

Child labor

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Discussion questions

- What are the causes of child labor?
 - Poverty?
 - Ignorance?
 - Gender bias?
- Is child labor bad (i.e., negative consequences)?
- What are solutions?
 - Bans?
 - Conditional and unconditional transfers?
 - Education?

How do we define child labor?

- Economically active: an activity that involves the direct production of economic goods & services.
 - "...includes all production and processing of primary products whether for the market, for barter, or for own consumption, the production of all other goods and services for the market and, in the case of households which produce such goods and services for the market, the corresponding production for own consumption..." (UN System of National Accounts)
- Child employment = being economically active at age $\leq 12/14/15/16$.
 - Includes wage employment, self-employment, unpaid family work, apprenticeships.
 - Includes participation in agriculture, milling, handicrafts, construction, water and wood collection.
 - Includes market (for others) and non-market (for household) work.

How do we define child labor?

- Non-economic work is participation in the provision of goods and services to family members or other members of the community that fall outside of the scope of the official definition of economic goods and services.
 - Includes community service work that helps build or maintain local schools,
 - Includes “chores” such as caring for family members, cooking, cleaning, or shopping.

How do we define child labor?

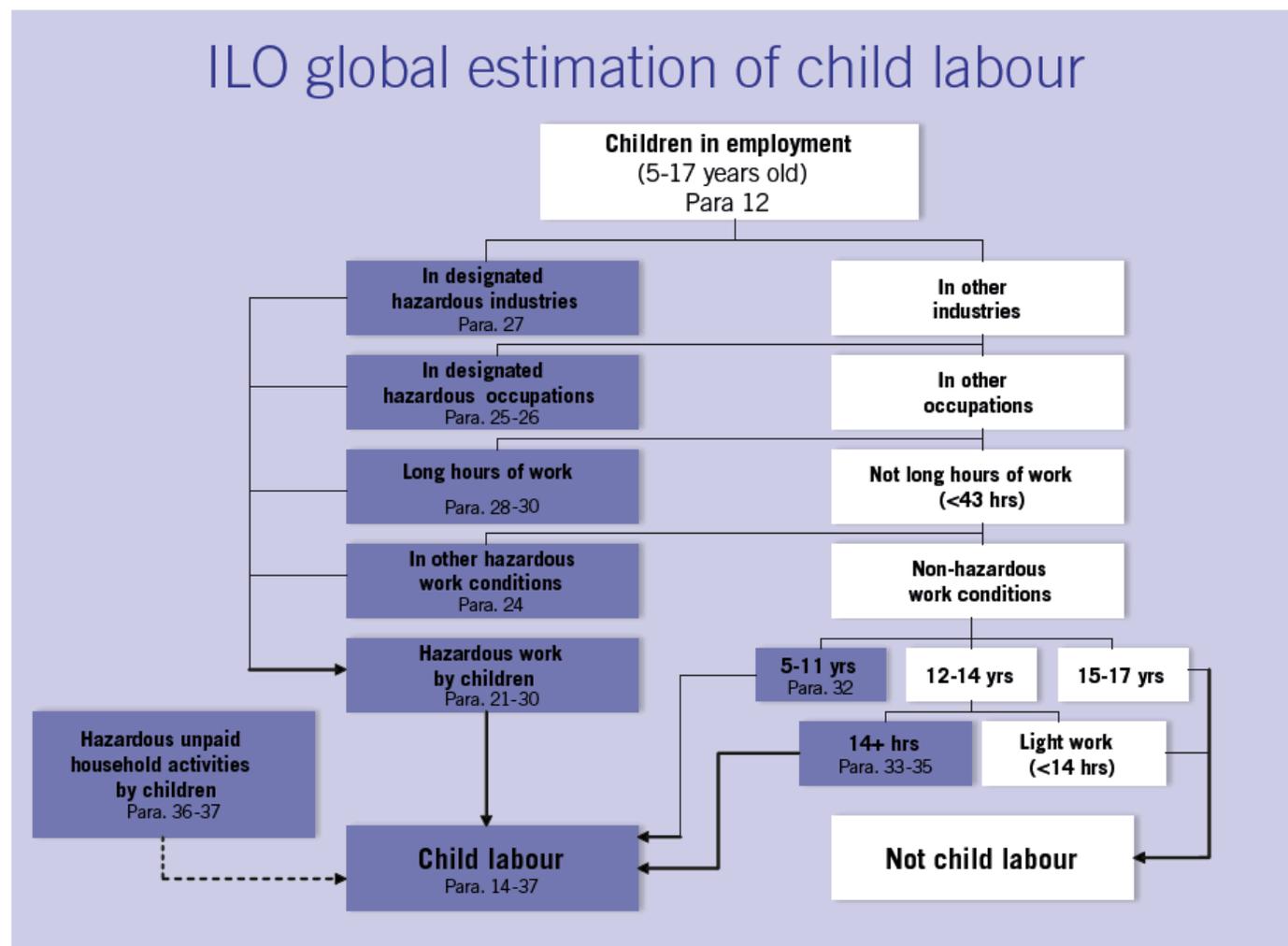
Official definitions vary:

- ILO: market work that is harmful to the future wellbeing of children.
- ILO's Statistical Information Monitoring Program on Child Labor:
 - Economically active, below age 12, works 1+ hours per week
 - Economically active, between the ages of 12 and 14 (inclusive), and works 14+ hours per week or 1+ hour per week in hazardous activity.
 - Below age 18, involved in hazardous work (e.g., trafficked children, bonded or forced labor, armed conflict, prostitution...)

How do we define child labor?

ILO definition:

Graphic 2. Conceptual framework of the ILO global estimation of child labour



How do we define child labor?

- Child labor is sometimes linked to not being in school:
 - Old enough to enroll in school, less than age 16, economically active, and not in school.
 - If not old enough to enroll in school, being economically active is sufficient to count as child labor.
 - Does not consider work at age 16 or older to be child labor.
- Note that even if in school, grades, learning, and continuation can suffer.

How prevalent is child labor?

- We imagine children in factories or mines.
 - Occurs, but is rare.
- Most work is by children with the family.
 - Of this most is agricultural.
 - Some (not much) is in the family business.

How prevalent is child labor?

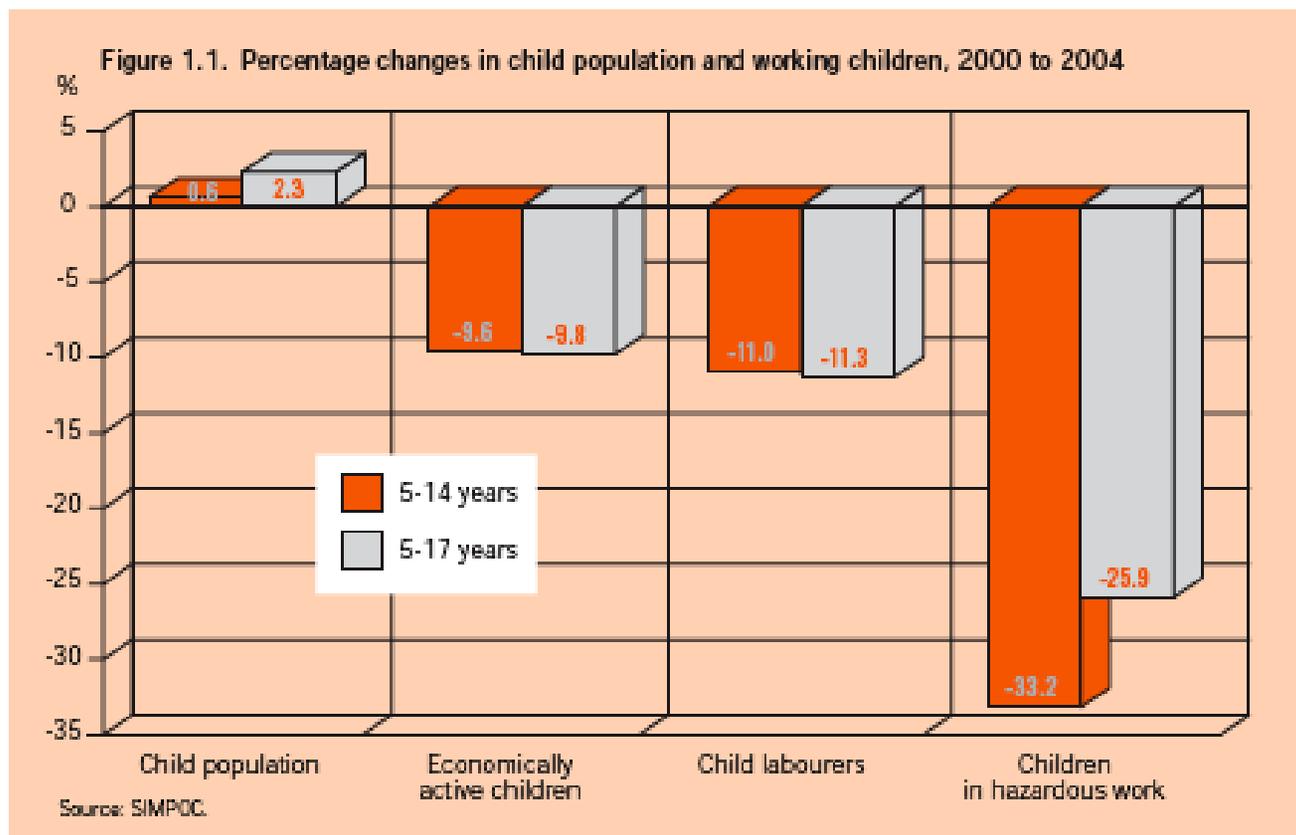
	Market Work				Domestic Work	Any Work, No Work, No School No School		
	Schooling	Any	Inside Hh	Outside Hh		Any Work	No School	No School
Sampled Countries	89.2	22.7	18.2	8.4	64.6	68.0	6.4	4.4
Albania	54.7	31.3	29.5	3.5	56.1	62.7	32.6	12.7
Angola	93.2	25.7	20.4	8.8	77.0	78.2	5.9	1.0
Azerbaijan	99.1	8.6	4.0	5.3	61.4	63.3	0.7	0.2
Burundi	88.1	31.2	27.6	6.9	84.3	87.3	11.2	0.7
Cameron	94.5	55.0	42.7	30.8	81.1	85.2	5.0	0.4
Central African Republic	85.5	62.2	50.3	37.3	85.0	88.9	13.6	0.8
Chad	95.0	62.6	55.2	26.7	82.5	88.3	4.6	0.3
Comores	77.1	38.1	32.2	16.3	61.1	66.8	15.9	6.3
Cote d'Ivoire	93.2	37.7	35.3	6.2	68.6	76.7	5.5	1.2
Democratic Republic of the Congo	53.5	19.2	12.9	10.4	50.3	52.3	17.4	29.1
Equatorial Guinea	94.9	33.7	31.0	5.4	84.9	85.8	3.1	0.6
Gambia	93.1	25.1	20.6	6.1	49.4	57.6	4.6	2.3
Guinea-Bissau	93.0	65.5	62.4	15.3	77.3	87.2	6.3	0.6
Guyana	97.4	26.3	15.9	14.7	72.8	75.2	2.3	0.3
Kenya	95.9	2.8	1.0	2.2	66.3	66.8	2.8	1.0
Laos	93.1	31.1	29.3	3.9	69.7	71.3	6.3	0.5
Lesotho	96.6	20.4	17.1	6.1	70.2	72.7	2.6	0.8
Madagascar	88.9	12.0	8.8	3.8	20.5	29.2	5.8	5.3
Moldova	97.3	30.5	23.2	11.8	86.3	88.0	2.1	0.6
Mongolia	95.2	21.4	20.6	1.4	91.2	91.7	4.6	0.2
Niger	88.1	67.1	44.4	42.9	88.7	93.7	11.4	0.4
North Sudan	86.0	16.4	14.2	4.1	52.8	56.7	10.1	4.0
Philippines	95.4	15.5	12.1	4.7	80.9	81.8	4.3	0.2
Rwanda	86.5	27.4	22.7	7.9	82.1	84.3	12.3	1.2
Sao Tome	88.7	15.5	10.0	7.8	80.0	81.3	9.5	1.7
Senegal	89.6	33.7	20.6	17.9	86.9	91.1	9.7	0.4
Sierra Leone	93.5	72.1	59.0	51.4	86.3	89.8	5.9	0.4
South Sudan	95.9	13.1	11.2	3.8	35.2	39.8	2.3	3.2
Swaziland	93.7	10.2	7.9	2.7	83.3	81.7	4.9	1.1
Tajikistan	97.2	12.4	10.0	3.4	72.5	74.6	2.6	0.3
Trinidad	98.0	3.2	2.3	1.1	56.3	56.6	1.1	0.8
Uzbekistan	96.4	15.2	10.6	5.8	78.1	79.8	3.4	0.3
Venezuela	92.0	8.1	3.9	4.5	62.4	64.6	3.8	4.2
Vietnam	95.1	24.4	23.4	1.9	51.7	57.8	4.3	0.6

How prevalent is child labor?

Activity	Participation rate	
Schooling	89.2	
{ Full time	21.2	} 90% of kids in school, of whom 75% also work.
{ With work	68	
Market work	22.7	
{ Inside HH	18.2	} 1/4 of kids engage in market work, of whom 3/4 work with their family.
{ Outside HH	8.4	
{ Only market	3.4	}
{ Domestic and market	19.3	
Domestic work	64.6	
{ Only domestic	45.3	} 2/3 of kids in domestic work, of whom 70% only work at home.
{ Domestic and market	19.3	
Any work	68	
Any work, no school	6.4	6% of kids any work, no school.
No work, no school	4.4	4 % of kids idle.

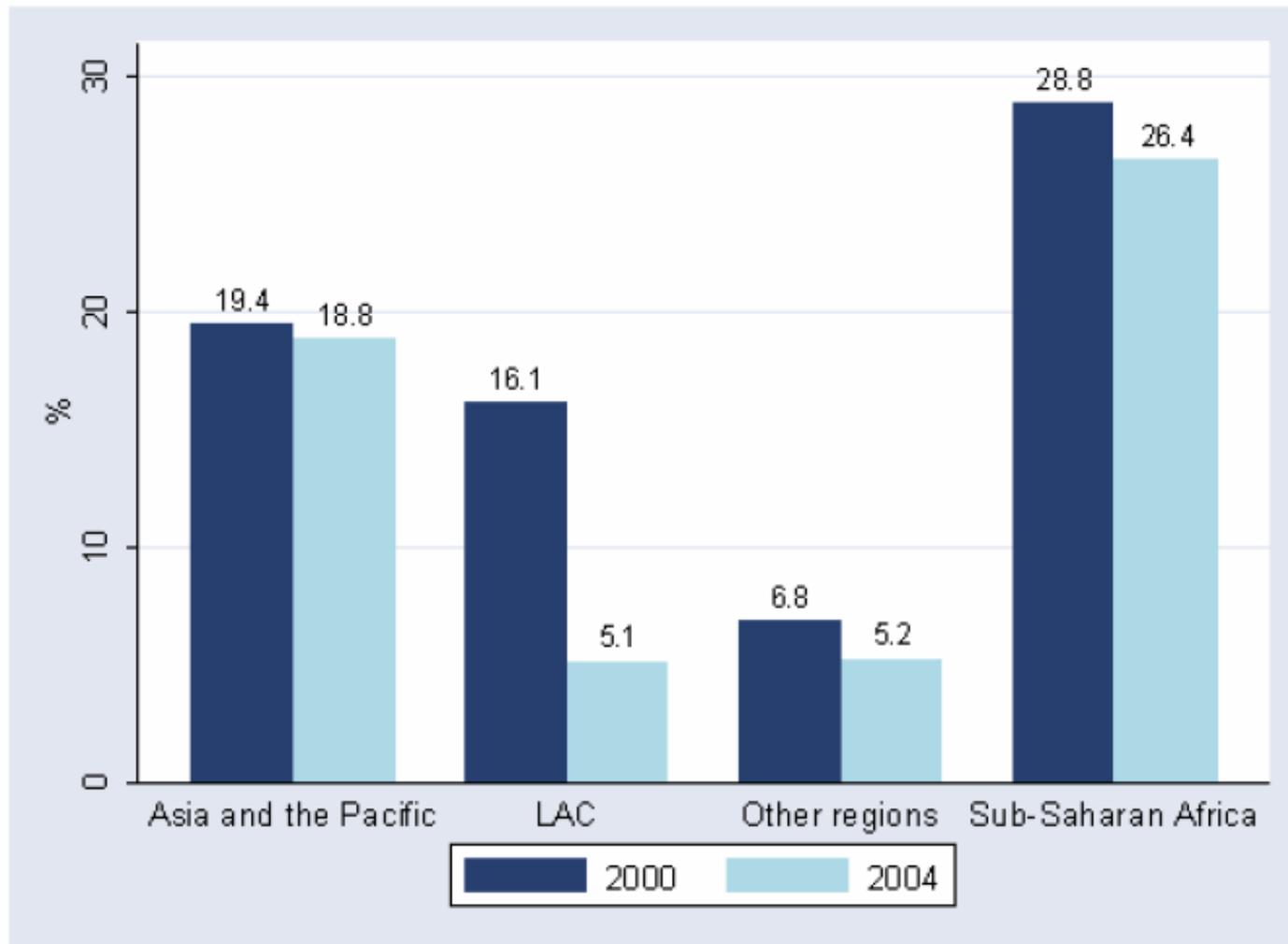
How prevalent is child labor?

But declining...



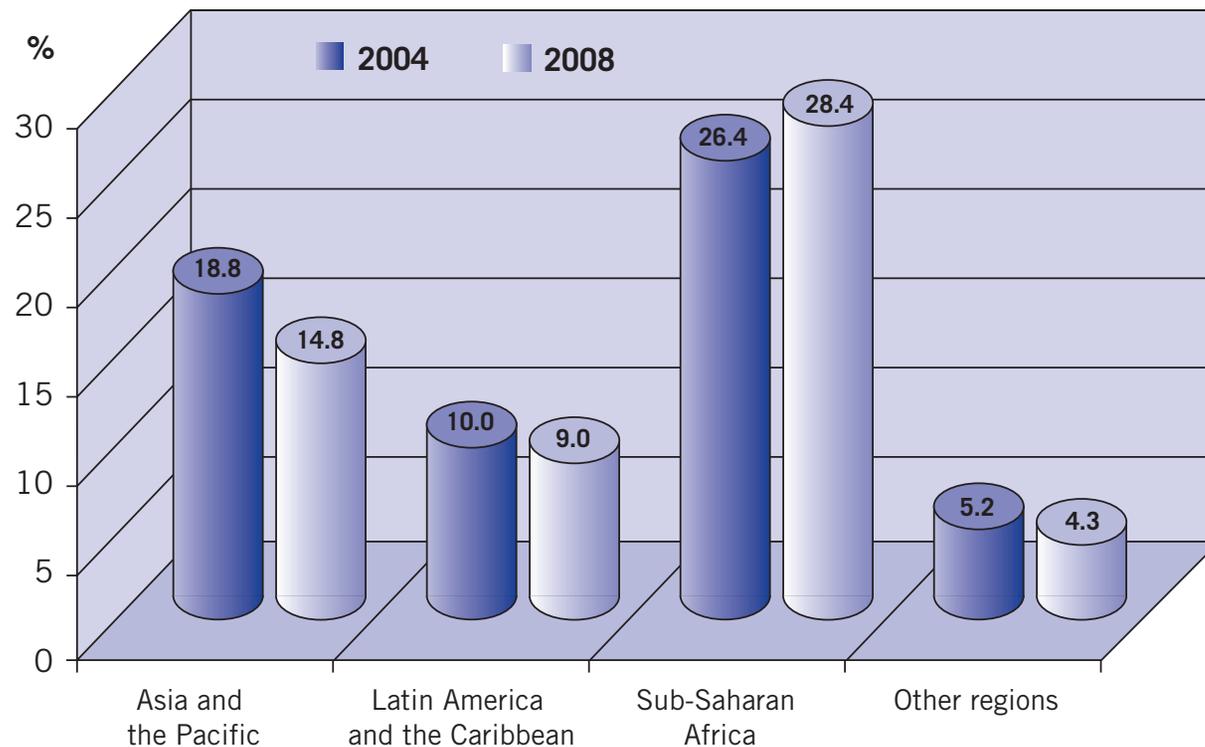
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How prevalent is child labor?

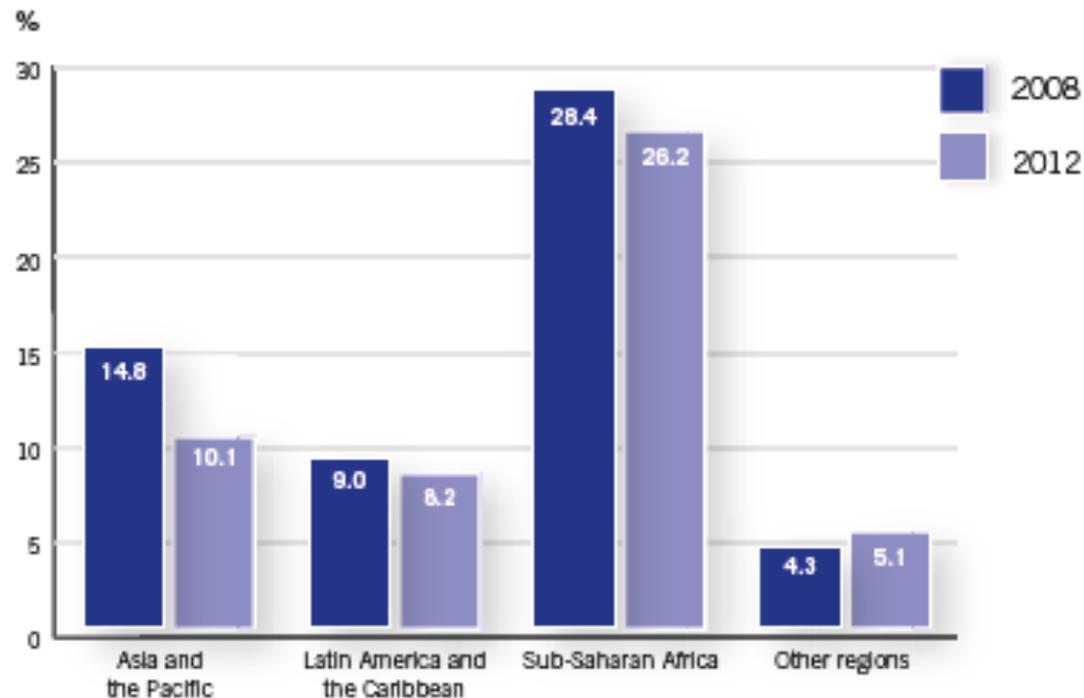
But declining...



How prevalent is child labor?

But declining...

Chart 4.
Global trends in children's
economic activity rate by
region (percentage), 5-14
years old, 2008-2012



How prevalent is child labor?

- Of economically active children
 - $\sim \ll 1$ % in mining.
 - $\sim 5\%$ in manufacturing (with some outliers, e.g., Bangladesh 14%).
 - $\sim < 1\%$ construction (with big outliers).
 - $\sim 2-3\%$ in hotels and restaurants.
 - $\sim 10\%$ in private homes.
- “Bad” child labor is perhaps $0.18 \times 0.06 \sim 1\%$ of children.
 - This is still a lot $\sim 126-200$ million depending on the definition.

Hazardous child labor

Table 10: Global estimates of child labour and hazardous work by age and sex, 2008

Sex and age	Total children ('000)	Child labour		Hazardous work	
		('000)	%	('000)	%
World	1,586,288	215,269	13.6	115,314	7.3
Boys	819,891	127,761	15.6	74,019	9.0
Girls	766,397	87,508	11.4	41,296	5.4
5-11 years	852,488	91,024	10.7	25,949	3.0
12-14 years	364,366	61,826	17.0	26,946	7.4
(5-14 years)	1,216,854	152,850	12.6	52,895	4.3
15-17 years	369,433	62,419	16.9	62,419	16.9

What causes child labor?

- Economists don't assume that parents of child workers are either selfish (altruistic) or ignorant.
- They begin with the assumption that parents care for their children and the household, and are trying to do the best they can given scarce resources.
 - Implies that parents think about children's time use (school, work, play) jointly.
 - Implies that observed child labor could be "optimal", i.e., a simple ban on child labor would hurt both the child and the entire household.
 - But Optimal \neq Desirable or Good.
 - Assumes children are passive, parents decide.
- Then look for evidence.

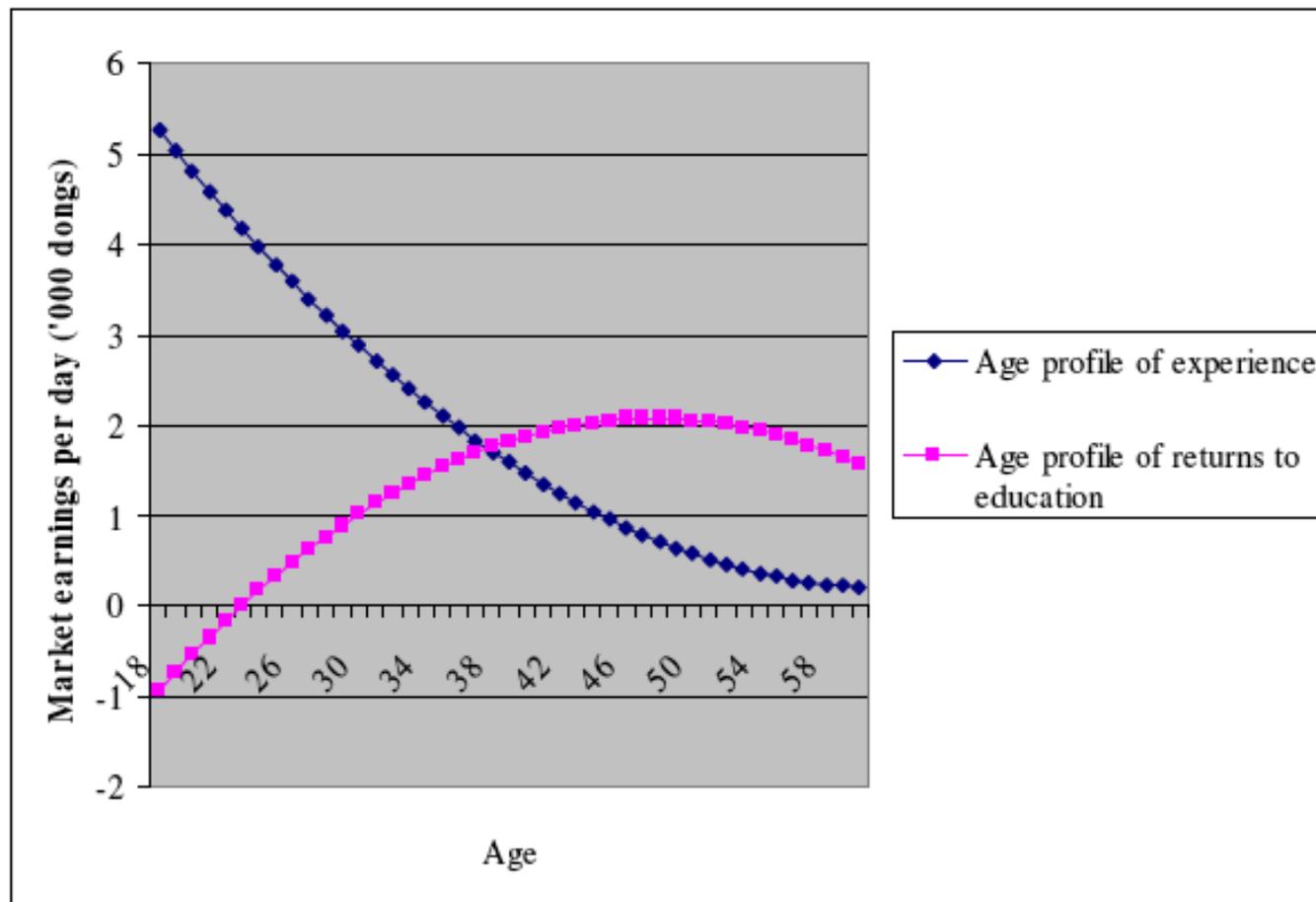
What causes child labor?

- Observed child labor is “optimal” if
 - Households are very poor.
 - Mixed evidence from unconditional cash transfers in South Africa (improved height/weight, when transfers go to women, e.g., Duflo).
 - Returns to education are very low (or students don't learn anything in school), so kids might as well work.
 - Returns to experience are higher than returns to schooling.

What causes child labor?

■ Beegle, Dehejia, Gatti evidence from VN

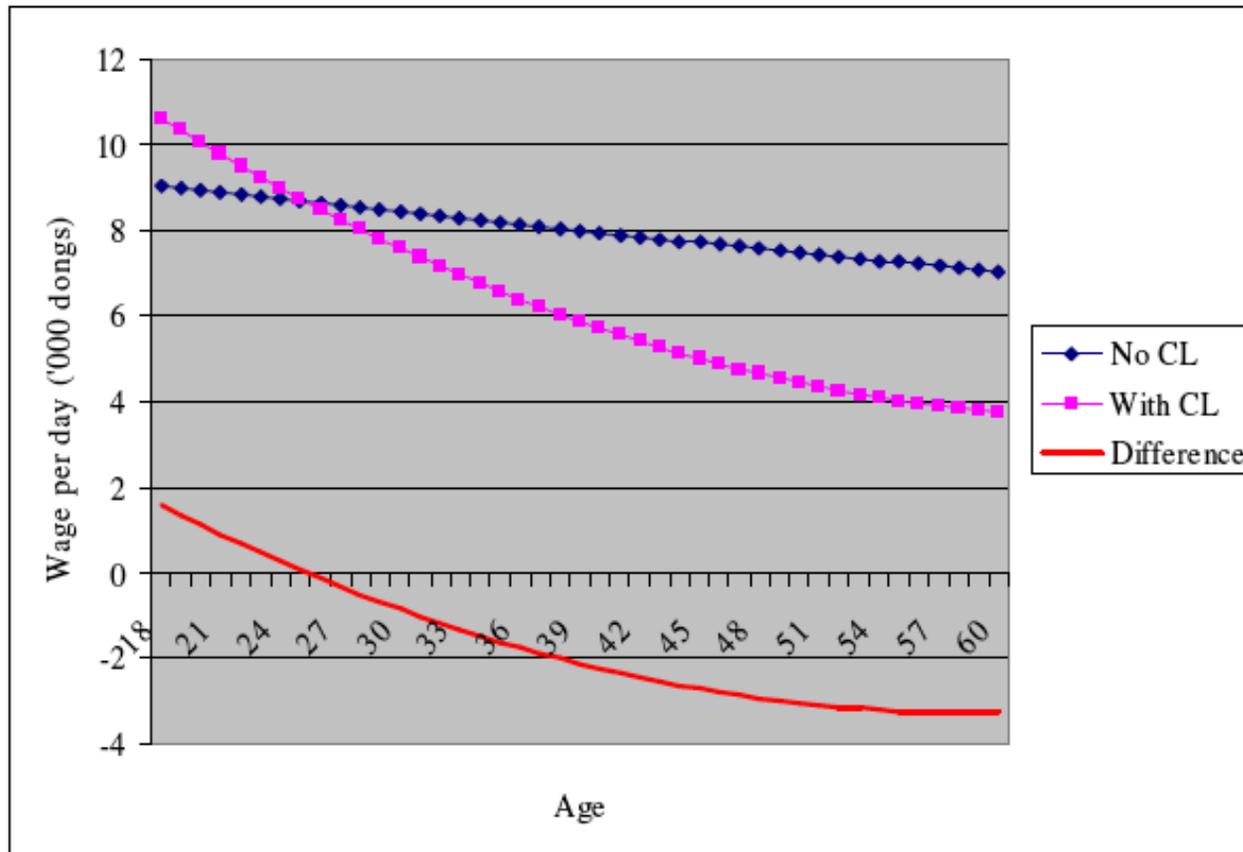
Figure 1: Age Profile of the Education and Experience Effects for Market Earnings per Day



What causes child labor?

- Beegle, Dehejia, Gatti evidence from VN

Figure 3: Comparing Profiles of Wages per Day with and without Child Labor



What causes child labor?

- Observed child labor is not “optimal” if
 - Parents are selfish
 - Goldin evidence from US
 - Parents are ignorant about harm from child labor (physical & education) and benefit from schooling.
 - Most children also in school so costs subtle.
 - Benefits from school difficult for parents to know/estimate in a changing economy.
- Beegle, Dehejia, Gatti evidence from VN.
 - Find that parents who experienced low returns to schooling in their lifetime are more likely to have their kids work.

Dominican Republic example

- While 80-90% of students complete primary only 25-30% complete secondary school...
- Even though returns to secondary school completion are on the order of 40% higher earnings.
- They find that the perceived returns to education are in fact low, much lower than the real returns.

DR example

	<u>POOR COMMUNITIES</u>						<u>RICH COMMUNITIES</u>		
	(1) Measured Mean	(2) Perceived (self)	(3) Perceived (others)	(4) Measured Mean	(5) Perceived (self)	(6) Perceived (others)	(7) Measured Mean	(8) Perceived (self)	(9) Perceived (others)
Not Complete Secondary	3,180 [1400]	3,516 [846]	3,478 [829]	2,610 [1098]	2,760 [426]	2,740 [433]	4,021 [1153]	4,176 [578]	4,122 [554]
Complete Secondary	4,479 [1432]	3,845 [1003]	3,765 [957]	3,028 [990]	2,985 [502]	2,939 [433]	4717 [1332]	4,595 [756]	4,485 [719]
(Sec) – (Not Sec)	1,299	329 [406]	287 [373]	318	225 [302]	199 [271]	696	419 [469]	363 [439]

Notes: All figures in 2001 Dominican Pesos (RD\$). Standard deviations in bracket. Rich and poor communities are defined as above vs. below the 50th percentile of community-level median income.

DR example

- They then randomly assigned a treatment in which they inform / teach students about the actual returns...

	Full sample				Poor households				Least poor households			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Returned next year	Finished school	Years of schooling	Perceived returns	Returned next year	Finished school	Years of schooling	Perceived returns	Returned next year	Finished school	Years of schooling	Perceived returns
Treatment	0.041* (0.023)	0.023 (0.020)	0.20** (0.082)	367*** (28)	0.006 (0.034)	-0.01 (0.026)	0.037 (0.11)	344*** (41)	0.072* (0.038)	0.054* (0.031)	0.33*** (0.12)	386*** (41)
Log (inc. per capita)	0.095** (0.040)	0.23*** (0.044)	0.79*** (0.16)	29.0 (47)	0.054 (0.068)	0.26*** (0.062)	0.69*** (0.23)	188** (87)	0.047 (0.12)	0.10 (0.13)	0.51 (0.45)	23 (133)
School performance	0.011 (0.010)	0.019** (0.009)	0.086** (0.034)	0.74 (14)	0.001 (0.014)	0.015 (0.012)	0.064 (0.048)	-9.5 (13.5)	0.025* (0.013)	0.024* (0.012)	0.10** (0.048)	8.2 (22)
Father finished sec.	0.074** (0.030)	0.050* (0.030)	0.26** (0.12)	-24 (32)	0.056 (0.045)	0.019 (0.043)	0.16 (0.18)	-29.1 (62)	0.096** (0.038)	0.096** (0.038)	0.36** (0.14)	-3.8 (40)
Age	-0.010 (0.016)	0.004 (0.015)	-0.006 (0.059)	-42* (21)	-0.042 (0.030)	0.002 (0.019)	-0.071 (0.088)	-46 (32)	0.005 (0.025)	0.005 (0.035)	0.025 (0.087)	-35 (29)
R ²	.016	.040	.049	.090	.007	.019	.014	.094	.020	.020	.029	.090
Observations	2,241	2,205	2,074	1,859	1,055	1,055	1,007	920	1,056	1,056	1,002	939

What causes child labor?

- Observed child labor is not “optimal” if (...cont' d)
 - Households are credit constrained.
 - Theory Baland and Robinson, evidence Edmunds & Dehejia and Gatti & Beegle, Dehejia, and Gatti.
 - If HH's want to educate their kids and know that the return to education is high, if they could, they would borrow or dis-save to send kids to school. If they can't dis-save or borrow, they meet short-term needs with child labor.
 - One special need is a short-term shock (sickness, bad crop). So this is related to incomplete insurance.

Example: Kagera, Tanzania

- 90% of children 7-15 work.
- Average work hours 20 hours per week.
- 88% of households experience an agricultural shock over 2 years.
- This raises child labor about 1.5-2 hours a week (i.e., about 10%), reduces school by 20%.
- But if you have collateralizable assets this effect is weaker; e.g., mean assets=50% less child labor and education shock.

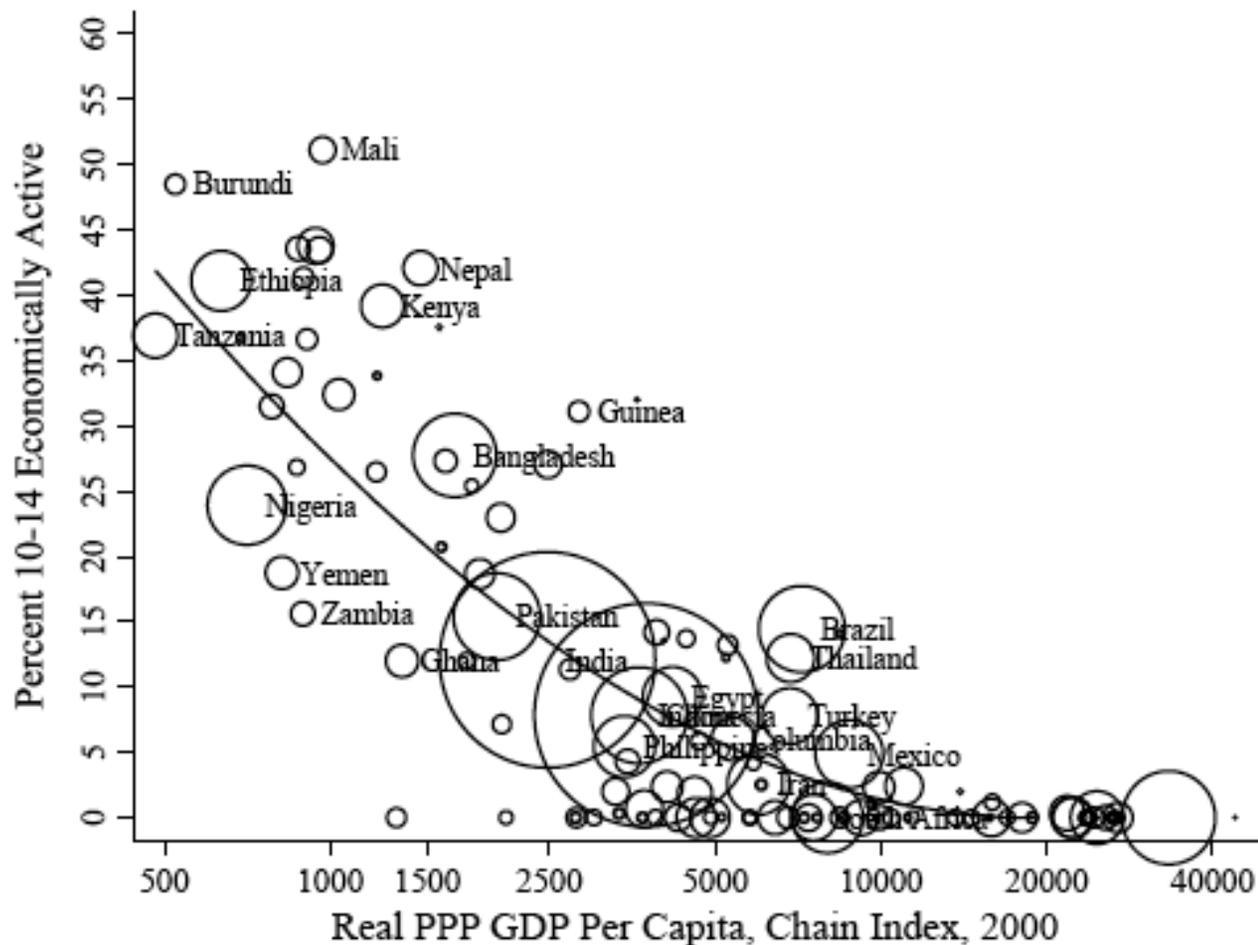
What causes child labor?

- Observed child labor is not “optimal” if (...cont' d)
 - There are “multiple equilibria.” (Basu and Van): high child labor participation drives down adult wage, creating poverty, necessitating child labor (like a poverty trap).
 - Child labor ban could be effective in this context.

How do we reduce child labor?

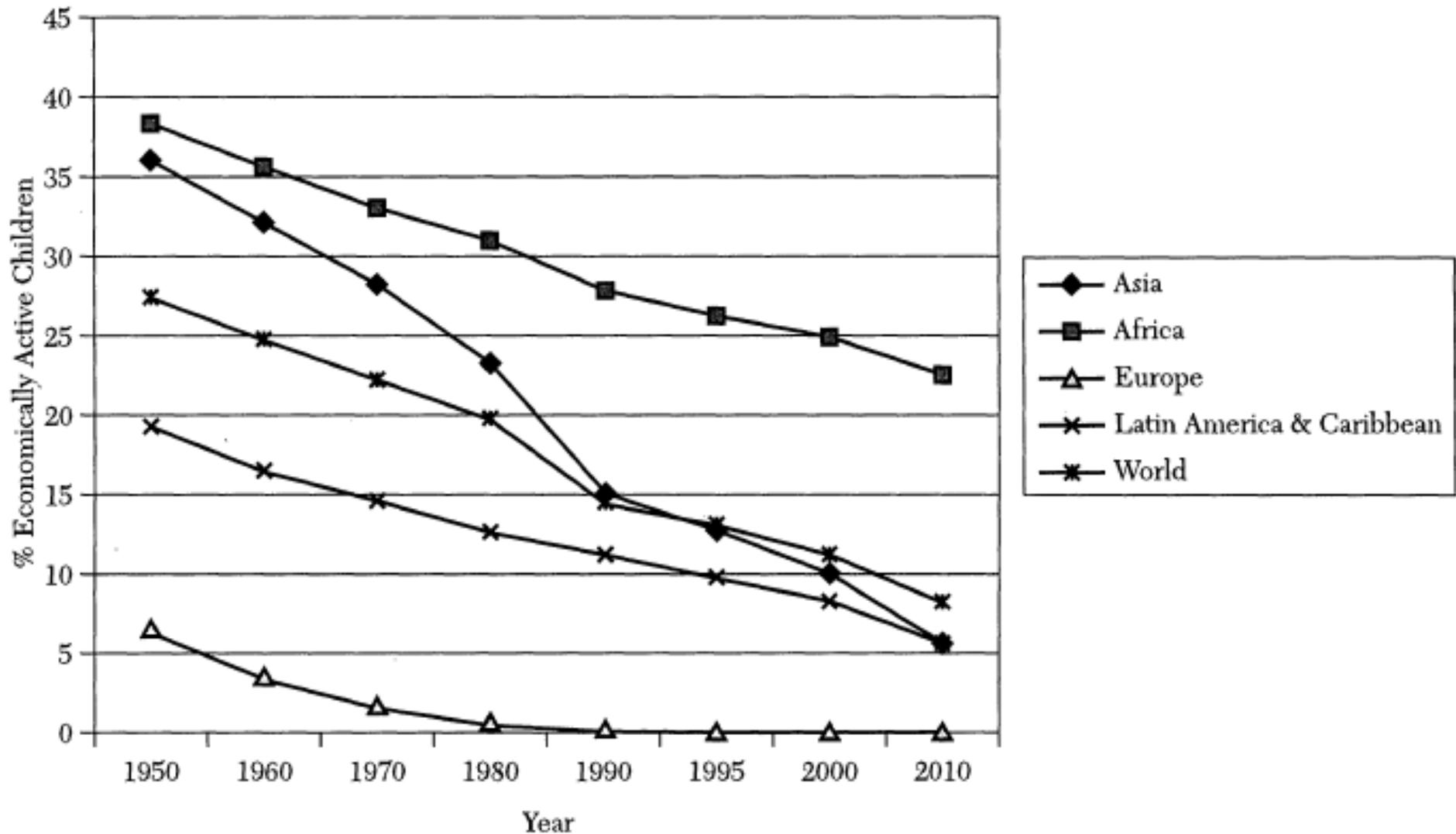
- Do nothing and let growth take care of it.

Figure 10: The Relationship between Economic Status and Economic Activity, 2000



How do we reduce child labor?

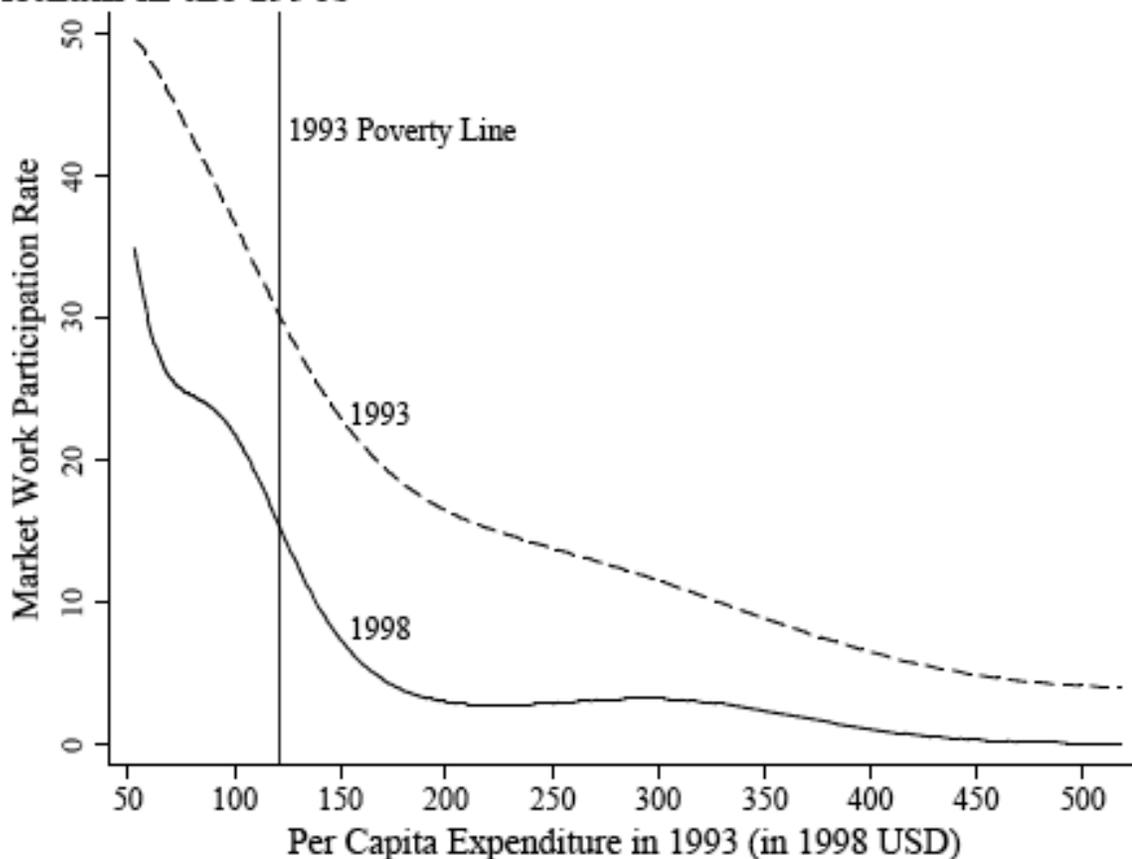
- Do nothing and let time take care of it.



How do we reduce child labor?

- Do nothing and let growth take care of it.

Figure 11: Living Standard Improvements and Market Work among Children 6-15 in Vietnam in the 1990s



How do we reduce child labor?

- Bans are unlikely to be effective and may harm children and households.
- Reductions in child labor must be linked to school opportunities and income for households.
- A big idea over the last decade has been Conditional Cash Transfers (CCT' s).
 - Broad evidence that they work and continue to work (e.g., Progressa).
 - Some caution needed: labor of older kids increases.
- A related challenge: if we can get students into school, can we get them to learn?

The links between culture & child labor

- Parents' decisions on children's time use:
 - Depends on social norms (how much work, what kind of work is appropriate),
 - But cultural itself is endogenous.
 - Expectation of what the returns to education will be when children are grown,
 - Depends on their own experience.
 - Depends on what opportunities will be.
 - Expectation of whether parents can rely on children to look after them when they are old.
 - Gender and birth order important.

How much does child labor contribute?

- Surprisingly no estimates that I have found.
- But a guess:
 - Child labor contributes only a small share to developing countries' GDP's.
 - But that small fraction is probably very important to households.
 - Child labor important in education and work experience.

Room for debate

- Is some child labor acceptable?
 - Yes I would argue.
 - In the “Social constructivist” view some forms of child labor may contribute to child development.
 - E.g., Some child labor (e.g., chores) is still seen and encouraged in the US. Why not in developing countries?
 - But these must be tightly circumscribed by children’s rights.
 - Interestingly some children view work as one of their rights.
 - Much child labor is the outgrowth of household poverty and underdevelopment (lack of schools and opportunities). Without an alternative, condemning child labor is condemning survival.
- The focus is increasingly on the “Worst Forms” of child labor (e.g., ILO 1999).