Abortion Liberalization Policies Around the World:
Hidden Differences in the Diffusion Process

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Abstract

World Polity theorists suggest that diffusion occurs because institutional frameworks become
taken-for-granted at the global level, and thus policies diffuse regardless of domestic contexts.
Using an event history analysis of national abortion liberalization policies from 1960 to 2009,
we hypothesize that policy diffusion is conditional on national institutional arrangements.
Specifically, we hypothesize that the presence of a strong women’s movement will be associated
with abortion liberalization for women who are raped, that strong states with a collectivist
orientation will be associated with abortion liberalization for fetal impairment, and that
medicalization will be associated with abortion liberalization to protect the mental health of the
mother. The first two of these hypotheses are supported.

Attention to women's rights at the global level has prompted numerous reforms around
the world. The 1970s "Decade of the Woman" culminated with the international Convention for
the Elimination of all forms of Discrimination Against Women (CEDAW). Legal and cultural shifts associated with CEDAW and related mobilization increased women's political representation (Paxton et al. 2006), enhanced women's human capital and employment opportunities (Berkovitch 1999), and reduced gender-discriminatory practices (Wotipka and Ramirez 2008). Some countries have embraced access to abortion as part of the expanded package of rights available to women, some have embraced access to abortion for very different reasons, and many others have resisted abortion liberalization altogether.

The controversy over abortion makes it an important case for extending World Polity Theory, which emphasizes the social construction of the nation, not as a unique edifice carefully crafted by local citizens and interest groups, but rather as a global actor embedded in an institutionalized system of rules, roles, capacities and inter-relationships. World Polity Theory addresses why certain ideas and related policies (such as women's rights) spread rapidly across countries despite vast cultural and resource differences (Dobbin and Simmons, and Garrett 2007). It highlights universalistic, rationalized, and global trends over particularistic, fragmented, and local ones (Frank et al. 2010).¹

However, World Polity theorists know that there is no single, unified global script. Rather, multiple universalized scripts exist simultaneously. For example, rationalization is one script that countries tend to adopt; individualization is another. Even among countries that are embedded in the global system, there will be variation in the extent to which they embrace the range of possible scripts. Likewise, there are institutionalized ideas and practices at the national level that may lead countries to resist some global institutional principles more than others. Our argument is that different types of global links and national institutional contexts will affect

¹ Drawing on Berger and Luckmann (1967), the theory suggests that needs and interests are socially constructed (Jepperson and Meyer 2011). Consequently, World Polity Theory represents a departure from functional models of
policy diffusion. Abortion is an interesting case to examine these ideas because it involves distinct policy “subsets,” as we explain below.

In this paper, we begin with some historical background on abortion as a global and national issue. We then develop our specific hypotheses and describe our methodological approach. Finally we summarize our results and make some concluding observations.

**Background**

Many current controversies and concepts surrounding abortion have ancient corollaries. For example, in early Greece, the Stoics did not believe that a fetus became a human life until birth; the Pythagoreans thought life began at conception (Cabot 1980). Gratian and Aquinas took more moderate views, developing the concepts of ensoulment and quickening, respectively, to identify the moment when a fetus became a person. Plato and Aristotle both thought that abortion should be required in some circumstances to insure the genetic quality of societal members (Cabot 1980). Disagreement over the use of abortion has ancient roots.

In terms of policy, history is characterized by periods with and without regulation. At times, the male head of household had the sole prerogative to determine whether an abortion was warranted for a woman in his household (Cabot 1980). Less frequently, the state tried to get involved. In ancient Rome, the state made abortion illegal to insure stable numbers of elites, whose population was decreasing (Cabot 1980). In early China, policies were directed, not at pregnant women, but at men attempting to induce abortions by beating women (Rigdon).²; State attempts to regulate abortion have thus occurred somewhat sporadically throughout history.

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² In distinction to contemporary regulation, since women often died as a result of the drugs or violence applied to end a pregnancy in the pre-modern era, regulations were likely designed to protect the life and health of the pregnant woman as much as to protect the fetus.
While the controversies surrounding abortion may be as old as human pregnancy itself, contemporary constructions of abortion are linked in important ways to modern conceptions of states and gender.

In the United States in the late 1800s, an emerging medical profession urged states to pass laws prohibiting abortion except to protect the life and physical health of the mother (Luker). Similar laws were also passed in Europe (cites). The prohibition on abortion was carried around the world by colonial authorities. For example, China changed its abortion policy to ban all abortions in the early 20th Century to be more in conformity with Great Britain’s law (Rigdon).

Early laws in the modern period left the determination of whether an abortion was warranted to doctors, who thus had immense discretion to interpret the statutory language. In the 1950s, a number of critical changes occurred in Europe and the United States. Improvements in medicine reduced the number of life-threatening justifications for abortion. Abortions to actually save lives became a medical rarity. Increasingly, medical procedures of all types occurred in hospitals rather than homes; physicians stopped making house calls. Therapeutic abortion panels attempted to bureaucratize the criteria for determining whether abortion was warranted, but these came to be seen as unworkable and unfair.

Luker (1984:62) writes: “…when abortion began to lose its status as a technical medical issue because of changes in the nature of medical practice, the institutional position of the Catholic church encouraged consideration of it as a moral issue.” The Catholic position has been consistent: people should not interfere with the natural functions of the body. Terminating a pregnancy was wrong because it interfered with nature. The Church had minimal impact on the state laws passed in the late 1800s, but it became very influential in the mid-20th Century.
Things were evolving somewhat differently among the countries in the Soviet bloc. In the USSR, abortion became a dominant form of birth control and was thus used widely. In China, the communist government liberalized abortion laws in the late 1950s over the objection of both doctors and domestic women's groups (Rigdon 1996). The apparent reason was improving public health by allowing abortions to be performed in medical clinics. In the 1970s, the Chinese state began to use abortion as one of several tools for limiting population growth (Ridgon 1996). Meanwhile, Western feminists were mobilizing around access to abortion as an important step toward women’s equality. Thus, a mix of discourses supported the legalization of abortion: women's rights, public health, eugenics, and population control. At the same time, both the Roman Catholic Church and two U.S. Presidents (Ronald Reagan and George W. Bush) took strong stands against abortion. Unlike many other global reforms, opposition to the liberalization of abortion laws had powerful and resource-rich advocates.

World Polity Theory explains gender issues as part of global expansion of human rights. As the global human rights regime has gained influence, it has begun to include women’s rights as part of its domain of concerns (see e.g., Berkovitch 1999; True and Mintrom 2001; Paxton et al. 2006). The international women’s movement grew substantially over-time (D’Itrì 1999; Rupp and Taylor 1999). More importantly, the women’s rights movement cooperated with IGOs promoting a discourse of gender inclusion, insuring that norms about women’s rights, equality, and participation in wage economy diffused across countries.

From the beginning, the major components of women’s rights discourse have been the claim that women are entitled to equal rights as men. Initiatives promoted labor policies aimed at standardizing individuals (in terms of making them comparable), replacing gender-differentiated ones. By emphasizing women’s equality with men, more and more areas of social and economic
life were targeted as possible sources of discrimination to be eliminated by introducing “sameness” (Berkovitch 1999). In fact, the global women’s rights regime and its linkages to countries have been shown to be associated with more gender-equitable outcomes across very differently situated countries in political (Ramirez et al. 1997; Paxton et al. 2006), social (Wotipka and Ramirez 2008), and economic (Kim working paper) areas. However, abortion rights do not fit neatly into a framework emphasizing men's and women's similarities. They are not derivative of rights originally extended to men (Ramirez and McEneaney 1997).

**Hypotheses**

While a number of studies explore cross-national differences in abortion policy liberalization, different grounds for abortion have been understood merely as steps toward further liberalization (e.g. from mental health to socio-economic reasons or from one allowance to six allowances) (Asal et al. 2008; Pillai and Wang. 1999; Ramirez and McEneaney 1997). In contrast, in this analysis we examine the heterogeneity across grounds for abortion. We focus in particular on exceptions that allow abortions in the case of rape, fetal impairment, and to protect the mental health of the pregnant woman. Although abortion has been understood in terms of women’s reproductive rights, exceptions allowing abortion vary in terms of their alignment with protecting women’s individual rights as opposed to collective entities, such as families or society.

The rape exception aligns closely with protecting individual women. The rape exception is based on a logic that a woman who is the victim of a crime and did not voluntarily engage in the sexual intercourse that resulted in a pregnancy, cannot be held responsible for that pregnancy. The mental health exception is also based on protecting individual woman’s rights because it privileges a woman’s health issues over the fetus. However, the mental health exception also reflects more collective issues as it can function to minimize mentally unfit mothers in society.
The fetal impairment exception, on the other hand, aligns less with individual women’s freedom and more on serving society as a whole, for example to protect public health or control population (Frank et al. 2010).

We think that each of these exceptions links into somewhat different institutional framework at the global or national level.

<table>
<thead>
<tr>
<th>Exceptions</th>
<th>Hypotheses</th>
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<tbody>
<tr>
<td>In the case of rape</td>
<td>Greater embeddedness in global women’s rights network will increase probability of rape exception</td>
</tr>
<tr>
<td>To protect the mental health of the pregnant woman</td>
<td>Greater embeddedness in global health networks will increase probability of mental health exception</td>
</tr>
<tr>
<td>In the case of known or suspected fetal impairment</td>
<td>Strong states with collectivist orientations will be more likely to adopt exceptions for fetal impairment</td>
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[The hypotheses below need to be brought into conformity with the table above.]

The contestation over abortion may influence the way abortion liberalization policies diffuse. One possible consequence is a diminution of global discourses relative to local ones. Here "local" is something of a misnomer because much current local cultural variation is a result of historic globalization processes (such as the spread of empires and/or colonization). The point is that country characteristics may be particularly salient in whether countries adopt abortion liberalization policies. One important distinction is the religious orientation of a country (see, e.g., Cook and Dickens 2003), if any:
Hypothesis 1: Relative to predominantly Protestant countries, predominantly Catholic or Muslim countries will be less likely to adopt laws that allow abortions in certain circumstances.

Historic regime differences may also be important. We have noted that China approaches abortion differently than Western countries. Formerly communist countries may share China's orientation. We know that countries of the former USSR have been heavily influenced by the USSR laws in most areas; this is likely to be true of abortion laws as well. Thus, we hypothesize:

Hypothesis 2. Countries from the former Soviet bloc will be more likely than other countries to adopt exceptions allowing abortion.

We expect these effects to persist even in the face of differences in countries' embeddedness in the global system.

The area of women's rights also has a local element. Women’s empowerment locally, particularly political empowerment, may be an important factor in liberalizing abortion policies. This is due to unique characteristics of abortion rights. Unlike many other human rights, which tend to be an expansion of rights granted to white-male-adults to people of color, female, and children, abortion rights only apply to women (Ramirez and McEneaney 1997; Asal et al. 2008). Thus, women’s status, particularly women’s presence in the law-making body, within countries is likely to be critical.

Hypothesis 3A: The greater the percentage of parliamentarians who are women, the greater the likelihood that the country will adopt exceptions allowing abortion.

In their cross-sectional analysis of 112 countries, Asal et al. (2008) find that women’s political empowerment has a large positive effect on legal abortion. On the contrary, Pallai and Wang
(1999) find no such relationship based on their descriptive analysis of developing countries. Our over-time analysis will help reconcile these conflicting findings.

Women’s political empowerment may not affect all aspects of abortion liberalization equally. Specifically, it may privilege support for women over support for more collective issues, like public health or population control (Frank et al. 2010). Thus, we expect:

*Hypothesis 3B: The positive association between the percentage of parliamentarians who are women and the likelihood of exceptions allowing abortions will be greater for exceptions to abortion that relate to the pregnant woman (to protect her health, if she is raped, etc.) than for exceptions that support public health or population control (e.g., if fetal impairment).*

Turning to global measures, as much as women’s political representation within countries is important, one must also take into account its ties to global mobilization. Turning to measures of global embeddedness, we first consider some traditional measures of global civil society in World Polity Theory discussions. First, we expect that a country’s embeddedness in the global women’s rights movement will result in pressure on that country to adopt exceptions to abortion criminalization.

*Hypothesis 4: The greater the links to women’s international nongovernmental organizations (WINGOs), the greater the likelihood that the country will adopt exceptions allowing abortion.*

In addition to links to women's organizations, the ratification of CEDAW may also reflect global embeddedness in the women's rights regime. We thus hypothesize:

*Hypothesis 5. Countries that have ratified CEDAW will be more likely to pass exceptions allowing abortion.*
As for women's empowerment at the local level, women's rights discourse at the global level may provide different levels of support for different types of laws that liberalize abortion. In general, laws that highlight individual health and autonomy receive greater support globally than laws that support families or nations (Frank et al. 2010). Hypothesis 6 thus mirrors Hypothesis 3B:

Hypothesis 5: The positive impact of WINGOs and CEDAW ratification will be greater for exceptions to abortion that relate to the pregnant woman than for exceptions that relate to public health or population.

Some might argue that abortion policies are liberalized for functional reasons. Although we do not expect these hypotheses to be supported, we believe it is important to test them. One idea is that countries with greater levels of population density will be forced to liberalize their abortion policies:

Hypothesis 6. The greater the population density of a country, the greater the likelihood it will have exceptions allowing abortion.

Another idea is that particular types of violence against women propagated during war will prompt abortion liberalization:

Hypothesis 6. Countries that are in the midst of an international war have a higher likelihood than other countries of allowing abortions in the case of rape.

We now turn to a test of these hypotheses.

Methods

Our analysis focuses on laws on the books rather than compliance or evasion of the law. While the latter is critically important, the former has significance as well. Formal law is a
symbol of cultural values; observing change and stability in formal laws provides insight into the process of reform and resistance (see Boyle and Meyer 1998; Durkheim [1893] 1997; Gusfield 1986). In addition, even when the law is not strongly enforced, the threat of enforcement is nevertheless a form of social control, and the law continues to shape debate and provide important cultural capital to some groups and not others (Frank et al. 2009; Posner 1994).

Our analysis is also distinct from previous studies of abortion policies that have tended to focus on particular countries, especially the United States. These case studies provide a rich understanding of group contests within national contexts. However, there are certain questions that case studies cannot answer, such as whether the adoption of abortion policies is linked to particular institutionalized frameworks. To answer this question, we must simultaneously consider the actions of a full range of countries within the global system.

Statistical Analysis

We present three event history models examining the effects of domestic and international variables on countries' adoption of rape, mental health, and fetal impairment exceptions to abortion criminalization policies, respectively. Each analysis runs from 1960 to 2009\(^3\) and focuses on policy adoption rates over time. The unit of analysis is the country, and since far and away most countries adopt an exception only once, we do not treat the adoption of an exception as a repeatable event. In rare instances where an exception was adopted, repealed, and adopted again, we focus on the first adoption event. We use an exponential model with time-

\(^3\) The start and end times of our analyses are constrained by data availability, but cover the period when the vast majority of the mental health, rape, and fetal impairment exceptions were adopted.
varying covariates, consistent with other similar studies (Paxton et al. 2006; Longhofer and Shofer 2010; Frank et al. 2000; Schofer 2003).\footnote{An exponential (or constant rate) model assumes that temporal changes in the hazard rate are a function of changes in the time-varying covariates rather than intrinsically related to time (as assumed, for example, in a Weibull model) or a function of some arbitrary baseline hazard (as assumed in Cox models).}

Cross-sectional models may be biased due to reverse-causal effects between key variables. Event history models focus on rates rather than levels of the dependent variable, and they allow us to exploit the temporal ordering of independent variables and dependent outcomes in a manner that avoids some of the weaknesses of cross-sectional models (see Blossfeld, Golsch, and Rohwer 2007). We use discrete time models because many of our variables, including abortion policy change are recorded yearly.

In our analysis, time is counted as historical time (Beck, Katz, and Tucker 1998), where risk begins at particular historical dates rather than occurring on a country’s internal clock. Countries that have already adopted an exception prior to 1960 are left censored and are excluded from the analysis. The extent of left censoring differs depending on the dependent variable. For example, 13 countries already had the rape exception by 1960 while 7 and 6 countries, respectively, experienced left censoring for mental health and fetal impairment. All other countries enter the analysis in 1960 or in their year of independence. Once it adopts an abortion exception, a country makes an exit from the analysis. Countries that have not yet adopted rape, mental health, and fetal impairment exceptions by 2009 are right censored. The extent of right censoring also varies by the dependent variable. Eighty-three countries still did not have a rape exception while 96 and 86 countries, respectively, remained without a mental health or fetal impairment exception.

\textit{Abortion Policy Measures}
The dependent variables are policy adoption events over time. The policies we consider are allowing abortion to protect the mental health of the pregnant women, in cases of pregnancy resulting from rape, and in cases of fetal impairment. We did not consider exceptions for the life and health of the mother because a very large percentage of these policies were passed prior 1960.

To construct our dependent variables, we began with *Abortion Policies: A Global Review* (UN 2002; 2006), which lists abortion exceptions and provides brief historical summaries of legislation for countries up to 1992. We updated this data using various sources to cover the period between 1992-2009, and we cross-checked the UN’s coding with the text of national laws reported in the *Annual Review of Population Law* and the Report of the International Federation of Professional Abortion and Contraception Associates, *Abortion Law of Each Nation State* (FIAPAC, 2009). For 178 countries that existed during all or part of the period between 1920 and 2009, we coded the year of passage of the following abortion exceptions, among others: 1) to terminate a pregnancy resulted from rape or incest; 2) to preserve the mental health of the pregnant woman; and 3) to terminate a pregnancy in which the fetus is known (or in some countries suspected) to be impaired ("fetal impairment"). Exceptions for rape often include incest in the same provision. Rape allowances sometimes appear without incest allowances, but incest allowances never appear without rape allowances. We therefore treat rape as the primary and common concern across these provisions.

We construct our abortion policy data based on a conservative reading of actual laws. We made a distinction between exceptions and defenses for abortion. The former is a law that says abortion is not illegal in a particular context; the latter is a law that says abortion is illegal but
criminal defendants can offer defenses or justifications in some circumstances. Since defenses do not make abortion legal, we do not include them in our policy count.\(^5\)

For mental health, we consider a country having a mental health exception when the law explicitly mentions the mental health or psychological well-being of the pregnant woman, or official court interpretations specify that mental health is included under the general health considerations. For fetal impairment, a country has a fetal impairment exception when it allows abortion when either or both parents have genetic disorders, when the pregnant woman is older than a stated age, or when there are actual signs of fetal impairment.

**Independent Measures**

*Independence.* Many newly independent countries adopt a full slate of laws, including those related to abortion, at the time of independence. Laws adopted in this way are not part of the global diffusion of particular issues; thus, we include a dummy variable for year of independence (COW 2008).

*Religion and colonial experience.* Because cultural and legal traditions may influence state abortion policies, we focus on two broad forces: religion and colonial history (CIA World Factbook). We measure religion with a series of non-time varying variables indicating dominant religion of the people in a country. We categorize religion into Protestant (reference category), Catholic, Muslim, and other religion. To assess effects of colonial history, we include a series of non-time varying, dummy variables indicating no colonial experience or colonization by other

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5 The distinction between exceptions and defenses tends to arise in the early history of former British colonies. For example, in a legal case in 1938, *Rex v. Bourne*, a British court ruled that a doctor would not be punished for performing an abortion on a girl who had been raped. The doctor testified that bringing the pregnancy to term would have made the girl a "physical and mental wreck" (Lancet 1938). Thus, *Rex v. Bourne* provides a justification or defense for abortion to protect the mental health of the woman if one is brought to court, but it does not make abortion legal in this circumstance. In fact, most countries governed by court cases such as *Rex v. Bourne* eventually adopted statutory language that codified the defense into an exception. We did robustness and sensitivity checks with an alternative coding in which the *Rex vs. Bourne* decision was coded as a rape exception, but it did not result in any significant changes in the overall rape exception trend or in the statistical results.
than British, French, or Former USSR (reference category) and compare it with countries that experienced colonization by British, French, and Former USSR. In addition, because all former USSR countries had the same abortion policies until 1991, which may influence results, we show results excluding these countries as well.

**GDP per capita.** We include GDP per capita to control for country wealth and economic development (World Bank 2010). We log this standard measure to account for skew.

**International violence.** Our measure of international violence is a time-varying, additive scale including two types of major episode of international political violence: warfare to gain independence and international violence involving a state(s) in that year (Marshall 2010). Each type of international violence denotes not only whether major international political violence happened during the year but also the magnitude of the major violence in a 0 (no independence war) to 10 (highest) scale. As an additive scale, our international violence measure ranges from 0 to 20.

**Population density.** We consider population density measured as a country’s midyear population divided by land area in square kilometers (World Bank 2010).

**Percentage of women in parliament.** We include the percentage of women in the parliament as an indicator of national women’s empowerment. Data are updated from Paxton et al. 2008 to include women’s representation in parliament between 2004 and 2009 (Inter Parliamentary Union).

**Women's International Nongovernmental Organizations (WINGOs).** In order to measure world polity linkages, we use citizen ties to international non-governmental organizations (Thomas and Boli 1999). Specifically, we include WINGO linkages measured by the number of individual WINGO memberships held by citizens in a country. This reflects cross-national and
over-time variations in a nation's embeddedness in international women’s rights movements.

Data from Paxton et al. (2006) provide information on country-level memberships for a sample of WINGOs for 196 countries for the following years: 1930, 1952, 1960, 1964, 1971, 1978, 1984, 1988, 1992, 1995, 2000, and 2003. WINGO sample selected reflects the percentage of the full sample of WINGOs that existed during each time period for which membership information was obtained. We interpolate missing values for those years in which membership information is not available between the five-year intervals and extrapolate for the years between 2004 and 2009. We log this measure to account for skew.

**CEDAW ratification.** We include a time-varying dummy variable denoting the year of CEDAW ratification and years after the ratification (coded 1).

**Results**

In 1970, just 10 to 15 percent of countries had laws that permitted abortions to protect the mother's mental health, or for cases of rape or fetal impairment (see Figure 1). That percentage had increased to around 50 percent of countries for each exception by 2009. This is consistent with idea that policies diffuse globally as they are promoted by activists and embraced by international organizations. However, in some ways, the spread of abortion policies is atypical. Specifically, the rates at which countries were adopting abortion exceptions were much faster from 1970 to 1987 than from 1991 to present. (The sudden increase in 1989 is due to the break up of the Soviet Union, which had liberal abortion policies, into many separate countries). This

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6 These authors coded membership data from the *Yearbook of International Organizations* (UIA various years), which reports country memberships annually from 1982.

7 As Paxton et al. (2006)’s sampling strategies were oriented toward to be representative of the growth of WINGOs and country-level memberships in those organizations over time, and country-level membership trends consistently increase over time, interpolating missing values in this type of data is appropriate (see e.g., Meyer et al. 1997; Boli and Thomas 1999; Boyle and Kim 2009).

8 In comparison, by 2009, over 80 percent of countries had an exception to abortion to save the life of the mother.
decreasing rate of adoption suggests that the trend toward abortion liberalization may be slowing rather than turning into a "norm cascade" (Finnemore and Sikkink. 1998). The mental health exception is especially notable; the percentage of countries that allow abortions to protect the mental health of the woman has gone down in recent years. This is due to Fiji legislating a new Crime Code in 2009, which eliminated the mental health consideration for abortion. Whether this is an isolated incident or signals a new trend retracting the mental health exception for abortion remains to be seen.

Although the total number of countries permitting abortion in each of the three situations examined is roughly similar over time, our event history models show some important differences in which countries are adopting each of the exceptions. In particular, variation in the impact of the female empowerment variables across the models is striking. Fundamentally, female empowerment matters more in the case of the rape exception than in the case of the mental health and fetal impairment exceptions, lending partial support to Hypotheses 3B and 5.

Model 1B indicates that each increase in the percentage of female representatives in parliament results in a 4 percent ($\exp(0.040) = 1.04$) increase in the likelihood a country will adopt a rape exception for abortions. In other words, an increase from 10 percent to 20 percent of female representative in parliament is associated with a 40 percent increase in the rate at which a rape exception is legalized. This variable also has a positive, although smaller ($\exp(0.030) = 1.03$), effect on the rate of adoption of a fetal impairment exception for abortions (see Model 3B). The effects on mental health approach statistical significance at $p < .10$, suggesting a similar association for that exception as well (see Model 2B).

When linkages to women's international nongovernmental organizations are included in the models, the impact of female parliamentarians remains statistically significant only in the
case of the rape exception. The impact of WINGOs themselves also varies. Every additional point in our WINGO measure increases the likelihood that a country will approximately 2 times more likely to adopt the rape exception for abortion by \((\exp(0.690) = 1.99)\); see Model 1C).

WINGOs approached a statistically significant positive effect at \(p < .10\) on the presence of fetal impairment exceptions to abortion (Model 3C), but had no significant effect on the adoption of a mental health exception. Somewhat surprisingly, whether a country has ratified CEDAW has no impact on the passage of any of the abortion laws. Overall, measures of women's empowerment are strongly associated with neither the woman's mental health nor the fetal impairment exceptions for abortion. However, two measures of women's empowerment do have an impact on countries' adoption of a rape exception to abortion.

Variation in the impact of religion is also interesting. Relative to countries that are predominantly Protestant (the reference category), countries that are predominantly Catholic are less likely to adopt each of the exceptions. The negative effect of Catholicism, however, is much stronger on the likelihood of adopting a mental health or fetal impairment exception than on adopting a rape exception. Catholic countries are 77 percent less likely to adopt mental health exception to abortion than Protestant countries \((1 - \exp(-1.468) = 0.77)\); see Model 2A) and 71 percent less likely to adopt a fetal impairment exception \((1 - \exp(-1.229) = 0.71)\). The 57 percent reduction \((1 - \exp(-0.837) = 0.57)\) in the likelihood of adopting a rape exception is somewhat modest in comparison. As much Roman Catholic Church condemns “killing of the innocent child,” it also condemns rape (Catechism of the Catholic Church 2356). Perhaps this makes the Catholic view on abortion associated with rape less strong compared to other grounds. For example, in Brazil where the majority of population is Catholic, abortion is illegal except in cases of rape or when the mother’s life is in danger.
Muslim countries, relative to Protestant countries, are least likely to adopt a mental health exception among the three exceptions (see Models 1A, 2A, and 3A). In this way, Islamic and Catholic countries were similar. Muslim countries were significantly less likely than Protestant countries to have a rape exception. The impact of being a Muslim country on the adoption of a fetal impairment exception was smaller and only approaching statistical significance.

The effect of the religion variables when the female empowerment variables are added to the models is also noteworthy. Once women’s empowerment variables are considered Muslim effects tend to disappear for all three exceptions, suggesting that a lower level of women’s empowerment in Muslim countries, in large part, explains differences between Muslim countries and Protestant countries. In the case of Catholicism, women’s empowerment variables wipe out the negative impact of Catholicism on the rape exception but not on the other two exceptions. While female empowerment variables diminish the effects of religion for the rape exception, the impact of being a Catholic country relative to a Protestant country is still negative on the likelihood of policy adoption for mental health and fetal impairment exceptions. This suggests that the negative Catholic effects on the rape exception are significantly countered as women are more empowered domestically or through international linkage. Catholic effects remain robust in the other two exceptions regardless women’s empowerment.

The findings with respect to women's empowerment and religion are consistent with the work of Frank et al. (2010), who propose that laws related to sex have changed over time to put more emphasis on individual rights. It is quite possible that the general trend to expand the definition of, and punishment for, rape extended into the abortion sphere, where women who were pregnant as the result of rape were seen as particularly sympathetic. The fact that female empowerment reduces the impact of Catholicism on policy adoption in the case of a rape
exception to abortion may reflect WINGOs' success in defining rape as a crime against humanity or a war crime. If rape is viewed as a war crime, abortion may seem more appropriate in response to it.

In terms of other variables, countries in the "other religion" catch-all category are not significantly different from Protestant countries. Given the mix of religions within the other group, this is not surprising. Former British colonies are somewhat less likely to have a rape exception to abortion than other countries; in terms of the other two policies, they are not significantly different from other countries. Countries that have been part of the former Soviet Union are much more likely to have each type of exception because abortion policy was very liberal in the Soviet Union. These countries apparently maintained the same policies when they became independent.

Acquiring independence between 1960-2009 is strongly associated with a higher likelihood of legalizing the three exceptions. This suggests that newly independent countries are more likely to liberalize abortion policies. GDP per capita was associated with a slight increase in the likelihood that a country adopted each of the exceptions. Neither war nor population density had much impact on the adoption of policies; it appears that abortion policy exceptions are more related to domestic and global culture than to functional needs arising from conflict or population.

**Conclusions**

- Important for understanding the complexity of institutional processes.
- Multiple institutionalized frameworks exist at domestic and international level (Alford & Friedland; Boyle).
• Even within the same issue area, these institutional frameworks can uniquely shape the adoption of policies.
• This analysis moves us a step closer to understanding which frameworks come into play and when.

References


Figure 1. Percent Sovereign Nations Legalizing Abortion Exceptions
Table 1. Event History Analysis of Rape, Mental Health, and Fetal Impairment Exceptions to Abortion Criminalization Policies

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<thead>
<tr>
<th></th>
<th>Rape</th>
<th>Mental Health</th>
<th>Fetal Impairment</th>
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<tr>
<td></td>
<td>1A</td>
<td>1B</td>
<td>1C</td>
</tr>
<tr>
<td>Catholic</td>
<td>- .837*</td>
<td>- .658+</td>
<td>- .583</td>
</tr>
<tr>
<td></td>
<td>(.339)</td>
<td>(.361)</td>
<td>(.361)</td>
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<tr>
<td>Muslim</td>
<td>- .724*</td>
<td>- .334</td>
<td>- .235</td>
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<tr>
<td></td>
<td>(.346)</td>
<td>(.400)</td>
<td>(.439)</td>
</tr>
<tr>
<td>Other religion</td>
<td>.078</td>
<td>.511</td>
<td>.604</td>
</tr>
<tr>
<td></td>
<td>(.354)</td>
<td>(.403)</td>
<td>(.434)</td>
</tr>
<tr>
<td>Protestant (reference)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Percentage female in parliament</td>
<td>.040***</td>
<td>.031*</td>
<td>.031+</td>
</tr>
<tr>
<td></td>
<td>(.012)</td>
<td>(.013)</td>
<td>(.017)</td>
</tr>
<tr>
<td>WINGO links (logged)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.690**</td>
<td></td>
<td>.312</td>
</tr>
<tr>
<td></td>
<td>(.266)</td>
<td></td>
<td>(.285)</td>
</tr>
<tr>
<td>CEDAW ratification</td>
<td>- .181</td>
<td></td>
<td>- .290</td>
</tr>
<tr>
<td></td>
<td>(.289)</td>
<td></td>
<td>(.290)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK colony</td>
<td>- .769*</td>
<td>- .878*</td>
<td>- .858*</td>
</tr>
<tr>
<td></td>
<td>(.356)</td>
<td>(.389)</td>
<td>(.407)</td>
</tr>
<tr>
<td>French colony</td>
<td>- .713</td>
<td>- .544</td>
<td>- .363</td>
</tr>
<tr>
<td></td>
<td>(.463)</td>
<td>(.460)</td>
<td>(.485)</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Former USSR</td>
<td>2.259***</td>
<td>1.340*</td>
<td>2.172***</td>
</tr>
<tr>
<td></td>
<td>(.492)</td>
<td>(.566)</td>
<td>(.655)</td>
</tr>
<tr>
<td>Other or no colony (reference)</td>
<td></td>
<td></td>
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<tr>
<td>Independence</td>
<td>1.557***</td>
<td>2.448***</td>
<td>2.874***</td>
</tr>
<tr>
<td></td>
<td>(.451)</td>
<td>(.547)</td>
<td>(.577)</td>
</tr>
<tr>
<td>GDPPC (logged)</td>
<td>.197*</td>
<td>.288**</td>
<td>.166</td>
</tr>
<tr>
<td></td>
<td>(.100)</td>
<td>(.105)</td>
<td>(.124)</td>
</tr>
<tr>
<td>International violence</td>
<td>- .018</td>
<td>.001</td>
<td>- .031</td>
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<td></td>
<td>(.132)</td>
<td>(.131)</td>
<td>(.137)</td>
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<tr>
<td>Population density</td>
<td>.000*</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>(.000)</td>
<td>(.000)</td>
<td>(.000)</td>
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<tr>
<td></td>
<td>(.885)</td>
<td>(.931)</td>
<td>(.970)</td>
</tr>
<tr>
<td>Wald chi-square</td>
<td>545.58***</td>
<td>496.64***</td>
<td>506.23***</td>
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<td>-----------------------</td>
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</tr>
<tr>
<td>Number of events</td>
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<td>55</td>
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<tr>
<td>Number of countries</td>
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<td>114</td>
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Note: Unstandardized coefficients, standard errors in parentheses.
+ < .10; *p < .05; **p < .01; ***p < .001 (two-tailed tests).