APPENDIX

I. Ratification (Table 1 and Figure 1)

Variable transformations

Because it is highly right-skewed, I log CHILD LABOR. I then rescale it so that it ranges from 0 (0% of children engaged in the labor force) to 8.867 (70% of children in the labor force). I transform each 'democracy' measure so that full democracies have a value of 0 and full non-democracies have a value of -1. For JUDICIAL INDEPENDENCE and DEMOCRATIC ELECTIONS, this simply entails subtracting 1 from all original values. For CIVIL LIBERTIES, I reverse the original Freedom House values and rescale as follows:

Original Value	Value in Table 1 Analyses
1 (e.g., Norway)	0
2	-.167
3	-.333
4	-.5
5	-.667
6	-.833
7 (e.g., North Korea)	-1

The rescaling of CHILD LABOR and each 'democracy' variable does not affect the substantive results, but it enables me to set intercepts at theoretically interesting values and to directly compare coefficients across models. The interaction terms are also based on these rescaled values.

Robustness checks

I include controls for presence of a LEFT-WING GOVERNMENT, (logged) GDP PER CAPITA, RECENT DEMOCRATIC TRANSITION, and separate RATIFICATION BARRIERS parameters for democracies and non-democracies. None is a significant predictor, although DEMOCRATIC TRANSITION comes close. The inclusion of these variables does not alter the other results notably.

Because the relationship between child labor and democracy is interactive, the

'tipping point' in Figure 1 depends somewhat on the simulated change in child labor. To get a better sense of what the average situation might look like, I re-run the simulation, this time estimating the marginal effect of a 100% increase above the mean of child labor (in practice, this means a rise in the percentage of children working from 3% to 8.5%). The resulting graphs look very similar to those displayed in Figure 1. Further simulations show (unsurprisingly, given the results in Table 1) that the larger the simulated increase in child labor, the lower the 'tipping point' on the relevant democracy measure.

II. Child Labor (Tables 2 and 3)

Variable transformations (Tables 2 and 3) and cutpoints (Table 2)

Being a proportion, the dependent variable can only assume values between 0 and 1. This can be a problem because OLS models can predict values out of these bounds. A common approach is to do a log, square root, or arcsine transformation of the dependent variable. Of the three, the square root transformation best improves model fit. I also log GDP PER CAPITA because it is highly right-skewed.[1]

In split-sample analyses, I use the following cutpoints. For CIVIL LIBERTIES, I follow others, coding countries as protecting civil liberties is they have a score of 1, 2, or 3 in the original data. I consider a country to have an independent judiciary if it lies in the upper tercile of the distribution. There is obviously a degree of arbitrariness in this approach, but it has the benefit of eliminating bias that probably results from a subjectively determined cutpoint. Although there is substantial overlap in countries' categorizations, there is certainly some variation. Table 1A in this appendix provides a list of which countries fit into each category on a yearly basis.

[1] Basu 1999; Heston et al. 2011. This variable controls for purchasing power parities.

In the analyses of all countries (Table 3), for ease of comparison with the other democracy measures, I rescale CIVIL LIBERTIES from its original Freedom House values by: (1) reversing the scale so that higher values indicate more (rather than fewer) civil liberties (as shown on p. 1 of the appendix); and (2) dividing all values by 6. All three measures now range from 0 (least democratic) to 1 (most democratic); hence, we can directly compare them.

Tests of Instrument Relevance and Validity

Democracies (Table 2, models 1, 3, and 5)

- RATIFICATION BARRIERS: weak ➔ irrelevant. Kleibergen-Paap LM statistics are close to zero.
- REGIONAL RATIFICATION: weak (or even irrelevant). Kleibergen-Paap LM statistics range from 2.57 to 3.3.
- ISSUE-AREA EMBEDDEDNESS: not valid (not orthogonal). I initially include this variable in each model displayed in Table 2. The *C* ('difference in Sargan') statistics are significant at $p < .05$. This casts doubt on the validity of this instrument.
- INTERNATIONAL INSTITUTIONAL EMBEDDEDNESS, COMMON LAW: acceptable instruments. We can easily reject the hypothesis that these candidate instruments are irrelevant (F-tests range from 13.4 to 22.4 and Kleibergen-Paap LM statistics range from 16.6 to 20.8). Values fall in a conservative (10%) range of the Stock-Yogo (2004) critical cutpoints. This provides further evidence that the instruments are not weak. *C* statistics for the individual variables never approach statistical significance. Hansen's *J* is never statistically significant. Both suggest that the instruments are valid.

Non-democracies (Table 2, models 2, 4, and 6)

- RATIFICATION BARRIERS: weak (or even irrelevant). Kleibergen-Paap LM statistics range from 3.5 to 6.3.
- ISSUE-AREA EMBEDDEDNESS: Not valid (not orthogonal). This variable easily passes the tests of irrelevance/weakness. Hence, I initially include it in each model displayed in Table 3. However, in some of the analyses, *C* statistics are significant at $p < .10$. This raises some concerns about the instrument's validity, so I do not include it in the analyses.
- COMMON LAW: weak ➔ irrelevant. Kleibergen-Paap LM statistics are close to zero.
- INTERNATIONAL INSTITUTIONAL EMBEDDEDNESS, REGIONAL RATIFICATION: acceptable instruments. We can easily reject the hypothesis that these candidate instruments are irrelevant (F-tests range from 13.3 to 21.5 and Kleibergen-Paap LM statistics range from 22.9 to 23.5). Values fall in a conservative (10%) range of the Stock-Yogo (2004) critical cutpoints. This provides further evidence that the instruments are not weak. *C* statistics for the individual variables never approach statistical significance. Hansen's *J* is never statistically significant. Both suggest that the instruments are valid.

One final test of interest for all models in Table 2 is the Anderson-Rubin Wald test, which is always significant at conventional levels for democracies and never significant for non-democracies. This latter finding tells us that for non-democracies, the effect of the endogenous regressor (RATIFIED MAC) is not statistically different from zero. Combined with the knowledge that the instruments are relevant and valid (above), this suggests that ratification indeed has a null effect on child labor for non-democracies.

Pooled analyses (Table 3)

Based on the analyses of democracies and non-democracies separately, there are three candidate instruments: (1) COMMON LAW, (2) INTERNATIONAL INSTITUTIONAL

EMBEDDEDNESS, and (3) REGIONAL RATIFICATION. This is potentially problematic because (3) was weak/irrelevant in the analyses of democracies, and (1) was weak/irrelevant in the analyses of non-democracies. Eliminating both from the pooled analyses would leave us with one instrument (and its interaction with the relevant democracy variable), which is not ideal.[2] I proceed as follows. First, I estimate the models with just INTERNATIONAL INSTITUTIONAL EMBEDDEDNESS and REGIONAL RATIFICATION (and the interaction terms). Hansen's *J* p-values were .017, .103, and .064. *C* statistics for the interaction of REGIONAL RATIFICATION and the relevant democracy measure were .044, .123, and .093. These results are statistically significant (or fairly close) enough to cast considerable doubt on the instrument's validity. Consequently, I decide not to use REGIONAL RATIFICATION (or the related interaction terms) in the pooled analyses.

Next, I estimate the models with just INTERNATIONAL INSTITUTIONAL EMBEDDEDNESS and COMMON LAW (and the interaction terms). Hansen's *J* p-values never achieve statistical significance. *C* statistics for COMMON LAW, AS well as the interaction of COMMON LAW and the relevant democracy measures, are always far from statistically significant. Hence, these instruments appear to be valid.

For the results reported in Table 3, the Kleibergen-Paap statistic indicates that the instruments are strongly correlated with the endogenous variable. Values fall above a conservative range of the Stock-Yogo (2004) critical cutpoints for bias and size

[2] I conducted the analyses with only INTERNATIONAL INSTITUTIONAL EMBEDDEDNESS and its interaction with the relevant democracy measure. The analyses easily passed the test of relevance. By definition, Hansen's *J* cannot be rejected (because the equation is exactly identified). The findings with regard to ratification's impact are very similar to those in Table 3, except that the probability that ratification decreases child labor in countries with democratic elections becomes marginally non-significant (p = .119).

distortion (although in two specifications, the values for size distortion are between 10 and 15%, which is still acceptable). Overall, the instruments appear not to be weak.

Robustness checks

I perform several robustness checks. I rerun all of the analyses with the following variables, one by one:

- AGRICULTURE AS A PERCENTAGE OF GDP. It is positively and significantly related to child labor when I run the analyses without GDP PER CAPITA. (The variables are highly correlated, as noted earlier). The main findings are unchanged.
- PRIMARY SCHOOL ENROLLMENT. Consistent with the existing literature, I find that countries in which more children are enrolled in school typically have lower child labor. The main findings are unchanged.
- BIRTH RATE. Countries with high birth rates also have consistently higher child labor. Many of the findings become statistically non-significant. This appears to be due to the reduction in sample size (because of limited data availability for BIRTH RATES).
- REGIONAL CHILD LABOR. Not surprisingly, it is a positive and significant predictor of child labor levels in all specifications. The main findings are unchanged.
- I obtained data on the UNEMPLOYMENT RATE. Unfortunately, however, data availability for this variable is far too limited to include it in the analyses.
- MANUFACTURING/GDP. Manufacturing-dependent economies have lower child labor, but this relationship is never statistically significant at conventional levels. The main findings are unchanged.
- LEFT-WING GOVERNMENT is associated with lower child labor, but this is only statistically significant in one model. The main findings are unchanged.

As discussed in the article, I exclude from the analyses of child labor all countries that ratified when they had no child labor. When I include these countries in the

analyses of democracies, there is still substantial evidence of endogeneity. Although ratification still drives down child labor, its substantive impact declines and falls short of standard levels of statistical significance. This is not surprising given that the sample now includes countries where it is computationally impossible and theoretically not expected that ratification would decrease child labor. For non-democracies, in contrast, the results do not change notably when I include in the analyses countries that ratified when they had no child labor.

IV regression carries the well-known pitfalls of bias due to weak instruments and inefficiency, but neither appears to be problematic in the regressions reported in Table 2. Nonetheless, one could reasonably argue that if endogeneity is not a problem for the countries in models 2, 4, and 6, methods to mitigate it are unnecessary and inefficient. I obtained similar results when estimating each model using a more efficient – though possibly biased – OLS model. The coefficients on RATIFIED are still positive, but smaller and in any case not statistically significant. Hence, the findings are not an artifact of IV regression's inefficiency.

To address concerns about CHILD LABOR data quality, I use the following approach. Given the close relationship between economic development and child labor, one solution is to consider suspect any state whose child labor is substantially lower than its GDP per capita would predict. (In practice, I chose the top 10% as a cutoff point). Robustness checks confirm that none of the results depends on the inclusion of these 'suspicious' countries.

Table 1A. Countries Included in Analyses and Years of Categorization as 'Democracies'

Country	Judicial Independence	Civil Liberties	Elections	Entered data (if not 1980)
Afghanistan	None	None	None	
Albania	None	1992, 2002	1991	
Algeria	None	None	None	
Angola	None	None	None	
Argentina	1984-1989, 1997-2002	1984-2002	1983-2002	
Armenia	None	1992	1992-2002	1992
Australia	1980-2002	1980-2002	1980-2002	
Austria	1980-2002	1980-2002	1980-2002	
Bahamas	1980-2002	1980-2002	1980-2002	
Bahrain	None	None	None	
Bangladesh	1992-1998	1991-1992	1986-2002	
Barbados	1980-2002	1980-2002	1980-2002	
Belarus	1991	1992	None	1991
Belgium	1980-2002	1980-2002	1980-2002	
Belize	1981-2002	1981-2002	1981-2002	1981
Benin	1992-1999	1991-2002	1991-2002	
Bolivia	1985-2002	1983-1994, 1996-2002	1982-2002	
Bosnia	None	None	None	1992
Botswana	1980-2002	1980-2002	None	
Brazil	1985-2002	1980-1992, 2000-2002	1985-2002	
Brunei	1984-2002	None	None	1984
Bulgaria	1989-2002	1991-2002	1990-2002	
Burkina Faso	None	None	None	
Burundi	None	None	1993-1995	
Cambodia	None	None	None	
Canada	1980-2002	1980-2002	1980-2002	
Cape Verde	1989-2002	1991-2002	1990-2002	
Central African Rep	None	None	1993-2002	
Chad	None	None	None	
Chile	1989-2002	1989-2002	1990-2002	
China	None	None	None	
Colombia	1980-2002	1980-1988	1980-2002	
Cameroon	None	None	None	
Comoros	1992-1996	1991-1992	1990-1993	
Congo Dem Rep	None	None	None	
Congo Republic of	None	1992-1993	1992-1996	
Costa Rica	1980-2002	1980-2002	1980-2002	
Côte d'Ivoire	None	None	None	
Croatia	1999-2002	2000-2002	1992-2002	1992
Cuba	None	None	None	
Cyprus	1980-2002	1980-2002	1983-2002	
Czech Republic	1993-2002	1993-2002	1993-2002	1993
Denmark	1980-2002	1980-2002	1980-2002	
Dominican Rep	1999-2002	1980-2002	1980-2002	
Ecuador	1981-1999	1980-1995, 1997-2002	1980-1999, 2002	
El Salvador	1995-1999	1980-2002	1988, 1992-2002	
Egypt	None	None	None	

Country	Judicial Independence	Civil Liberties	Elections	Entered data (if not 1980)
Equatorial Guinea	None	None	None	1993
Eritrea	None	None	None	1993
Estonia	1991-2002	1991-2002	1991-2002	1991
Ethiopia	2002	None	None	
Fiji	1980-2002	1980-1986, 1992-2002	1992-1999	
Finland	1980-2002	1980-2002	1980-2002	
France	1980-2002	1980-2002	1980-2002	
Gabon	None	1991	None	
Gambia	1988-1991	1980, 1987-1993	None	
Georgia	None	None	None	1992
(West) Germany	1980-2002	1980-2002	1980-2002	
Ghana	None	1980, 1997-2002	1980, 1993-2002	
Greece	1980-2002	1980-2002	1980-2002	
Guatemala	None	1986-1989	1980-1981, 1986-2002	
Guinea-Bissau	None	None	2000-2002	
Guyana	1993-2001	1992-2002	None	
Haiti	None	None	None	
Honduras	None	1980-2002	1982-2002	
Hungary	1988-2002	1989-2002	1990-2002	
Iceland	1980-2002	1980-2002	1980-2002	
India	1980-2002	1980-1990, 1998-2002	1980-2002	
Indonesia	None	None	1999-2002	
Iran	None	None	None	
Iraq	None	None	None	
Ireland	1980-2002	1980-2002	1980-2002	
Israel	1980-2002	1980-2002	1980-2002	
Italy	1980-2002	1980-2002	1980-2002	
Jamaica	1980-2002	1980-2002	1980-2002	
Japan	1980-2002	1980-2002	1980-2002	
Jordan	None	1992	None	
Kazakhstan	None	None	None	1992
Kenya	None	None	1998-2002	
Korea South	1991-2002	1991-2002	1991-2002	
Kuwait	1983-2001	None	None	
Kyrgyzstan	None	1992-1994	None	1992
Laos	None	None	None	
Latvia	1991-2002	1991-2002	1991-2002	1991
Lebanon	1980-2002	None	None	
Lesotho	1984-2002	2002	None	
Liberia	None	None	None	
Libya	None	None	None	
Lithuania	1991-2002	1991-2002	1991-2002	1991
Luxembourg	1980-2002	1980-2002	1980-2002	
Macedonia	1993-2002	1993-2000, 2002	1993-2002	1993
Madagascar	1990-1994	None	1993-2002	
Malawi	1996-2002	1994-2001	1994-2002	
Malaysia	1980-1993	None	None	

Country	Judicial Independence	Civil Liberties	Elections	Entered data (if not 1980)
Maldives	None	None	None	
Mali	None	1992-1993,1995-2002	1992-2002	
Malta	1990-2002	1980-1982, 1987-2002	1980-2002	
Mauritania	None	None	None	
Mauritius	1980-2002	1980-2002	1980-2002	
Mexico	1997-2002	1989, 1992, 1996, 2000-2002	2000-2002	
Moldova	1992-2002	None	1992-2002	1992
Mongolia	1992-2002	1991-2002	1990-2002	
Morocco	None	None	None	
Mozambique	None	None	None	
Myanmar	None	None	None	
Namibia	1990-2002	1990-2002	None	1990
Nepal	1991-1999	1991-1992	1990-2001	
Netherlands	1980-2002	1980-2002	1980-2002	
New Zealand	1980-2002	1980-2002	1980-2002	
Nicaragua	1995-2002	1990-1992, 1996-2002	1984-2002	
Niger	None	None	1993-1995, 2000-2002	
Nigeria	1980-1982	1980-1983, 1999	1980-1982, 1999-2002	
Norway	1980-2002	1980-2002	1980-2002	
Oman	None	None	None	
Pakistan	None	1988-1989	1988-1998	
Panama	1991-1999	1984-1986, 1990-2002	1989-2002	
Papua New Guinea	1980-2002	1980-1992, 1998-2002	1980-2002	
Paraguay	1993-2001	1989-2002	1989-2002	
Peru	1982-1986	1980-1988, 1996, 2001, 2002	1980-1989, 2001, 2002	
Philippines	1987-2001	1985-1992, 1996-2002	1986-2002	
Poland	1989-2002	1989-2002	1989-2002	
Portugal	1980-2002	1980-2002	1980-2002	
Qatar	None	None	None	
Romania	1994-2002	1994-2002	1990-2002	
Rwanda	None	None	None	
Saudi Arabia	None	None	None	
Senegal	None	1989-1992, 2002	2000-2002	
Sierra Leone	None	None	1996, 1998-2002	
Singapore	None	None	None	
Slovakia	1993-2002	1994-1995, 1998-2002	1993-2002	1993
Slovenia	1992-2002	1992-2002	1992-2002	1992
Solomon Islands	1980-2002	1980-1999, 2002	1980-2002	
South Africa	1980-2002	1994-2002	1994-2002	
Spain	1980-2002	1980-2002	1980-2002	
Sri Lanka	1980-2002	1980-1982	1989-2002	
Sudan	None	None	1986-1988	
Suriname	None	1988-1989, 1992-2002	1988-1989, 1991-2002	

Country	Judicial Independence	Civil Liberties	Elections	Entered data (if not 1980)
Swaziland	None	None	None	
Sweden	1980-2002	1980-2002	1980-2002	
Switzerland	1980-2002	1980-2002	1980-2002	
Syria	None	None	None	
Tanzania	None	2002	None	
Thailand	1989-2002	1986-1990, 1996-2002	1980-1990, 1991-2002	
Togo	None	None	None	
Trinidad	1980-2002	1980-2002	1980-2002	
Tunisia	None	1989	None	
Turkey	1980-2002	1989	1983-2002	
Turkmenistan	None	None	None	1992
Uganda	None	None	1980-1984	
Ukraine	1991-1992	1991-1992	1991-2002	1991
UAE	1986-1999	None	None	
United Kingdom	1980-2002	1980-2002	1980-2002	
United States	1980-2002	1980-2002	1980-2002	
Uruguay	1983-2002	1985-2002	1985-2002	
USSR/Russia	None	1991	None	
Uzbekistan	None	None	None	1992
Venezuela	1980-1994	1980-1998	1980-2002	
Vietnam	None	None	None	
Yemen	None	None	None	
Zambia	1992-2002	1991-1992	None	
Zimbabwe	1980-1983, 1992-1995	None	None	