What Difference do Human Rights Treaties Make? The Convention on the Rights of the Child and Basic Immunization Varun Gauri, The World Bank

November 17, 2007

When states sign human treaties, do the lives of their citizens improve? The question is important for both practical and theoretical reasons. To begin with, it is an increasingly important policy issue in the field of aid effectiveness. A large number of studies have questioned the effectiveness of development assistance for reasons related to the fungibility of aid money in the public expenditures of developing countries (e.g., van de Walle and Cratty 2005, Feyzioglu et al 1998), the problem of multiple principals and conflicting donor objectives (e.g., Dreher, Nunnenkamp, and Thiele 2006; McGillivray 2003; Knack 2004), and misguided policies, low quality governance, and corruption in recipient countries (e.g., Burnside and Dollar 2000). A recent paper reviews the literature and, using the political motivation for aid as an instrument in an aid-growth analysis, concludes that there is "little robust evidence of a positive (or negative) relationship between aid inflows into a country and its economic growth." (Rajan and Subramanian 2007).

As a result of these problems, a number of analysts are suggesting new modalities for development assistance. One approach advocates development-related spending outside of developing countries, such as spending on global public goods (e.g., new vaccines or research to enhance agricultural productivity) or human resources devoted to development but based in rich countries, as a means to avoid problems related to governance and Dutch Disease, which accompanies aid inflows and limits the effectiveness of development assistance (e.g., Bhagwati 2005). Another approach advocates changing global rules of interaction in a manner so as to assist developing countries. These could include new rules regarding trade, carbon emissions, "odious" debt, extractive industries, banking secrecy, technological standardization, budget transparency, property, and military intervention. Collier notes that the "generation of international norms" would benefit the poorest people in the world, and are relatively cheap when compared to traditional development assistance (Collier 2007).

But do explicit attempts to generate new international norms succeed? There is as yet little evidence on the impact of mechanisms such as the Extractive Industries Transparency Initiative, the Kimberly Process for diamonds, or newly available public data on carbon emissions among power plants. One place to look for evidence of the impact of new global norms on development outcomes is the effect of international human rights treaties, particularly those relating to economic and social rights.

The theoretical motivation for this paper involves two related issues in the study of the behavior of states. First, why do states bind their own hands by agreeing to international human rights commitments? The pursuit of reciprocal benefits, which is the usual incentive ascribed to state participation in an international regime, does not fit well with human rights treaties because states gain no material benefit from human rights compliance on the part of other parties. The literature has developed models for the ratification of human rights based on coincidence of state interests (the realist picture), reputational costs or the threat of sanctions (associated with institutionalism), pressure from domestic interest groups (the liberal narrative), or the socialization and ideological conversion of public officials (in strands of constructivism). Second, why do states comply with international human rights regimes, if they do? The literature has developed accounts that emphasize the importance of democratic openness for generating compliance (Hathaway 2002), the mobilization of domestic and international NGOs (Keck and Sikkink 1998, Hafner-Burton Tsutui 2005), and socialization (Goodman and Jinks, forthcoming).

This paper, which addresses the impact of the 1989 Convention on the Rights of the Child (CRC), speaks to this broader debate on state motivation for ratifying and complying with international human rights instruments. It advances on existing analyses of the impact of human rights treaties in two significant ways. First, it utilizes immunization coverage rates as the dependent variable. Immunization coverage is one of the most widely and reliably measured indicators of international well-being now available . As a result, this paper uses a far more precise outcome indicator than other papers, which have typically studied reported killings or incidents of torture, repression of civil and political liberties, and restrictions on speech. Because of the relatively good quality of the immunization data, the paper arguably offers a stronger test of the direct impact of human rights treaties. Second, the paper studies a key indicator related to the rights to survival and health, whereas the majority of existing analyses focus primarily on civil and political rights.

The next section below very briefly reviews the literature on the impact of complying with international human rights treaties. After that the succeeding sections address the ratification of the CRC; the factors that affect immunization coverage, which is the key dependent variable in this analysis; the data and methods used; and key findings.

Existing Literature

The large majority of analyses of the impact of international human rights treaties find little or no effect on outcomes. Hathaway, for instance, found that ratification had little or no effect on ratings for genocide, torture, fair trial, civil liberty, or women's political participation (Hathaway 2002). Hafner-Burton and Tsutui (2004 ?) find that treaty ratification does not reduce rates of torture or repression, particularly in the worst offenders. Neumayer (2005) similarly finds that "rarely does treaty ratification human rights." For a review and assessment of existing studies, see Simmons (forthcoming).

Most of the empirical analyses studies focus on civil and political rights, with a couple of exceptions. For instance, von Stein (2005) finds that ratification of the Minimum Age Convention does not affect rates of child labor, though Simmons (forthcoming) finds that ratification of the CRC, and its optional protocol on the participation of child in armed conflict, do seem to be related to lower rates of child labor and a higher age of military service, respectively.

All of the studies of treaty ratification have struggled with problems of selection bias (von Stein 2005). Put simply, countries that are already compliant with, or intend to comply with, a treaty's requirements might be more likely to sign the it; in other words, treaties function as a vehicle for expressing preferences that states already have – treaties are window dressing. Or, at the other end of the spectrum, states that have no intention of complying with human rights treaties might sign them just to get international pressure groups, including other states, off their backs – treaties as fig leafs. It is exceedingly difficult to disentangle these selection effects in an econometric analysis. Some existing studies have used democracy as an interaction term in analyses on the premise that democracies are less likely to ratify treaties than non-democracies because once signed, the treaties have more meaning and impact in democratic settings, where there exist political space for domestic pressure groups use and mobilize around international human rights treaties. Democracy is obviously correlated with the outcomes of interest, however, and would not satisfy exclusion restrictions as an instrumental variable. Perhaps a more promising approach would be to utilize the existence of common law courts, and federalism, which both raise the costs of treaty compliance and are not as obviously correlated with many development outcomes (Simmons, forthcoming).

The Convention on the Rights of the Child

The CRC originated in a proposal of the Polish government to the UN Commission on Human Rights in 1978. Although the US, Swedish, Canadian, and UK representatives to the Commission questioned the need for the convention, Eastern European representatives prevailed on the commission to at least study the issue. Many of the skeptics, including many of the NGOs consulted were, expressed concern about the consistency of the proposed convention with existing international human rights instruments and about the timing of the proposal. An open working group, which included the participation of member states and NGOs, was established in 1979. It met regularly until its work was completed exactly ten years later. Western and Eastern European states were most involved in the working group, with much lower rates of participation on the part of African, Asian, and Latin America states. The convention was adopted by the UN General Assembly on November 20, 1989. Ratification was rapid: by September 1990, some twenty states had ratified the convention; by December 1992, 127 countries had ratified it, and 27 others had signed it, making it one of the most quickly adopted instruments in the "international bill of rights." (LeBlanc 1995)

The CRC contains provisions obligating state parties to "respect and ensure" children's rights relating to, among other goods, life, identity and nationality, family of belonging, privacy, freedom of expression and thought, education, health, social security, standard of living, protection from torture and from sexual and commercial exploitation, and due process an legal assistance. In a parallel fashion with other human rights conventions, the CRC established a Committee to oversee implementation on the part of signatories and to encourage international cooperation. An amendment to the CRC raised the membership of the committee from ten to eighteen people. Optional protocols on the involvement of children in armed conflict and on the abolition of the death penalty were adopted in May 25, 2000.

For the purposes of the present analysis, it is important to point out that the provisions on the right to the "highest attainable standard of health" (Article 24) include an emphasis on primary health care and the encouragement of a "basic knowledge of child health." Article 6, moreover, establishes an obligation on the part of State Parties to "ensure to the maximum extent possible" child survival. The terms "child survival," "primary health care," and "basic knowledge of child health" had, by the time of the adoption of the treaty in 1989, become closely associated with UNICEF's efforts to reduce infant and child mortality. Throughout the 1980s, UNICEF had been supporting the efforts of countries to encourage breastfeeding, widen access to ante- and post-natal care, conduct growth monitoring, use oral rehydration to reduce morbidity and mortality associated with childhood diarrhea, encourage child spacing, and make the basic six vaccines for childhood diseases (diphtheria, pertussis, tetanus, measles, polio, and tuberculosis) more widely available, in conjunction with WHO's Expanded Program on Immunization (EPI). UNICEF's Universal Childhood Immunization campaign (UCI) ran from 1985-1990, and was a crucial element of the prevailing approach to child survival. In ratifying the treaty, state parties indicated their commitment to, among other elements, the prevailing and widely accepted approach to child health.

Determinants of Immunization Coverage

Most studies use household surveys and explain variance in childhood immunization "uptake" or "demand" with characteristics of children's mothers and their households, often but not always including community-level fixed effects. These studies invariably find maternal education and household socioeconomic to be correlated with the probability of childhood immunization, but there are disparate findings concerning the extent to which these are causally related to immunization status, and whether measurable maternal and household characteristics might be proxies for other underlying factors or for characteristics of the communities of residence.

For instance, Desai and Alva (1998) use the first round of data from the Demographic and Health Surveys (DHS) in twenty-two countries and find that whereas the inclusion of individual-level and community-level fixed effects significantly weakens the relationship between maternal education and childhood health, the link between maternal education and child immunization remains strong. In a survey in two villages near Yogyakarta, Indonesia, Streatfield, Singarimbum, and Diamond (1990) also find that immunization status is related to maternal education. In another study, Gage, Sommerfelt, and Piani (1997) find that higher household socioeconomic levels and more maternal education both increase the likelihood of childhood immunization in Nigeria and Niger, and that household structure (living in a nuclear or elementary polygynous family, as opposed to a laterally extended family) negatively affects immunization probabilities in Nigeria but not in Niger. In a study of family choices for maternal and child health in Guatemala, Pebley, Goldman, and Rodriguez (1996) find that both mother's and father's education are significantly and positively related to childhood immunization status, as is living in urban areas, but that unobserved family and community characteristics are even more influential. They hypothesize that family health beliefs, differing abilities among families to take advantage of available resources, and variance in the intensity of immunization campaigns in different areas might explain these intra-class correlations. In a study of immunization uptake in four rural areas of Bangladesh, Steele, Diamond, and Amin (1996) find that the effect of mother's education on child immunization status disappears once father's education is included, and that the latter becomes insignificant when village-level dummy variables are added. They find a large amount of unexplained variation at both the household- and village-levels, which they speculate might be related to immunization accessibility, the attitudes of local leaders, differences in household attitudes and beliefs, and power relationships within the household. Their study offers evidence for the power relationship interpretation since children who lived with their mothers and paternal grandparents were significantly less likely to be immunized, and children whose mothers belonged to women's social groups were significantly more likely to be immunized.

Supply-side factors that affect immunization coverage, such as the quality of vaccines, incentives for the cadre of workers who perform vaccination, and the organization of national immunization agencies, have received little attention in the literature. One study in Gujarat state in India argues that the agents who perform vaccines for the Indian public sector, the so-called "multi-purpose workers" who live in and work from their home villages, were excessively focused on numerical targets, so much so that they did not explain the purposes, benefits, and potential side effects of vaccines to patients, nor did they convey potentially useful information up to their superiors regarding the obstacles to immunization, such as geographic challenges, caste and gender discrimination, and the influence of mothers-in-law. (Streefland 1995) Several accounts of immunization policy use the concepts of "political will" or "political commitment" to explain the success of moves to improve coverage (UNICEF 1996 pp. 65-66, Madrid 1998a, Widdus 1999, Justice 2000b and 2000c), conduct polio eradication activities (Hull and Aylward 2001), or introduce new vaccines (Madrid 1998b, Huang and Lin 2000, Miller and Flanders 2000,

Wenger 2001). Put simply, the implication is that if political leaders were to make immunization a priority, coverage rates (as well as polio eradication and the introduction of new vaccines) would improve as a result. However, as several writers have pointed out, the terms "political will" and "political commitment" are "catch-all culprits" without much analytic content (Grindle and Thomas 1991, Reich 1994). As one commentator put it, "political will [does] not arrive de novo, so it is necessary to understand the elements that contribute to recognition of need, and willingness (or capacity) to pay [for new vaccines]" (Widdus 1999a). Some of these case studies have also pointed to the negative effects of decentralization on immunization rates. (Justice 2000, Madrid 1998; Khaleghian 2005 ?) In theory, decentralization might make coordination among local health secretariats more difficult, and it might create a free rider effect in which the incentives for one jurisdiction to immunize its population are negatively related to the strength of the immunization effort in neighboring jurisdictions. But it might also, under certain conditions, improve service delivery by making governments more accountable to and responsive to needs of local populations.

Studies that examine the determinants of vaccine adoption have focused primarily on the informational pre-requisites for government decision making (Mahoney and Maynard 1999, Hausdorff 1996, General Accounting Office of the United States 1999, Levine and Levine 1997, Miller and Flanders 2000. All of these studies, while pointing to the importance of informational pre-requisites for decision makers, leave unexamined the question of what motivated decision makers to conduct epidemiological analyses to begin with, the question of, in other words, political and organizational determinants. Where they are consistent with the present analysis is the finding that the role of bureaucratic elites has been important in shaping immunization policies over the past two decades.

For the present study, the most important takeaway finding from the immunization uptake literature is that both supply- and demand-side factors are important. In the short-run, a bureaucratically and politically motivated push can increase coverage rates, but over the longer term this push will only be sustainable if the program is embedded in the health care civil service, which itself will depend on political calculations and demand from voters and households. At the same time, low levels of modernization, income, and literacy will raise the cost of any given political push, and set an upper bound on the likely effect of any new government-led initiatives. The direct effects (if any) of ratifying the CRC on immunization rates in a country, then, were likely to have been short-term; the deeper determinants, such as modernization, education, and income, would likely have washed out ratification effects after a short period of time.

Data and Methods

Data on immunization coverage were obtained from WHO and UNICEF. These measure the proportion of children who have received the DTP3 and measles vaccine at one year of age and are obtained from either service delivery records or, where available, from cluster surveys carried out under the auspices of the WHO's Expanded Programme on Immunization. Although several studies have voiced concern over the disparity between coverage rates reported from service delivery records and "actual" coverage rates measured by sample surveys (Boerma et al. 1990, UNICEF 1996, WHO 1999), a comparison with household-level DHS data from 82 countries shows that, in general, using reported rates as a dependent variable is reasonable, and does not exhibit any significant evidence for systematic bias. Correlations between measles and DTP3 rates at the national level are quite high. Immunization coverage rates are analyzed from the period 1980-1997.

Data on the dates of ratification were taken directly from the United Nations Treaty Collection (on-line). Other control variables were extracted form the World Bank's Development Data Platform (GDP, aid as a share of GDP, illiteracy), the Polity IV database (democracy), the International Country Risk Guide (institutional quality), and from sources in PAHO and UNICEF (membership in vaccine funds).

Findings

Table 1 below presents the results of probit estimates of the likelihood of ratifying the CRC. It turns out that the ratification rate of other countries in the region is positively and significantly related to the likelihood that a given country will ratify. Common law heritage is also associated with the probability of ratifying, but negatively. Simmons (forthcoming) explores the reasons for these factors: the choices of neighboring countries affects a country's own decision to ratify or not either through (1) a socialization process or (2) by creating pressures not to appear out-of-step and suffer consequent reputational costs. Countries with common law heritage tend to have stronger, more independent courts, which make them less likely to ratify a human rights treaty - if the judiciary is relatively independent, there is a greater chance that some court in the future will hold the executive accountable for the obligations incurred upon signing the treaty. In the table, a probit specification is used rather than a survival analysis, based on either a Cox proportionate hazard or a Weibull model that assumes an increasing probability of ratification over time, because the ratification rate of other countries in the region is used to structure the time trend, rather than the proportionate or increasing risk over time assumed in survival analysis. Neumayer (2004) discussed the relative advantages and disadvantages of a probit or a survival analysis in this context. Von Stein (2005) notes that if a dummy variable equal to one for all years subsequent to the year of ratification is used on the right-hand side in the estimation, the standard errors on the coefficient estimates for the independent variables are based only on information from years prior to ratification and the year of ratification, with the result that the two approaches are largely equivalent. That is the method employed in this paper.

Table 2 uses the findings from the determinants of ratification to control for selection effects in the estimation of the impact of ratifying the CRC on immunization rates. There are a number of interesting findings in Table 2 related to the determinants of immunization coverage. The key variable of interest for the present analysis, however, relates to the CRC. Years since ratification is positively and significantly related to DTP3 coverage rates in the first estimation. Having ratified the CRC remains positive in the IV estimation, though the estimate is far less precise. In the measles estimation, treaty ratification does not appear positively related to the ratification of the CRC. A somewhat curious finding is the positive and significant coefficient on illiteracy in the measles estimation – almost all household level studies find a strong negative relationship between parents' (particularly maternal) illiteracy and childhood immunization rates. Collinearity with the GDP per capita variable could be the cause.

The key findings of this analysis are robust to changes in both the specification of the models (the use of a survival analysis with common law heritage, estimations without country and year fixed effects) and in the variables used (the substitution of Kaufmann and Kraay indicators of voice and institutional quality for the Polity IV and ICRG measures, substituting years since ratification for ratification status in the IV estimations in Table 2).

Did the CRC make a difference for childhood immunization?

The results of this study are decidedly mixed. While there is some, limited evidence that DTP3 immunization rates increased with the number of years post-ratification, those findings may be the result of selection effects: countries that ratified the treaty were more likely to have become relatively strong on immunization in the first place. The finding, moreover, does not seem to hold for measles. So it does not appear that the ratification of the CRC had any independent, country-level effect on immunization outcomes.

One reason for this becomes clear by examining Figures 1 and 2. Both measles and DTP coverage rates were increasing sharply in the 1980s, but then started to level off right around the time of CRC approval by the UN General Assembly in 1989, and around the time when states started to ratify the treaty shortly thereafter. Measles coverage rates for low-income countries actually dipped just after the cascade of CRC ratification in the 1991 and 1992.

It appears, then, that the long period of preparation of the CRC, 1979-1989, rather than CRC ratification itself, appears to have been more strongly correlated with increases in immunization coverage. This is probably not a coincidence. The UCI period in the mid to late

1980s launched a widely supported immunization initiative that the UNICEF hoped that the CRC would endorse and extend, not initiate. In other words, there were broad currents in the national, transnational, and international spheres that had jointly been pushing immunization, the CRC, and the rights and wellbeing of children more generally.

If that is true, it suggests that research aiming to identify the impact of human rights treaties needs to be reoriented. This paper, like most in the field, fails to find any direct effect of ratifying of human rights treaty on country-level outcomes. But it may have been the case that the goal of achieving the treaty made mobilization easier for the entire current of work around childhood rights that occurred in the 1980s. Human rights treaties, then, are misunderstood if considered on the model of imposing new obligations on states. They are mobilization devices. When and if there appears an international legal instrument setting standards for extractive industries, its ratification may prove to have little impact on state and corporate behavior; but that does not mean that the present movement for such a treaty will have accomplished nothing. The fact that variation in ratification does not appear to be correlated with variation in outcomes no more means that human rights treaties are meaningless than does the lack of correlation between an "I love you" and the emergence of marital discord suggest that "I love yous" are all meaningless. The focus needs to shift from the search for an efficient causes to the analysis of teleological causes, which suggests the need for a new mode of social science research on the effects of human rights treaties.

Table 1. Probability of ratifying the CRC

	All states	Low- and middle-income states	
	(Random effects probit)	(Random effects probit)	
Ratification rate in region	4.66***	4.13**	
	(1.32)	(1.39)	
Common law heritage	-0.96**	-0.86**	
	(0.37)	(0.39)	
Democracy score (Polity IV)	0.08	0.07	
	(0.05)	(0.05)	
Log GDP per capita	-0.20	-0.16	
	(0.21)	(0.26)	
Illiteracy rate	0.00	0.00	
	(0.01)	(0.01)	
Aid as share of GDP	0.00	0.00	
	(0.01)	(0.01)	
Membership in UNICEF	-0.73	-0.99	
vaccine fund	(3888.65)	(1248.43)	
Membership in PAHO vaccine	-0.39	-0.18	
fund	(0.58)	(0.60)	
Institutional quality (ICRG	0.03	0.01	
ratings)	(0.05)	(0.04)	
State failure	0.39	0.33	
	(0.32)	(0.34)	
No. observations	1128	1018	
Probability Chi2	0.000	0.000	

Estimations include a dummy variable equal to one in all years subsequent to the year of ratification, fixed year effects, and random country effects.

Table 2. Determinants of immunization rates (DTP3 and Measles)

	DTP3	DTP3	Measles	Measles
	(OLS)	(IV)	(OLS)	(IV)
CRC ratification status		5.12		-3.10
		(4.29)		(4.80)
Years since CRC ratified	1.41**		-0.30	
	(0.49)		(0.55)	
Democracy score (Polity IV)	7.70***	7.62***	8.32***	8.35***
	1.12	(1.14)	(1.25)	(1.28)
Log GDP per capita	8.53**	7.12**	8.67***	7.21*
	(3.25)	(3.29)	(3.78)	(3.80)
Democracy x Log GDP per capita	-1.13***	-1.13***	-1.22***	-1.22***
	(0.16)	(0.17)	(0.18)	(0.18)
Illiteracy rate	0.02	0.14	0.78**	0.76**
	(0.23)	(0.23)	(0.26)	(0.26)
Aid as share of GDP	0.03	-0.04	-0.14*	-0.14*
	(0.06)	(0.06)	(0.07)	(0.07)
Membership in UNICEF vaccine fund	9.09***	9.36**	11.22**	11.16***
_	(2.92)	(2.95)	(6.24)	(3.32)
Membership in PAHO vaccine fund	10.53*	10.67*	13.71*	13.33**
	(5.64)	(5.70)	(6.22)	(6.25)
Institutional quality (ICRG ratings)	0.93***	0.94***	1.11***	1.15***
	(0.18)	(0.19)	(0.21)	(0.22)
State failure	-3.96**	-3.86**	-1.09	-0.61
	(1.49)	(1.52)	(1.67)	(1.70)
No. observations	1058	1050	1032	1022
Probability Chi2	0.000	0.000	0.000	0.000

The OLS and IV estimations include country *and* year fixed effects. In the IV estimations, CRC ratification status is instrumented by the regional ratification rate and common law heritage.



Figure 1: DTP3 Coverage Rates by Income Level, 1980 to 1997



