (HN), Panama and Sri Lanka (PA and LKA), Lebanon, Central African Republic and Chad (LB, CF and TD), Kiribati, Yemen, Lao PDR, Guinea-Bissau (Ki*Ye*ETC), Sudan, India, Eritrea, Malawi, Ethiopia (SD*IN*ETC), Nicaragua, Tanzania, Namibia (Ni*TZ*NA), Angola, Cameroon, Benin, Malaysia (AO*CM*ETC), Bangladesh and Myanmar (BD*MM), Ecuador (EC), Uruguay (UY), Philippines and Costa Rica (PH*CR), Republic of Korea and Egypt (KR*EG), Ghana and Senegal (GH*SN), Nepal, Colombia, Vietnam, Togo, Cabo Verde, West Bank (NP*CO*ETC), South Africa, Sierra Leone, Morocco, Indonesia, Syria, Thailand, Afghanistan, Mali, Timor-Leste (ZA*SL*ETC), Zambia, Lesotho, Iran (ZM*LS*IR), Jamaica, Guyana, Comoros (JM*GY*KM), Brazil, Argentina (BR*AR), Dominican Republic, Mongolia, Pakistan, Kenya (DO*MN*ETC), Barbados, Mauritius (BB*MU), Oman, Algeria, Republic of Congo, Burkina Faso, Djibouti, Côte d'Ivoire, Jordan, Gabon (OM*DZ*ETC), Mauritania, Gambia, China, Tunisia (MR*GM*ETC), Uganda,

*Maldives, Trinidad and Tobago, Zimbabwe (UG*MV*ETC), Suriname, Guinea, Congo DR, Rwanda, Haiti, Liberia (SR*GN*ETC), Madagascar (MG), Cuba (CU), Singapore (SG), Libya (LY), Iraq (IQ)*

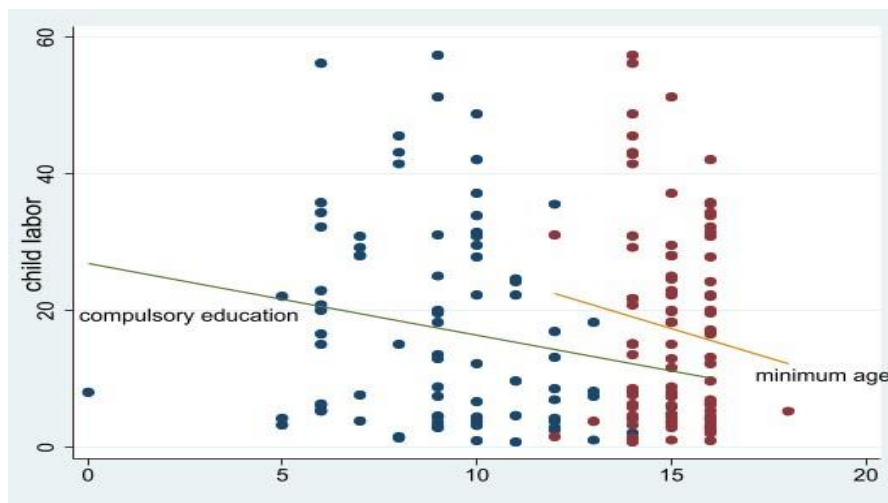
Figure 1 presents a cross-tabulation of the minimum ages of work and compulsory years of schooling in the legal frameworks of 107 non-OECD countries, compiled by the United States Department of Labor (2018). Tonga is excluded from the sample, given that it does not have a required minimum age of work. East Europe is omitted as well due to relatively small incidence of child labor in the region. Aside from several outliers, namely Nigeria, Belize and Soudi Arabia at the lower end and Lybia and Iraq at the higher end, most countries are clustered around the 14-16/17 permitted minimum age range of entry in the labor market. This is consistent with the high rates of ratification of ILO's Convention 138 even if in countries with poor governance this does not guarantee compliance. By contrast, the compulsory years of education range is much larger, and thus perhaps more interesting to study vis-à-vis its potential effect on reduction or elimination of child labor.

While minimum age of work and compulsory schooling legislations are under the scrutiny of international organisations and national governments, globalisation has stimulated the proliferation of a wide range of direct business and industry level arrangements aimed at reducing child involvement in production for export. These include labor standards, codes of conduct, labelling programs and trade sanctions. In what follows we shall review some of the empirical and case study literature that evaluates the effects of both minimum age and compulsory schooling laws, as well as business interventions in the child labor market as a background and as an input into our more rigorous discussion of the theoretical political economy literature that explains them.

3. Empirical patterns and evidence on the effectiveness of interventions in the child labor market

Figure 2 shows scatterplots of child labor against minimum age of work (the green line) and compulsory years of schooling (the yellow line). Both beta coefficients are negative and significant, indicating negative correlation between child labor and these two policy variables. At the same time, review of the literature on the *causal* effect of minimum age of work and compulsory schooling on child labor indicates that these relationships are far from straightforward.

Figure 2: Scatterplots of child labor with minimum age of work and compulsory schooling



Source: United States Department of Labor (2018).

Note: The figure presents scatterplots of child labor against compulsory education and minimum wages for the sample of countries described in the note under figure 1. Child labor represents the proportion of children in the 7-14 age group. Due to missing observation, child labor is available for 93 of the 107 countries described in the note under figure 1.

Three types of studies explore the implications of minimum age of work legislation on child labor and come up with, at best, inconclusive results. Using historical data from the US Moehling (1999) and Manacorda (2006) find a minimal effect of such legislation on the decline of child labor. In the case of the former, this is explained with the fact that enforcement tends to lag behind the entry into force of a law, while according to the latter the legislation in the US followed the decline in child labor instead of preceding it. An analysis of historical data from India indicates that the effect of minimum age legislation on child labour may end being positive (Bharadwaj et al, 2013). That is because a fall in child wages in the regulated sector after the implementation of the law increases child labor in the unregulated. Using cross-country data from 59 countries Edmonds and Shrestha (2012) find that age explains little of the variation in child labor. Bargain and Boutin (2017) address the methodological problem in Edmonds and Shrestha (2012), namely the reliance on an age trend in trying to make inferences about the effect of a minimum age legislation. They instead use the natural experiment of a constitutional reform in Brazil in 1998 which increased the minimum age of employment from 14 to 16. Using a regression discontinuity design, they find no significant effect of the ban overall, even if there is some drop in child employment among the groups with the highest compliance rates. In sum, the literature on minimum age of employment fails to identify compelling evidence of unambiguous causal effect of this type of legislation on child labor. Even ignoring methodological and compliance issues, this poses questions related to the

political economy of such legislation, especially with regards to why such laws are nonetheless forged and adopted.

The literature on the child labor implications of compulsory schooling laws is more prolific and with mixed results. Historical data from OECD countries tends to find that the increase in education and the reduction of child labor are positively correlated with the adoption of compulsory schooling laws. Using census data from the US, Lleras-Muney (2001) finds that by increasing education at the lower tail, the adoption of compulsory education legislation decreased education inequality by as much as 15%. Margo and Finegan (1996) note that in states that combined compulsory schooling with child labor laws, compulsion increased school attendance at age 14. Leon (2004) witnesses that enhanced female education on account of compulsory schooling laws significantly decreased fertility; fertility among women with 3-4 more years of schooling went down by at least one child. Although the paper does not look explicitly into the impact of compulsory education on child labor, the strong theoretical association between fertility and child labor suggests that compulsory schooling should have negative association with the incidence of child labor.

Fyfe (2005) analyses historical experiences of early industrialisers in Europe, the US and Japan with the adoption of compulsory schooling and child labor laws and the corresponding trends of educational attainment and child labor elimination. She finds that compulsory schooling laws preceded child labor legislations and in fact made them less difficult to enforce. The enactment of compulsory schooling laws coincided with the increase in education and the reduction of child labor but acted “in concert” with other important phenomena, such as technological progress and increase in male wages. This message is echoed by other studies, for example Stambler (1968), and raises the important query of whether anti-child labor and pro-schooling legislation precedes a declining child work trend or instead only endorses an already existing trend.

A broader question that begs attention is whether historical lessons learnt from early industrialisers can be helpful in addressing the child welfare problems currently experienced by less developed economies and whether legislation that proved to be successful in one setting would produce similar positive outcomes elsewhere. Review of the literature on the link between compulsory schooling and child labor in less developed economies does not provide an unambiguous answer to this question. To begin with, problems with compliance indicate that the attempt to transplant norms of behaviour in contexts where conditions for their

adoption are not ripe is likely to be futile. Using household data from the 1990s Patrinos and Psacharopoulos (1995) show that although schooling in Paraguay was compulsory till age 13, 28% of those at age 12 were already out of school. Among those out of school, 19% worked formally and contributed about a quarter of family income. Psacharopoulos (1997) finds similar non-trivial labor force participation among those below the legal working age and supposed to be at school in Bolivia and Venezuela. Cultural factors play an important role in the internalisation of a new legislation. The change in compulsory schooling legislation in 2012 in Turkey produced prolific research on its effectiveness in enhancing schooling and reducing child labor. Although the focus of different studies and their corresponding results vary, a common factor is the difference in the impact of the legislation on boys' and girls' schooling and labor force participation (Dinçer and Erten, 2015; Erten, and Keskin, 2019 ; Dayioglu, and Kirdar, 2020). Analysis of the effect of the increase in compulsory schooling by one year in Egypt in 2004-05 produces analogical results. Elsayed (2017) finds that while a year of compulsory schooling increased total years of education from 0.6 to 0.8, this effect was concentrated among boys and increased the gender gap in schooling from 0.30 to 0.48. There was no significant impact of the change in legislation on child labor.

The political and governance structures of individual settings are among the most important factors affecting not only the adoption, but also the implementation of legislation that is in principle considered desirable. China and India are in this sense interesting and rather popular comparison cases. Although since as early as the 1940s-1960s both countries showed consistent willingness to achieve universal education, the net enrolment rate of children in the 7-12 age group increased from 20% in 1949 to 97% in 1988 in China, while in India the rate remained 20-25% lower (Fyfe, 2005). Rigorous analyses show a significant positive influence of compulsory schooling on child labor reduction in China. For instance, Tang, Zhao and Zhao (2020) show that one additional semester of free compulsory schooling decreased the incidence of child labor among boys by 8.3% and this effect was strongest among boys from lower socioeconomic strata. By contrast, the commitment to both achieving universal education and translating enhanced schooling into reduced child labor ratios was incomparably smaller in India. Even in Kerala, an outlier state that managed to achieve 90% literacy, the effect of schooling on child labor was negligible (Fyfe, 2005). Some refer to the inferior performance of India in terms of universalisation of education and eradication of child labor as a Weiner paradox, whereby widespread education among the poor is viewed as disruptive to the caste-based social order. Either way, historical experiences as well as recent examples of schooling

and child labor legislation indicate that one-size-fit-all solutions are likely to produce suboptimal results and hence interventions in the child labor market - even if considered generally desirable - need to be adjusted to the local environment.

Despite difficulties in adoption and compliance with pro-schooling and anti-child labor legislation, global commitment to these two objectives is undeniable. Hardly any state has blatantly opposed the ratification of international child labor elimination treaties and the global commitment to ensuring universal education is under way. The less straightforward and more controversial set of interventions in the child labor market are those involving international business and sectoral initiatives. Bachman (2000) provides a comprehensive review of such initiatives, including sectoral codes of conduct, trade bans, labelling and fair-trade programs, as well as industry wide arrangements where a compensation is granted for withdrawal of children from the labor force. Most of the analysis of the effect of such initiatives is qualitative and tends to highlight less than optimal and - in a large proportion of cases - negative consequences. Among the most widely cited infamous cases is the Harkin trade ban imposed on Bangladesh's garments sector, which resulted in the relocation of children from the better regulated and protected rug production sector towards dangerous employment in the informal economy, including occupations such as prostitution and stone quarry. Although some of these programs envisage compensation for the families withdrawing their children from the labor market, such compensation is rarely sufficient. When under-aged children in Siakot Pakistan were withdrawn from the labor market in the late 1990s, they were put into schools and paid a stipend, while adults were recruited to fill the vacated jobs. Despite the good intentions, families whose mothers and children left work suffered 20% fall in income (Economist, 2000), while experts believed that income replacement programs of this type were too expensive to replicate on a large scale (Bachman, 2000).

The broader quantitative literature that evaluates anti-child labor business and sectoral initiatives tends to be equally sceptical. The key objection is that international standards tend to apply solely to the export sector, which employs an infinitesimal proportion of the working children in less developed economies (Marrow V and Boyden J 2018). Even if interventions in the export sector improve the welfare of children and adults in this sector, this comes at the expense of those involved in less regulated alternative niches in the local economy. As such, economists appear to increasingly agree that outright ban of not only mild forms of child work, but also of some of the worst forms of child labor as a result of sanctions could be counterproductive (Dessy and Pallage, 2005).

Given the more controversial nature of trade related pressure to eliminate child labor, in the next section we shall explore the political economy behind its development. In the section to follow, we shall delve into the political economy of national policy making in the area of universal schooling and child labor legislation in an attempt to derive common trends and policy implications.

4. The political economy of standards, labelling and sanctions in the child labor market

The political economy literature on standards, labelling and sanctions in the child labor market is by construction interested in the place of child workers (and exploited workers more broadly) in the domain of international trade. As such, this literature has delved into the motivations behind each party's decision to either advocate a ban on child labor or (at the very minimum) push towards the establishment of minimum labor standards, including in relation with the use of children in the production process. Polemics in this area date back to as long ago as the 18th century when Jacques Nicker, the banker and finance minister under Louis XVI, declared that an individual country's intervention in the labor market (in that particular case, a country's decision to abolish the weekly day of rest) would give it unfair advantage vis-a-vis other countries. Such polemics re-emerge and strengthen in periods of intensified global competition, such as the inter-war period, which coincides with the establishment of the ILO, as well as the post-1980s era of intensified globalisation.

Understandably, the unfair advantage claim is at the bottom of, and the bone of contention behind, the debate on labor market regulations. On one side of the spectrum are supporters of the claim that multilateral sanctions are a justifiable policy response against countries that adopt lower labor standards that give them trading advantage in labor intensive goods (Collingsworth et al. 1994; Wilkinson 1994). This side of the policy argument is supported by the softer moral argument that children should not work, just as adults shouldn't overwork and be underpaid (Fields 1995; Bloom and Noor 1996). The policy agenda based on the latter conceptual platform expands beyond the usual suggestions of social clauses, bans and trade retaliations and includes measures such as consumer boycotts or product labelling which reflect the preference of rich countries' consumers for an exploitation-free production process.

Both the opportunistic and the altruistic points of view regarding the need to combat the use of child labor in international trade are attacked on several different theoretical and empirical grounds. The most obvious objection is the use of these types of arguments in defence

of disguised protectionism on the part of Northern against Southern trade partners. Indeed, in contrast to major past debates, such as that related to the inclusion of a social clause in the treaties establishing the European Common Market, current standards related and trade retaliation debates are built around the confrontation of Northern and Southern trading partners of significantly different levels of economic development, and often adhering to widely divergent socio-cultural norms. Most objectionably, Southern partners invariably appear as the accused and Northern partners as plaintiffs in such interactions, even when the latter would “generally find it difficult to defend themselves to an impartial international jury”, particularly with respect to the use of migrant (often slave) labour in their production processes (Bhagwati 1995).

An additional, though related, issue raised as part of this debate is the possibility of *race to the bottom in international labor standards*, where competition with Southern partners who utilise lower labor standards would force Northern partners to reduce their own standards. No conclusive evidence exists to support this hypothesis. To the best of our knowledge, only Chau and Kanbur (2006) go beyond the usual North-South divide and ask the question of whether competition between Southern partners in the Northern market would lead to race to the bottom among competing Southern partners. The authors establish that while race to the bottom in this context is indeed possible, it is not inevitable. Importantly, the authors argue that Northern protectionism is likely to deteriorate rather than improve Southern choice of standards.

The spirit of this finding is corroborated by Doepke and Zilibotti (2010) who establish that stricter international anti-child labor policies lower domestic political support for banning child labor within developing countries. The fact that less rather than more protectionism and child - labor - related retaliation by Northern trading partners is more likely to reduce the use of child labor and lead to strengthening of Southern labor standards is further supported by Edmonds and Pavcnik (2005) who present empirical evidence in favour of the view that free trade is likely to improve the income positions of parents in these countries and thereafter their ability to withdraw their children from the labor force. This view is extended to the area of international migration. Specifically, Epstein and Kahana (2008) show that by resolving the labor surplus problem, higher level of migration reduces the incidence of child labor in countries characterised by high levels of out-migration. Dimova, Gang and Epstein (2015) provide confirmation to this macro level argument at the micro level.

All these arguments invalidate the claim that more protectionism and retaliation on the part of Western partners would reduce child labor. This is irrespective of whether the motivation behind this claim is purely opportunistic or driven by altruistic or moral considerations (Krueger 1997). Indeed, even when the motivation behind anti- child labor activism is more unquestionably altruistic as is the case of consumer driven push towards the labelling of products free of child labor, there is no guarantee that the intervention is welfare improving. For example, Basu, Chau and Grote (2006) find that a threat to sanction imports of unlabelled Southern products discourages the South from maintaining a credible social labelling program. This is mainly because such programs expose unlabelled Southern producers, rendering them synonymous with using child labor. Further shortcomings of such programs are the possibility of false-labelling and the difficulty in monitoring their implementation, which frequently renders the use of child labor unfettered by trade sanctions.

To summarize, the theoretical literature on standards, labelling and boycotts in the child labor market fails to build a compelling case regarding their effectiveness in improving child welfare; the empirical literature that we highlighted in the preceding section is not more successful either. Even when the intention behind the development of such programs is not outright opportunistic and blatantly defending the interests of Northern importers, their practical implementation tends to be either sub-optimal or even producing negative externalities for children displaced from the export sector and for their families. It is therefore not surprising that a large proportion of such interventions are little more than wishful thinking with little positive and binding effect (Servais, 1989).

5. The political economy of compulsory education and anti-child labor legislation

Given the ambiguous motivations behind international interventions in the child labor market and their equally controversial effect, most of the latest political economy literature on child labor explores the stakeholders, motives, dynamics and consequences of domestic interventions. The key question that this literature asks is what determines a nation-wide support for anti-child labor and pro-educational policies. The related models are typically calibrated using historical data from the time of the industrial revolution in Britain and the US. The theoretical frameworks employed differ mainly with respect to key assumptions regarding the main bargaining parties in the negotiation process. The core question posed is (effectively) whether anti-child labor and pro-schooling legislation is endogenous to the decreasing child

labor trend and the increasing education trend experienced by advanced economies around the time of the industrial revolution. As we argued in section 3, the answer to this question would provide interesting insights into the potential effectiveness of such legislation in emerging economies that experience sub-optimal levels of education and child labor.

A fundamental common factor that lies at the core of this set of political economy models is the importance of *income inequality* in aligning the interests of different national stakeholders around the common objective of eliminating child labor, the common assumption being that decision making is subject to majority voting rules. At the very basic level and without looking at the specifics of the bargaining parties involved, Tanaka (2003) explores the dynamics of child labor and public education under majority voting. When the distribution of income is very unequal, public schooling is not supported by the majority and the amount of child labor is large. Poorer households do not support investments in education and the elimination of child labor because of the income loss associated with the former and the tax burden associated with the latter. As the equilibrium tax rate is determined by majority voting, this status quo changes when inequality goes down sufficiently to make the elimination of child labor and investment in education the preferred choice of the median voter.

While the income- distribution- based support or opposition to child labor elimination is the central element of most of the related political economy models, other authors develop a more elaborate bargaining game between key parties in the voting process. The main difference is with respect of the identity of these key parties. In Doepke and Zilibotti (2003) and Doepke and Zilibotti (2005), the decisive conflict (and resolution thereof) is between skilled and unskilled manufacturing laborers. Skilled workers are assumed to be in favour of child labor and against its elimination as this status quo implies larger supply of unskilled work and hence a higher wage premium. The upshot is that an unequal society dominated by an elite of skilled workers would not be in favour of child labor elimination. Unskilled workers, who are in principle able to influence the political decisions either directly in a democracy or via trade unions, face a trade-off. While child labor ban would increase their wage by increasing the relative supply of skills, it also causes loss of family income, which is particularly pronounced for families with large sizes. There are thus two steady-state equilibria: one where child labor is legal, unskilled workers have many working children and there is little support for a child labor ban, and another one, where child labor is banned, families are small and banning child labor is supported. According to Doepke and Zilibotti (2005) the crucial turning point that

induces support for child labor laws is skill-based technological change, which induces parents to choose smaller families.

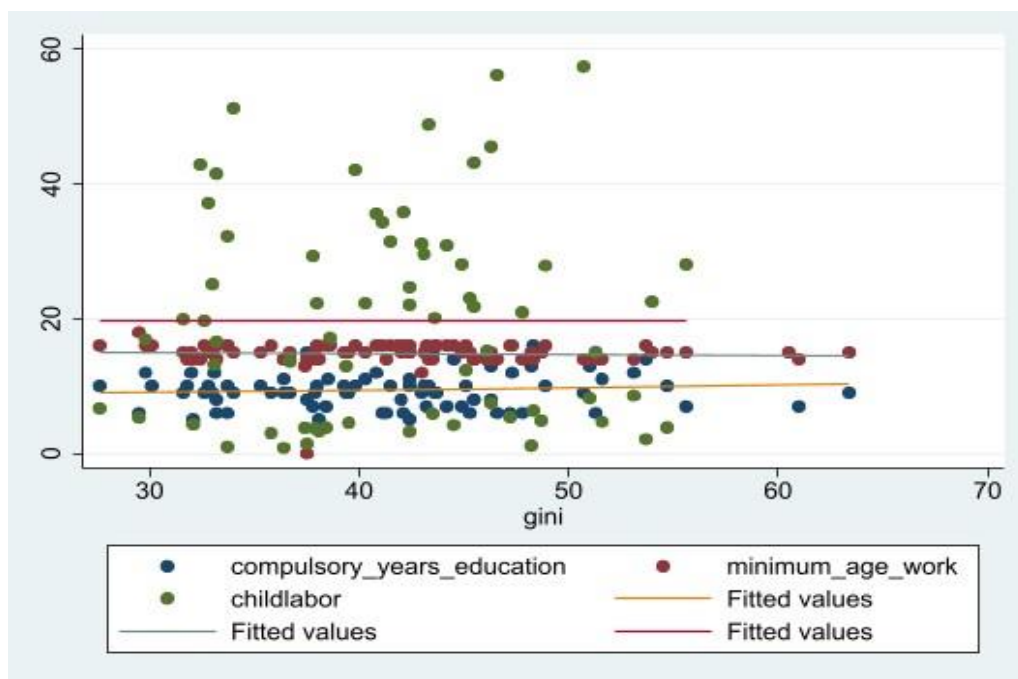
Dessy and Knowles (2008) propose an alternative model that is in many ways analogical, except that the crucial bargain is struck between poor and middle-class families as opposed to skilled and unskilled manufacturing sector workers. The socio-political conflict is over mandatory education, the key idea being that there is a long delay between incurring costs and enjoying returns from investing in education, while poor parents have inconsistent time preferences. As such, poor parents are faced with the dilemma of loss of income upon withdrawal of children from the labor market, on the one hand, and future return to education, on the other hand. As skill levels and parental wages increase, a point is reached whereby the majority of the adult population favours a legislation compelling full- time education for children and restrictions on child labor. While relying on the same core assumptions, namely a conflict between better off and poorer parents, as well as a tension based on the sacrifice of income today and (future) returns to schooling, Krueger and Tjornhom (2002) consider the alternative effects of three different policies, (a) a ban on child labor, (b) a tax-financed mandatory education law and (c) a combination between a child labor ban and mandatory education. All three reforms result in steady state gains, but only mandatory education wins majority support of current parents. Once again, inequality reduction is a determining factor of the political support for child labor legislation.

While relying on a variety of underlying assumptions, particularly with respect to the key bargaining actors in the political deal, the wide range of the political economy models that try to explain the development of national anti-child-labor and pro-schooling legislation share a common conclusion. Specifically, decrease in inequality and the technological change driven increase in the proportion of the educated middle class is found to be the main driver of greater support for such policies. With the sole exception of Dessy and Knowles (2008) who use cross-sectional data to test the hypothesis that decrease in inequality increased the support of child focused policies in Latin America, the vast majority of these models are calibrated with historical data from a specific point in time when technological change around the time of the industrial revolution led to an expansion of the middle class in western democracies and thus stimulated support for numerous progressive social reforms, including investment in mass education and elimination of child labor.

This poses the question of whether the historical incident of the industrial revolution, which resulted in inequality-reduction-driven development of a specific type of liberal institutions - compatible with the reduction of child labor and increase in education - is replicable in the current era of premature de-industrialisation. Consequently, it is worthwhile asking whether the models calibrated with the use of historical data provide viable predictions for current emerging economies. For practical purposes, this boils down to answering the following questions:

Is it inequality and its decline what drives the support for mass education and child labor elimination policies? Or is it the underlying production structure that leads to the development of a specific type of governance structure compatible with welfare enhancing policies? If the latter is the case, the current trend of premature deindustrialisation among a large proportion of less developed economies may fail to result in the development of sizeable enough liberal middle class that was the driving force behind child labor elimination among early industrialisers. One could thus envisage the persistence of high child labor rates among countries dependent of large agricultural and service sectors even at relatively low income inequality levels.

Figure 3: The association of inequality with child labor, minimum age legislation and compulsory schooling

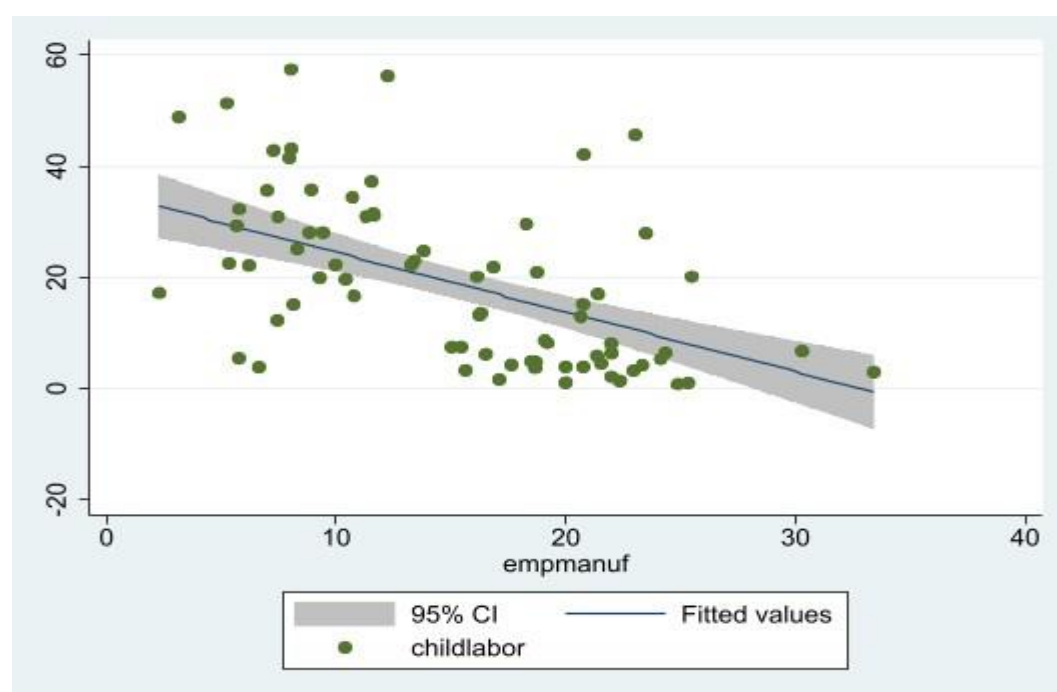


Source: United States Department of Labor (2018) and World Development Indicators database.

Note: The figure presents scatterplots of child labor, compulsory years of education and minimum ages of work against the gini coefficients for the sample of countries described under figures 1 and 2. The first three indicators are provided by the United States Department of Labor (2018). The Gini coefficient is available at the World Development Indicators database.

To get an insight into the first of the above questions, Figure 3 presents scatterplots of inequality (proxied with the GINI coefficient) and minimum age of work (the red dots), compulsory schooling (the blue dots) and child labor (the green dots). In all three cases we observe no significant association between inequality and either of these variables of *de facto* child labor elimination and *de jure* measures aimed at eliminating child labor. In other words, these simple correlations do not provide convincing evidence that low level of inequality by itself is necessarily the key driver of anti-child labor legislation and its *de facto* decline.

Figure 4: The link between child labor and the size of the manufacturing sector



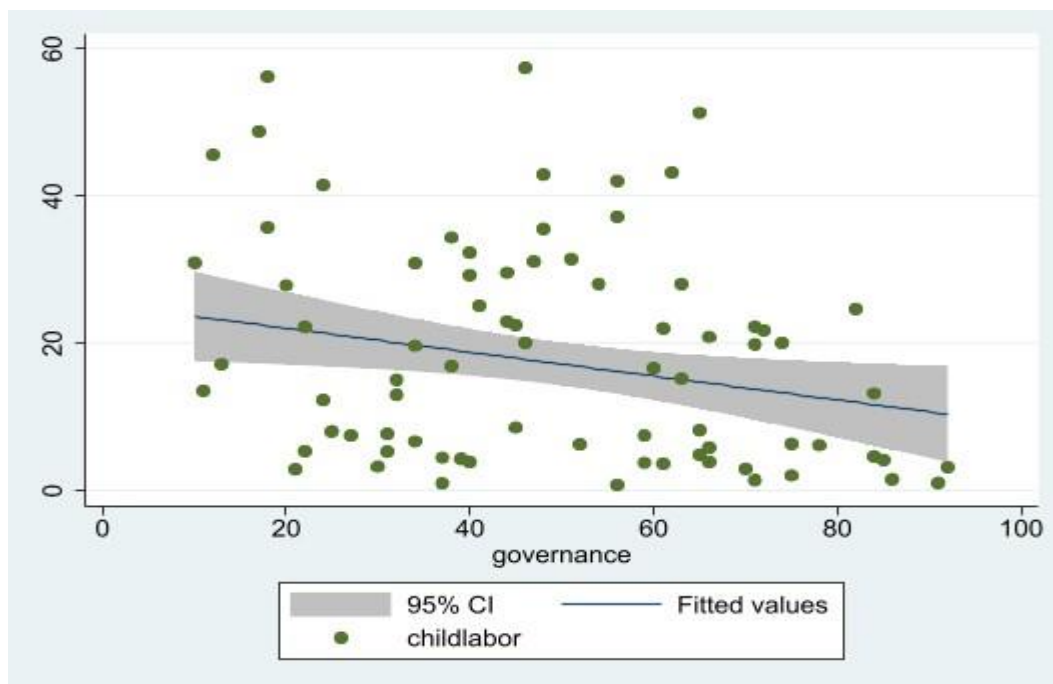
Source: United States Department of Labor (2018) and World Development Indicators database.

Note: The figure presents a scatterplot of child labor against the size of the manufacturing sector, proxied by the proportion of employment in the manufacturing sector. Child labor is proxied by the proportion of working children in the 7-14 age group and the indicator is provided by the United States Department of Labor (2018). The manufacturing employment variable is taken from the World Development Indicators database. The scatterplot is performed for the sample of non-OECD and non-East European countries described under Figure 1.

By contrast, the scatterplot between child labor and the size of the manufacturing sector highlighted in Figure 4 reveals a significant negative association. The pattern is consistent with the logic of the models reviewed in this section, but also with evidence that the more labor intensive agricultural and (to a lower extent) service sectors in less developed economies are the main employers of children (Edmonds, 2008). As such, the pattern could be driven by

technology determined demand for unskilled labor in these two sectors, as opposed to the political economy logic underlying the child labor elimination effort around the time of the industrial revolution. It is worthwhile noting that conveyer type production around the time of the industrial revolution was conducive to unionisation. By contrast, the type of technological change experienced by the manufacturing sectors today leads to greater degree of substitution between capital and labor that frustrates the type and degree of collective action experienced by early industrialisers (Rodrik, 2015 ; Fukuyama, 2015).

Figure 5: The link between governance and child labor



Source: United States Department of Labor (2018) and Freedom House.

Note: The figure presents a scatterplot of child labor against the governance index, provided by the Freedom House. Child labor is proxied by the proportion of working children in the 7-14 age group and the indicator is provided by the United States Department of Labor (2018). The governance index captures political participation and civil rights. It ranges from 0 to 100, 100 representing the highest level of political participation and civil rights. The scatterplot is performed for the sample of non-OECD and non-East European countries described under Figure 1.

Not surprisingly, Figure 5 also highlights a negative association between child labor and governance. This is consistent with the evidence presented in section 3 whereby economies with weaker institutional and governance frameworks are both less likely to adopt anti-child labor and pro-schooling legislation and to comply with such legislation once adopted. The open question is whether the structure of an economy and the corresponding governance structure of a country affect child labor independently or in concert. If the latter is the case, this could

single out the models calibrated with data from the industrial revolution as relying on a unique experience that might not be replicable in the current era of premature deindustrialisation affecting a large proportion of less developed economies. This proposition is worth examining in future political economy research on child labor.

6. Summary

Over the past decades, the international community has produced a wide range of international and national interventions in the child labor market culminating most recently in a global commitment to eradicate the worst forms of child labor via the attainment of target 8.7 of the Sustainable Development Goals. Although a voluminous literature has dealt with several aspects of the phenomenon of working children, particularly its causes and consequences, and has left few questions unanswered in these domains, disproportionately fewer studies have delved into its political economy. This is possibly due to controversies in the very definition of child work, as well as (and perhaps even more importantly) on account of difficulties in ascertaining whether anti child labor activism is driven by well-informed altruism or trade-related opportunism.

This chapter puts under conceptual and empirical scrutiny the two main trends in the stylised political economy literature on child labor, one dealing with international (mostly international trade related) interventions in the child labor market such as standards, boycotts and labelling and a second examining the dynamics of national policies affecting child welfare. The latter is consistent with global anti-child labor and pro-education agendas, as it involves (among other things) ratification of international treaties and support for United Nations goals of enhancing child education and broader aspects of child wellbeing.

While review of the political economy literature on standards, labelling and sanctions reveals a dominant role of opportunism and no unambiguously positive implications of these initiatives for the welfare of working children and their families, the results of the literature on national interventions in the child labor market are more mixed. Review of the stylised theoretical literature in this area highlights inequality reduction as a key mechanism behind the development of national child friendly policies, as well as ratification of international treaties with the same objective. Yet most of these theoretical models are calibrated with historical data from the time of the industrial revolution where technological change resulted in the growth of a liberal middle class supporting universal education and child labor elimination. There is no consistent evidence that policies, such as minimum age of employment and pro-education

legislation, that worked well in eliminating child labor in currently rich economies, would be equally effective in emerging markets that struggle with low levels of education and high levels of child employment. A glance at the literature on the impact of minimum age of employment and compulsory schooling laws on child labor in less developed markets indicates that the adoption of such legislation relies critically on the local institutional framework, while compliance is, at best, inconsistent and dependent on cultural and governance characteristics.

It is interesting to note that the specific experiment of the industrial revolution was not only effective in eliminating child labor and ensuring high education levels in industrialised economies, but its underlying mechanism may have some validity today. Statistics do indicate that in current emerging markets that manage to expand their industrial base, child labor goes down - even if contrary to much of the theoretical literature - the dynamics of child labor reduction does not necessarily pass via reduced levels of inequality. At the same time, one needs to keep in mind the fact that in the current era of premature deindustrialisation, this pattern tends to be more of an exception than the rule. Most working children are currently employed in the agricultural and (to a lesser extent) the service sectors of developing countries, where the child labor elimination dynamics of stylised political economy models does not necessarily hold. Moreover, by focusing almost exclusively on the industrialisation-based mechanism for child labor alleviation, the literature does not explore other obvious alternatives. For instance, the development model of a number of MENA countries that relied on heavy investment in the public sector did produce (at least for a certain period in time) high levels of education and low levels of child labor without recurring to industrialisation and the development of western type governance structures. To summarize, the stylised political economy literature on child labor does an excellent job in explaining historical experiences. Yet, future research which shies away from the well-trodden path of familiar historical experiments could provide more insights into current phenomena that deviate from these familiar patterns.

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ⁱ It is a different question to what extent this coincides with improvement of the quality of schooling, as well as ability of countries to achieve high levels of transition to higher levels of education and more importantly in our context, to achieve high levels of withdrawal of children from the labor market.
