The Ghosts of Violence Past: The Impact of Sexual and Gender-based Violence on Social Capital in Post-conflict Uganda

Taylor Jacoby—Economics and Political Science

Linking the Basic Elements of Economic Growth: The Effect of Social Capital on Entrepreneurial Activity

Madeleine Gleave—Economics and Political Science; Chase Petrey—Political Science; Peter Carroll—Political Science

When Power Does Not Corrupt: NGO Vulnerability and Political Corruption

Megan Spencer—Political Science

Constructivist Theory and Overcoming the Gender Gap in Education in Latin America

Kristen Staib—Political Science with Spanish Minor

Full of Regret: Possible Economic and Psychological Predictors of Voter Turnout Rates

Marc Watterson—Political Science
CONTENTS

Taylor Jacoby—economics and political science
The Ghosts of Violence Past: The Impact of Sexual and Gender-based Violence on Social Capital in Post-Conflict Uganda ................................................................. 1

Madeleine Gleave—economics and political science; Chase Petrey—political science; Peter Carroll—political science
Linking the Basic Elements of Economic Growth: The Effect of Social Capital on Entrepreneurial Activity ................................................................. 27

Megan Spencer—political science
When Power Does Not Corrupt: NGO Vulnerability and Political Corruption .......... 42

Kristen Staib—political science with Spanish minor
Constructivist Theory and Overcoming the Gender Gap in Education in Latin America ................................................................. 56

Marc Watterson—political science
Full of Regret: Possible Economic and Psychological Predictors of Voter Turnout Rates ................................................................. 78
The Ghosts of Violence Past: The Impact of Sexual and Gender-Based Violence on Social Capital in Post-Conflict Uganda

by Taylor Jacoby

Introduction

After conflict, states and societies are faced with an enormous amount of work in order to rebuild. With limited resources, it is difficult to determine which initiatives ought to be prioritized. Northern Uganda is currently in the middle of this scenario. In 2006, the government signed a peace treaty with the Lord’s Resistance Army (LRA), effectively ending two decades of brutal civil war. Now the Ugandan government has begun working toward important goals like stabilizing democratic institutions, reconstructing and expanding infrastructure, improving health and education, and reintegrating former abducted rebel soldiers. They are joined in their efforts by a veritable flood of international humanitarian aid providers that have poured into the country during the relative security of the past five years. One particular cost of conflict has been consistently neglected by both post-conflict interventions and post-conflict literature: The deterioration of social capital.

Social capital—or the “networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit” (Putnam 1995, 67)—is badly weakened by conflict but of critical importance to sustainable peace, stability, and prosperity. Although they do not invoke this terminology, journalists, aid workers, and others writing qualitative reports of conflict areas have noticed the social costs of conflict. These anecdotal sources suggest that one of the ways in which social capital is most damaged is through sexual and gender-based violence (SGBV). Those who have seen the aftermath of SGBV firsthand consistently describe psychological and social consequences that are largely overlooked by peer-reviewed journals. Consider the following observations from one New York Times article: “The ordinary sense of family
and community is lost after a man has been forced to watch his wife being raped, or parents are forced to watch the rape of their daughters, or children see their mothers raped”; After witnessing rape, “many flee. Families are dislocated. Social relationships are lost. There is no more social network, village network. Not only the victims have been destroyed; the whole village is destroyed” (Herbert 2009).

As in most African conflict zones, rape, assault, and other deliberate abuse of women was widespread in northern Uganda throughout the long civil war. This has not ceased with the formal end of conflict. Indeed, some literature suggests women are actually in greater danger after the initiation of formal ceasefires (Ormhaug, Meier, and Hernes 2009; Ghobarah, Huth, and Russett 2003). Although the international community has recently begun to devote far more resources and attention to “women’s issues” in post-conflict reconstruction, very few have examined the broader social costs of SGBV. In the long run, it seems possible that other post-conflict and development efforts may fall short and peace may not last if the lingering ghosts of sexual and gender-based violence are not exorcised.

The initial inspiration for this paper was the puzzle of why so few scholars seemed interested in the connections between SGBV and social capital when newspapers and other more “personal” sources commented so widely on the concept and its implications. I was troubled by what appeared to be two very different pictures of SGBV in Africa. This paper tests empirically what is reported by anecdotal accounts. Specifically, the aim of this research is to determine the impact of widespread SGBV on social capital in northern Uganda.

This paper has two key contributions to the current literature on traumatic experiences. First, it does not treat “trauma” as a lump sum. Political science literature has little to say about the impact of trauma, and the articles that do exist almost never separate trauma into types of events (nor do they typically allow for differences in response among men and women). There are reasons to believe that some experiences may be “more traumatic”—or at least more destructive of social capital—than others. This paper looks specifically at the differences between the impact of experiencing explicitly gender-based violence and “general” (or non-gender-based) experiences of trauma.

Second, this paper attempts to determine how traumatic experiences actually break down social capital. Anecdotal evidence reports high social costs of SGBV, and quantitative studies (done primarily by psychologists) report a high incidence of psychological distress among those who have experienced trauma, but few authors examine the links between these two observations. This paper tests whether post-traumatic stress disorder (PTSD) is a key causal mechanism in the relationship between SGBV and lowered social capital.

This study finds the psychosocial impact of SGBV is not homogenous across respondents. Data gathered from interviews with a random sample of eighty-three northern Ugandan women align with the psychological “dose-response” theory.
(Johnson and Thompson 2008) that more incidents of trauma lead to greater psychological distress. The data also challenge the claim that trauma may lead to positive social behaviors by showing SGBV has a direct negative impact on measures of social capital. In all models, SGBV experiences had a greater impact than non-SGBV experiences of trauma. This lends support to the claim that addressing the psychosocial costs of SGBV ought to be made a higher priority in post-conflict interventions. However, the results were less robust in demonstrating that PTSD is a significant causal mechanism in the relationship between trauma and social capital.

Literature Review

Scholars have widely explored the negative effects of conflict. Most often, violence is considered costly in terms of physical capital—infastructure is destroyed, money is spent on arms instead of public goods, resources are devoted to military expenditures as opposed to long-term investments, etc. Other studies consider the costs in terms of human capital—schooling is interrupted, disease and malnutrition become rampant, and so forth. Least examined are the costs to social capital, and this seems faulty. Conflict separates families, creates rifts in communities, alters social norms, and renders trust and cooperation largely irrational. Conflict also leaves psychological scars, which affect individuals' relationships. Though scholars have touched on related issues, the nature of the relationship between individual responses to violence and broader social capital is a question that remains relatively unexplored.

This gap is less pronounced among practitioners of post-conflict reconstruction (such as the UN), where there is a slowly growing recognition of the relationship between psychological functioning and social context. As a result, "psychosocial" models are increasingly used to intervene after trauma. In the literature on traumatic experiences that does exist, there are two prominent approaches to the importance of psychosocial intervention after conflict. Put bluntly, one group of scholars is very concerned about the impact of trauma and the other group is not.

The first group argues that trauma has a definitively negative impact on the individual who experiences it, and a potentially negative impact on the individuals' broader society. This approach is primarily put forward by psychologists and other mental health advocates. The World Health Organization (WHO) argues, "There is no health without mental health" (Prince et al. 2007). Their studies of trauma focus on determining the prevalence of PTSD and other depressive symptoms, measuring the correlation between mental illness and physical illness, and estimating forgone economic potential (WHO 2005; Chrisholm, Saxena, and Ommeren 2006; Prince et al. 2007). According to this group, trauma alters its victims. Some even propose that without appropriate intervention after trauma, the victim may become the aggressor.
(Bayer et al. 2007; Vinck et al. 2007). These scholars argue that psychosocial interventions after trauma are critical, because they not only benefit the immediate victims but also work to prevent cycles of violence.

However, although the findings generated by these types of studies are compelling, they cannot tell effective stories on their own. Studies rooted in this approach generally lack the causal logic found in social science literature. Establishing a clear causal mechanism between individual traumatic experiences and larger societal costs is necessary if post-conflict priorities are to be successfully shifted.

The second group argues that while the effect of trauma on the individual is probably negative (at least initially), the impact on broader society is inconclusive. This approach is primarily advanced by political scientists and economists. The core assumption of this group is that trauma can actually, in certain contexts, have a positive impact: Experiencing adversity leads to higher levels of functioning and pro-social behaviors (Tedeschi & Calhoun 1996; Linley & Joseph 2004; Blattman 2009; Bellows & Miguel 2009). For example, one study in Uganda shows that formerly abducted soldiers are more politically active and hold more leadership positions as a result of the violence they experienced (Blattman 2009). Similarly, another shows that households where more members were injured, killed, or displaced also became more politically active (and radical) after conflict (Bellows and Miguel 2009). These scholars argue the international community should not prioritize resources to post-traumatic psychosocial interventions, because individuals are remarkably resilient. In fact, some argue that psychosocial intervention is not just broadly unnecessary but actually harmful since it can weaken individuals' natural resilience to traumatic experiences (Shalev & Errera 2008; Agaibi & Wilson 2005).

This approach also tends to present a muddled view of the causal story. If those who have experienced trauma become more politically active than they were previously, they may just be rational actors. In other words, the more trauma an individual has experienced, the greater his or her incentive to become involved and prevent further conflict. How does one then isolate the impact of trauma on individuals' behavior? Further, these studies lump all traumatic experiences into a single category, but what if different experiences result in different outcomes? And what are the outcomes for measures of social capital beyond civic engagement?

The argument developed in much of the rest of the paper hinges on more precise measurement of groups that may react very differently to trauma (and indeed to different kinds of trauma). This study is built on the assumption that women react differently than men do to similar traumatic experiences; also, the set of experiences women regularly face, namely sexual and gender-based violence, may have a larger psychosocial impact than does "regular trauma." This paper also hypothesizes that PTSD may be a specific causal mechanism in the relationship between individual experiences of trauma and broader social costs. This hypothesis is an attempt to bridge the logical gap between the two prominent approaches currently in the literature.
Trauma, Social Capital, and Psychological Distress: Theory

Ultimately, the goal of this paper is to determine the impact of widespread SGBV in northern Uganda. However, answering this specific question first requires an understanding of the impact of traumatic experiences in general. Most people can accept that, in one way or another, trauma affects the individual who experienced it. Likewise, most people view events that result in individual trauma, such as violent crime or sexual assault or warfare, as detrimental to society. Perhaps less intuitive are the connections between micro-level individual distress and macro-level social deterioration.

There are good reasons to believe individuals' reactions to traumatic experiences can contribute to the breakdown of societies, and this paper proposes that one critical causal mechanism is PTSD. A person may develop PTSD after experiencing, witnessing, or fearing serious harm or abuse. As the number and intensity of traumatic experiences increases, victims are more likely to develop PTSD as well as experience greater symptom severity (American Psychiatric Association 1994, 309.81). At one level, PTSD is compelling simply because it is observed with such high prevalence among individuals in post-conflict societies. The American Medical Association has surveyed thousands of subjects in central Africa for PTSD symptoms. A selection of these studies reveals that, of those sampled, 36% in Southern Sudan (Roberts et al 2009), 52% in Eastern DRC (Mels et al. 2009), 74% in villages for internally displaced persons in northern Uganda (Vinck et al. 2007), and 25% in Rwanda (eight years after the genocide) (Pham, Weinstein, Longman 2004) show significant symptoms of PTSD.

Beyond raw numbers, an understanding of PTSD symptoms provides many insights about how individual psychological distress could affect communities. For example, most individuals suffering from PTSD show signs of depression. They withdraw socially, and, when around others, are often agitated and irritable. They lose interest in activities they previously enjoyed, have great difficulty with concentration, and often cannot manage schoolwork or holding a job. They may suffer from extreme paranoia, outbursts of rage, and delusions. Many fall into a pattern of substance abuse (all symptoms summarized from American Psychiatric Association 1994, 309.81).

Each of these symptoms places serious tension on professional, familial, and interpersonal relationships. However, because the family is the foundation of all other social interaction, the PTSD's effect on families may be most important. It is from their families that children develop their first understanding of social behavior. In the home, children learn to cooperate with their siblings and trust in the experience of their parents. Families make up a person's first social network and the place where he or she learns the norms required to interact within it. When parents are anxious, abusive, or simply withdrawn and distrusting, these antisocial behaviors will often be passed on to their children. In the introduction to her book, War is Not Over When It's Over, Ann Jones highlights this reality in a description of the lasting impact of
abuse inflicted by her father—a man “irrevocably changed” by what he experienced as a soldier in WWI. “The violence my father brought home fell on me and shattered whatever small childish trust I may once have had in the simplicity of love. [War] changed everything for him, and consequently for me” (2010, 5).

This demonstrates PTSD’s potential to erode social capital long after the initial trauma experience. This erosion is perhaps most accelerated by a PTSD symptom called “restricted range of affect” (American Psychiatric Association 1994, 309.81). This is essentially emotional stunting, and it is one of the primary differences between PTSD and an ordinary reaction to a terrifying experience. For example, many trauma victims choose to withdraw from others, because they suffer from generalized anxiety, but those with PTSD may be withdrawn because they have actually lost the ability to feel love, compassion, intimacy, and other “loving feelings” (Ibid.). Due to this emotional stunting, as well as an intense psychological need to regain a sense of control, many trauma survivors end up causing harm to others (Agger, 2001; Levy & Sidel, 2003; Pupavac, 2004, Volkan, 2000). Aggression often begins in the family (domestic abuse is a serious social consequence of untreated PTSD) but may be inflicted on others in the community as well. Either way, the effect of violence from someone with PTSD eventually has a broader social cost. Thus, neglecting the residual effects of individuals’ traumatic experiences may “lock societies into a pernicious cycle of violence, as it is assumed that the ‘abused’ will later become the ‘abuser’” (Clancy & Hamber 2008, 12).

Additionally, PTSD may deteriorate social capital by inhibiting communities’ collective ability to forgive, reconcile, and rebuild. To illustrate, one study found that former child soldiers in eastern Africa who exhibited “clinically important” PTSD levels (a symptom score of 35 or higher out of 51) were significantly less open to reconciliation and had significantly more feelings of revenge than children with lower scores. The more symptoms children displayed, the more intense these feelings were (Bayer et al. 2007, 557). Another study found that 75% of internally displaced persons (IDP) in Uganda met PTSD criteria, while only 45% met depression criteria; those with PTSD were consistently in favor of using violence to ensure justice and stability, while those with only depression symptoms consistently preferred nonviolence (Vinck et al. 2007).

The big picture is that by weakening trust, cooperation, social networks, and norms surrounding reconciliation and peace, PTSD may have a devastating effect on post-conflict reconstruction. This is because each of those aspects of social capital are already crippled, and often destroyed, by conflict, but all are necessary to rebuild peace and prosperity. During conflict, interpersonal trust and cooperation are often dangerous, and new norms of behavior are established to facilitate survival (Collier 2003). As priorities shift from the collective good to self-preservation, fear, hatred, manipulation, and selfishness must become societal norms (Colletta and Cullen 2004). This value shift must be reversed for a country to truly put an end to conflict. For example, well-intentioned post-conflict enterprises, such as democratic elections or upright police
forces, will be of little good if the people do not trust anyone to provide order, protection, and public goods. Networks of families and neighbors must be reunited before there can be hope of successfully reintegrating former soldiers into communities. Different ethnic groups must be able to cooperate with one another on public works programs before there can be hope these groups will really share power in government. One can imagine many scenarios. The point is, social capital matters to post-conflict reconstruction, and PTSD acts as a barrier to accessing the social elements that matter most.

Although trust, cooperation, networks, and beneficial norms will never disappear completely, there may be a threshold at which the social capital that remains may be insufficient to make a positive difference in a given society. In other words, if you use violence to destroy social capital, you also destroy the society’s ability to recover from it. This effect may be particularly pronounced in the case of SGBV. In a study of Ugandan youth formerly abducted into the Lord’s Resistance Army (LRA), Jeannie Annan found that individuals’ readjustment into their former communities (largely measured in terms of psychological factors) was greatly eased by social factors such as social support, family connectedness, and community involvement (2007). Similarly, studies of sexual assault have shown that survivors’ levels of psychological distress have a significant, negative correlation to mediating variables such as social support (Turner 1983; Ullman 1999), being taken seriously by legal, medical, and/or police personnel (Campbell 1999), and their perception of how violent the assault was (Bondurant 2001). Individuals’ reactions to trauma are influenced not merely by factors endogenous to the individual but also by exogenous social capital. Indeed, according to Kleinman, one of the first psychologists to model traumatization, “social context, or what [Kleinman] would call traumatic sequences over different time periods, shapes the outcome often more profoundly than did the original violation” (qtd. in Clancy & Hamber 2008, 15).

This suggests that social capital also matters in speeding individual recovery from traumatic experiences. According to psychologists, trauma is most distressing when individuals are unable to process their experience in a wider social context, which would allow them to overcome anxiety and move on (Freud 1919; Clancy & Hamber 2008, 16). For example, a woman may be used to going to her husband for advice and support when she has faced difficulties. But if this woman is raped and fears her hus-

---

2. This idea comes from a larger discussion of Freud’s concept of “the uncanny.” Freud defined the sense of the uncanny as the feeling of deep unease that is triggered by something that is at once both unusual and familiar (1919). In terms of trauma, “uncanny” describes a feeling of deep anxiety and fear when something (or someone) well known, and thus a source of comfort, becomes simultaneously a source of panic (Gampel 2000). As just one example, during conflict (especially ethnic conflict) neighbors, friends, and family members may turn against one another in violence (Clancy & Hamber 2008, 16). In a moment, someone familiar and safe becomes an unexpected enemy. This concept of the uncanny can be clearly applied in the case of domestic violence and marital rape, but it can also be extended to the majority of survivors of sexual violence, as most know their perpetrators. The psychological response of these survivors must involve reconciling the images of their abuser with the uncle who was always kind to them, or the father of their children, or the household breadwinner, and so forth. However, compelling though this concept may be, it is simply too uncouth to evoke Freud in any feminist analysis.
band will reject her if she told him (a common occurrence in conservative countries like Uganda), or if it was her husband who raped her (an even more common occurrence in all countries), then her usual form of social support is unavailable to her. Logically then, psychological distress is not nearly as pronounced in other types of traumatic experiences where social context is not a significant factor, such as natural disasters, serious accidents, or even a large share of combat scenarios (e.g., soldiers fighting in wholly unfamiliar foreign places or relying on technology rather than hand-to-hand combat). The implication is that certain experiences are ultimately “more traumatic” than others.

Based on both anecdotal and empirical literature, there is reason to believe SGBV has a greater psychological and social impact than other kinds of trauma. Qualitative reports from journalists and women’s rights advocates consistently find evidence of the negative social consequences of SGBV, such as stigmatization and familial rejection that support this claim (Kristoff and WuDunn 2009; Thernstrom 2005; Csete & Kippenburg 2002). If one turns to psychological literature, there is also quantitative evidence for this claim. First, it has been consistently shown that women seem to be more vulnerable to psychological distress than men. Women are more likely to develop depressive and PTSD symptoms after conflict and other traumatic experiences, even if they have been exposed to a lower number of events than men (Tolin and Foa 2006). Additionally, the type of experiences women are commonly faced with may be just as liable as women’s physiology. Many studies have shown a particularly high incidence of PTSD among survivors of sexual and domestic violence—significantly higher than the incidences among survivors of other types of trauma (Kilpatrick et al. 1989; Frazier et al. 1997; Breslau et al. 1998; Baker et al. 2005).

This evidence strongly suggests that studies of the psychosocial impact of conflict and other traumatic events that fail to isolate gender and trauma type will produce a potentially flawed and certainly incomplete picture of the situation. As a final illustration, consider the following statement in a report from the Survey of War Affected Youth (Annan et al. 2008)—an impressive project documenting the psychosocial adjustment of northern Ugandan youth. Although SWAY concludes that negative psychological and social outcomes are by far the exception and not the rule in post-conflict Uganda (Annan et al. 2008, vi-ix), one statement (inadvertently) suggests a focus on the impact of SGBV separate from other types of trauma could produce different results. It reads,

The experiences of forced wives go beyond “sex slave”: this simplistic classification perpetuates common misunderstandings which can lead to inappropriate responses in addressing their needs, particularly regarding mental health and stigma issues (Ibid., ix).

This statement implies it is the sexual and gendered aspects of being a formerly abducted woman that lead to psychological and social problems. If there was no difference
between the impact of general violence and that of SGBV, emphasizing the sexual role of forced wives should not be an issue. However, this SWAY statement makes the case that the sexual and gendered roles of forced wives should not be emphasized, because this invokes mental health and social problems (stigma). This paper makes the case that, precisely because it so often leads to distress, SGBV should be evaluated separate from other types of war-time and traumatic experiences.

In sum, I hypothesize that SGBV trauma experiences will have a different psychological impact than will other trauma types. Extending this hypothesis, I hypothesize that SGBV trauma will have a greater negative effect on social capital than other trauma types. I hypothesize that this effect will appear when measuring the direct impact of SGBV on social capital as well as the indirect effect of SGBV through PTSD. However, I suspect that despite psychological distress, many women will be “resilient” in the sense that they continue, with varying success, to care for their families and protect them through community involvement and other pro-social behaviors.3

Background: Sexual and Gender-Based Violence in Northern Uganda

Much of SGBV’s impact in northern Uganda is left over from the country’s long civil war. Conflict in Uganda began almost immediately after independence in 1962 when leaders from rival ethnic groups began fighting for power, but civilians were largely spared from the violence until the late 1970s. (Uppsala Conflict Data 2008). In 1985, southern rebels led by Uganda’s current president, Yuweri Museveni, overthrew the government, which was then dominated by northern ethnic groups (Ibid.). Guerillas from the largest northern group, the Acholi, initially resisted this takeover, but by 1988, most rebels had settled for peace. (Annan et al. 2008, 1).

A small band of northern rebels refused to accept these terms, and, under the direction of Acholi spiritual leader Joseph Kony, formed the Lord’s Resistance Army (LRA).4 Between 1987 and 2006, when the LRA was under Kony’s command, nearly two million people were displaced, thousands killed, and up to eighty thousand young Ugandans abducted and used as soldiers (Annan et al. 2010, 8). Due to Kony’s spirituality, the use of sexual violence in the Ugandan conflict may be different than in other African wars. Kony strictly forbade his fighters from adultery and fornication. However, fighters who had pleased Kony were given abducted girls as “wives”; rank and power could be determined how many wives a fighter possessed (Annan et al. 2010, 9).

3. I suspect much of this resilience is motivated by the fact that many Ugandan women have no other choice. If they gave into “disabling” psychological and social problems, who would care for their children? “Forced resilience” is a concept that calls for future research.

4. The LRA was originally called the Holy Spirit Movement and was led by a woman, Alice Lakwena. Lakwena was also an Acholi spiritual leader (most famous for insisting that if her soldiers went into battle naked and anointed with holy oils, their skin would be bulletproof) hoping to overthrow the Ugandan army; however, her resistance lasted only a year before the majority of her supporters were killed in combat, and she was detained in Kenya (Allen 1991, 372).
Abductees were not the only women in Uganda to experience sexual violence. Some reports state that LRA fighters did adhere to Kony’s restrictions, and the rebels raped very few non-abducted women and girls (Annan et al 2010, 10). However, staggering numbers of sexual assault and other abuse are reported by the huge group of displaced Ugandans who were forced to live in IDP camps as a result of rebel violence (International Center for Transitional Justice 2005, 16). Whether or not it is true the rebels practiced restraint (thus implying these assaults were primarily perpetrated by civilians taking advantage of the chaos), it was their violence that forced women into their vulnerable situations in the camps.

Though the war officially ended in 2006, violence continues to be a reality for many Ugandan women. In fact, some studies suggest that, because official declarations of “peace” are accompanied by chaotic transition periods, women are actually no safer—and perhaps in greater danger—after conflicts end (Ormhaug, Meier, & Hernes 2009; Ghobarah, Huth, & Russett 2003). SGBV during conflict only adds to a long-standing tradition of violence against women. According to the Uganda Demographic and Health Survey of 2006, 60% of Ugandan women have experienced physical violence beginning at the age of fifteen; two-thirds of these women experienced this violence at the hands of their domestic partner (UBOS, 286). Thirty-nine percent of Ugandan women between the ages of fifteen and forty-nine have experienced sexual violence; about half of these women endured this coerced sex from their current husband or intimate partner (Ibid.).

The frequency of SGBV incidents is only part of the problem. The widely held belief that women who have experienced SGBV are at least partially to blame leads to survivors being viewed as damaged, dirtied, promiscuous, or, in the case of domestic violence, as bad wives. Fear of disbelief, rejection, and stigma prevents countless women from reporting SGBV to local authorities. Underreporting of survivors alongside impunity for perpetrators is pervasive worldwide, but the problem is particularly acute in conservative countries, such as Uganda, where cultural norms have long prevented women from speaking out against their husbands or openly about sexuality. This wide range of SGBV scenarios makes Uganda an ideal place to conduct this research.

Methods
This research was conducted between June and July 2011 in three northern Ugand-

5. There are many theories for why this is so. Some argue aggression is an inherent part of masculinity, and if men have no enemy on which to direct it, they will abuse their wives and children and perhaps assault others in the community (Alison 2004; DeLaet 2006). Others suggest the dehumanizing, humiliating aspects of war (losing battles, loved ones, land, fortune, and so forth) may inspire in men a need to reaffirm their sense of pride and strength through sexual or domestic violence (Ibid.). Demobilization may also invoke an additional sense of emasculation and weakness, as some studies have shown connections between mandated disarmament and increases in SGBV (Gear 2005).

6. In 2009, 10,365 cases of sexual violence were reported to the Ugandan Police and registered nationally (CE-WIGO 2010, § 2.2). Of this, only 4,365 cases were taken to court, and a paltry 385 convictions were made (Ibid.).
dan districts—Pader, Gulu, and Lira. The study sample consisted of eighty-three women currently living in these districts (or within about ten miles). The mean age of participants was 30.65. Approximately 31% had never been married, 22% were currently married, 3% were divorced, 7% were separated, 14% were widowed, and 20% were currently living with a partner. The majority of participants were the main caregiver for at least one child (72%) and nearly one-third were responsible for five or more children (27%). Seventy-nine percent of participants had a primary school education level or lower (by far the largest concentration, 44%, had "some primary school" as the extent of their schooling). Sixty-nine percent of participants had a daily income of three thousand Ugandan shillings or less (about $1.30), and 90% had a daily income of 6,000 UGX or less. Thirty-five percent had received some kind of counseling, of which 100% was provided by NGOs.

Because phone or door-to-door recruitment was not feasible (due to the sensitivity of the topic as well as logistical reasons), selection of respondents was not strictly random. Respondents were mobilized by five local NGOs: Northern Uganda Malaria, AIDS and Tuberculosis (NUMAT) (about 45% of respondents), Health Alert Uganda (about 25%), Justice and Reconciliation Project (about 2%), Gulu Youth Center (about 1%), and the Grassroots Women Association for Development (about 20%). After introducing the project and research team to the directors of each organization, my research team and I were invited to administer surveys during previously scheduled meetings of their beneficiaries. These meetings provided an ideal forum, because they tended to involve a lot of waiting time that left beneficiaries with sufficient time to complete a survey. Once at the meeting site, an NGO representative would introduce our research team and explain the project and its purpose. We would then randomly select respondents from the assembled groups. If the woman we had selected agreed to participate, she was then interviewed individually in a private place.

By tagging along to NGO activities rather than having them mobilize respondents directly for the research, we hoped to keep selection bias at a minimum. Even so, there remains some concern as to the candor of the responses received. As one partial solution, after the pilot period we implemented a test for interviewer bias. Although this did not resolve the issue of women not wanting to speak to anyone about their experiences, it did address the concern that some women were inclined to tell us "what we wanted to hear." Before being administered the questionnaire, individuals were randomly assigned to be interviewed by either 1) a Western, female univer-

7. Meeting type varied by organization. We visited NUMAT, Grassroots Women Association for Development, and Justice and Reconciliation Program focus groups that met regularly to discuss subjects such as coping with the experiences of conflict, domestic violence, and women's economic empowerment. We accompanied the Health Alert team on trips to distribute nutritional supplements to mothers in rural villages. At the Gulu Youth Center, we sampled from those who had attended a monthly HIV/AIDS awareness and support activity.

8. All participants signed a consent form before beginning the survey.
higher student working with a local translator 2) a local translator only 3) a community
member who knew the local women on a more personal level. In the end, interviewer
type had no significant impact on the dependent variable, which restored some level
of confidence on this particular issue. (Because of its lack of explanatory power, this
control was not included in regression models.)

The data in this study were aggregated from the results of a self-reported ques-
tionnaire. The questions were translated into Luo, the predominant native language
of northern Uganda (spoken fluently by 100% of respondents), by a bilingual profes-
sor at Makerere University in Kampala. The questionnaire was then piloted and ques-
tions that seemed irrelevant, overly sensitive, or consistently misunderstood were
adjusted or eliminated with guidance from local NGO workers.

The questionnaire had four sections. The first section asked demographic ques-
tions. Age, marital status, education level, income level, history of counseling (yes
or no), and number of children currently in care were used as controls in regression
models.

The second section evaluated individuals' exposure to traumatic events. “Stress-
ful, frightening and dangerous events” that “often occurred during the civil war in
Uganda, but many [of which] may also occur during times of peace” were listed,
and the respondent was asked to indicate which, if any, she had experienced (yes or
no). This section was adapted from the Harvard Trauma Questionnaire (Mollica et
al., 1992) to be contextually and culturally appropriate for northern Uganda. For
analysis, the results of this section were summed into a “total traumatic events” score
(“yes”=1). This was compared against scores generated by dividing the twenty-eight
events into “SGBV” and “non-SGBV” and summing the “yes” responses in these cat-
egories. The UN Committee on the Elimination of Discrimination Against Women
(CEDAW) General Recommendation 19 defines gender-based violence as: “Violence

9. A fifth section attempted to understand trust in authority and perceptions of gender roles through a series
of hypothetical scenarios. By changing key words in a “treatment” version of the scenarios, we hoped to use
an experimental design to look at these subtle, and often taboo, subjects. However, although the results were
compelling, they did not fit the framework of this paper and will be saved for future exploration.
10. I was careful to include other variables I imagine could have a significant impact on psychological and social
reactions to trauma such as ethnicity, location during the conflict, access to health care, religion, and frequency/type
of social activity. I also used proxies for education and income (which are notoriously prone to misreporting)
such as home roofing material as a proxy for income, but found so little variation across the sample on
these variables that they could not be used effectively.
11. Before beginning this section, translators were instructed to remind all respondents that they should skip
any question that they did not wish to answer. Hopefully, this reminder minimized the perceived pressure to
answer all questions, regardless of respondents' level of anxiety or discomfort, and thus increased the likeli-
hood of honesty for the questions respondents did choose to answer.
12. The event “tied up or locked up as a prisoner” is perhaps the least intuitive in this sense, but was included
because in Uganda the majority of women taken prisoner (not including state imprisonment of tried crim-
inals) are subjected to repeated sexual abuse. “Abduction” was not included because there is sufficient evi-
dence that not all abducted girls were used for sex, but served many of the same functions (and were exposed
to the same types of violence) as abducted boys (Annan et al. 2008). The linguistic difference between these
events may seem subtle, but the actual implications seem incompatible.
directed against a woman because she is a woman or which affects a woman disproportionately. It includes physical, mental or sexual harm or suffering, threats of such acts, coercion and other deprivations of liberty” (1993). The events making up the SGBV category were selected to best fit this definition.

The third section measured the psychological impact of the traumatic events reported in Section 2. This was done using the Post Traumatic Stress Disorder Checklist (Weathers et al, 1993). This test used a 1 to 5 scale (1=not at all, 5=extremely) to assess the frequency of the seventeen PTSD symptoms (as outlined in the Diagnostic and Statistical Manual of Mental Disorders) that the individual experienced over the last month. Summing responses on this scale generates a score of symptom severity that can be used for diagnosis. Although there is no authoritative threshold score (recognizing that individuals respond differently despite having similar symptoms), a score of thirty-five is often considered sufficient for diagnosis and fifty is considered severe (Ruggiero et al. 2003, 500).

The fourth section attempted to measure the dependent variable social capital by assessing the psychosocial impact of trauma. Rather than defining social capital in terms of easily quantifiable indicators like voting history and “number of group memberships,” a questionnaire was used to collect information on how individuals perceived themselves within society. The content of this section drew heavily from questionnaires used with previous success in northern Uganda by Annan (2007, appendixes). The questions in this section used a 1–6 Likert scale (1=strongly agree, 6=strongly disagree) and were summed for a total social capital “score,” and also divided into four scores of specific social capital components. The four components include: 1) social trust 2) social support 3) self-blame and 4) pro-social behavior. Questions asked to assess each component are listed in the appendix.

Data were primarily analyzed using ordinary least squares multiple regression models with robust standard errors (to correct for heteroskedasticity in the error term). The hypothesis that SGBV has a different psychological impact than other types of trauma was tested by regressing PTSD scores on scores of total traumatic events and then on separated SGBV and non-SGBV scores. The related hypothesis that SGBV has a greater negative social impact than other types of trauma was tested two ways. The direct impact was tested by regressing total social capital scores and the four social capital component scores on SGBV and non-SGBV scores. The indirect impact (measuring the strength of PTSD as a causal mechanism) was tested by tested by regressing the social capital scores on PTSD scores.

During the piloting period, I observed that if provided with a neutral category, the majority of women would choose this option for the majority of questions. This could be related to survey fatigue, but seems most likely related to Ugandan women’s habit of being deferential, especially in “important” matters, as this research tended to be perceived. As such, I dropped the neutral middle option, choosing to forgo conventional wisdom (and undoubtedly, some measure of accuracy) in order to urge women toward a confident opinion.
Results

Even without performing statistical analysis, the purely observational data is quite powerful. Tables 4 and 5 in the Appendix list the type and frequency of traumatic events experienced by the participants. The mean number of traumatic events experienced per woman was 13.3 (of twenty-eight possible events). The three most commonly experienced events were witnessing beatings or torture (90.4%), regular lack of food or water (89%), and threats and other verbal abuse from family members (77%), but only two events were reported by less than 20% of participants.

Of the eighty-three women interviewed, 87% had a clinically important PTSD score of thirty-five or higher and about 40% had severe scores of fifty or higher (these data exhibit a range of 28-73 out of a possible 17-85). The mean total PTSD score was 48.7.

Testing H1: SGBV trauma has a different impact than non-SGBV trauma

There are two components to the hypothesis tested here: 1) traumatic experiences of SGBV will directly lower levels of social capital 2) traumatic experiences of SGBV will indirectly lower levels of social capital by generating PTSD. Both the direct and indirect effects of SGBV were hypothesized to be stronger than the effects of non-SGBV trauma.

Table 1 provides evidence for the direct effect. As hypothesized, SGBV trauma displays a statistically-significant negative effect on total social capital. Model 1 in Table 1 reports a decrease in total social capital score of about two points for each additional SGBV-related trauma experience. Non-SGBV trauma does not have a statistically significant effect.

SCBV also has an effect when total social capital is indexed into the four social capital components. The influence on social support and social trust is statistically significant: Each additional experience of SCBV-related trauma corresponds to a 0.8 decrease in social support scores and a 0.5 increase in social trust scores (the coefficients on self-blame and pro-social behavior were both in the predicted direction, but not statistically significant).

Table 2 provides even stronger support for the second component. As a "lump sum," the total number of traumatic events experienced was a significant predictor of PTSD scores (p<.10). Model 1 shows that for each additional experience of trauma, PTSD score increases .46 points. When trauma is divided into indexes of SGBV and non-SGBV experiences, this picture becomes more focused. Number of SGBV experiences was a better predictor of PTSD scores than traumatic experiences as a whole (p<.05). Model 2 shows that for each additional experience of SGBV, PTSD score increases by 2.2 points. Meanwhile, number of non-SGBV experiences is not a significant predictor of SGBV.

Testing H2: PTSD is an important causal mechanism in the relationship between trauma and social capital

While trauma is seen to contribute to higher PTSD scores, and SGBV trauma to even high scores, this study's second hypothesis was not supported by the data used
in this study. While the coefficients on each of the social capital component scores are in the predicted direction, PTSD does not appear to be a statistically significant predictor of social capital levels. These results are summarized in Table 3.

Concepts, Costs, and Concerns: Limitations of African Trauma Studies

One explanation for the divisiveness in the literature on the impact of trauma is that such studies face several tough methodological challenges. Three primary issues affected the quality of data in this and other related studies: Measurement of psychosocial variables, interviewer effect, and random sampling. The small sample in this study is also not ideal.\footnote{Regrettfully, incomplete data on a few key variables meant that, for best accuracy, the regressions utilized only seventy-six of the eighty-three hard-won observations.}

First, it is very difficult to measure the psychological impact of trauma, because of the variation in perspectives across individuals, cultures, and academic disciplines. Among both academics and practitioners, there is a growing body of criticism of PTSD as a useful diagnostic tool in developing countries. The criticism most relevant to this research is that the Western "medicalized idiom" of PTSD does not adequately capture many individuals' and many cultures' conceptualization of trauma (Beristain 2006; Clancy & Hamber 2008). In some cases, this diagnosis will overestimate the impact of trauma on the wellbeing and functioning of an individual, and in other cases, it will overlook individuals who do not meet the criterion for diagnosis yet are in critical need of psychiatric care. Ultimately, the human mind remains too complex for our (relatively) spare models to capture perfectly, and PTSD seems an adequate way to operationalize psychological distress.

Social capital is also notoriously hard to measure, since gains in clarity come at the expense of accuracy. Selecting a sufficient, but not overwhelming, number of indicators to build an operational definition is not straightforward. The indicators and categorization of the social capital variables in this study come at the end of a careful assessment of the above trade-off; however, some measurement error inevitably exists.

Language barriers make measuring difficult concepts even harder. Linguistic translation is always subjective. Beyond that, however, cultural differences open doors to personal bias and large gaps in meaning.\footnote{For just one example, Luo, the most common language in northern Uganda, apparently has no word for "feelings." People refer to specific emotional states instead of this broad and abstract word.} Limited time and funding restricted the amount of training I could give my translators, and so I don't doubt there was some inconsistency in translation.

Beyond issues of concept validity, there were also worries about interviewer effects. Due to the sensitive nature of traumatic experiences and mental health, researchers must be mindful of their subjects' incentive to be discreet or dishonest. Subjects have several potential reasons to lie in interviews about their traumatic experiences. They may have
an emotional need to avoid reflecting on terrible memories,\textsuperscript{16} or simply do so out of habit; they may be conditioned to anticipate stigma and so downplay or deny certain experiences; or they may recognize an opportunity for personal gain by "gaming the system" and telling the researcher what the individual believes they want to hear.

Constructing truly random samples is also a trial. Due to the nature of psychological distress, it is not only difficult to create a truly random sample but also quite possible to overlook the "most traumatized" individuals. Ugandan infrastructure does not allow for phone calls or going door-to-door at a randomized set of households. Even if this were not the case, it would be inappropriate and potentially dangerous to approach women in this way about their experiences with SGBV. "Pure" randomization was sacrificed in order to protect the physical and emotional safety of the respondents. However, I feel the recruitment methods that were employed were sufficiently indiscriminate to feel confident in the results.

That said, the larger concern is that this (and nearly all trauma studies) overlooks the most distressed individuals. Those who are truly suffering may be too anxious or otherwise or unwell to stray far from their homes, let alone speak to strange foreigners. They may be ostracized to the point they would be unaware of or unwelcome at the types of events where we conducted surveys. They may have committed some act of retribution, general aggression, or other anti-social behavior and be held in jail, outside the ethical bounds of this research. Going through the potential psychosocial effects of SGBV, many similar scenarios arise. The theory presented in this paper may be more accurate than the data suggests, because those with the most severe trauma symptoms are precisely the ones who would be missed by researchers.

Discussion

The purpose of this study was to produce a more precise picture of the impact of SGBV on social capital in northern Uganda. This study tested to see how the two prominent approaches found in the current literature on traumatic experiences fit when the sample was limited to only women and when "trauma" was categorized into SGBV and non-SGBV-related experiences. This study also tried to identify whether PTSD could link the two approaches into a more clear causal story.

What seems certain, according to the data, is that women in northern Uganda have experienced a large number of traumatic events and a large amount of SGBV specifically. The data also suggests there is a very high level of psychological distress, at least as measured by PTSD. So what is the relationship between these findings?

Testing H1: SGBV trauma has a different impact than non-SGBV trauma

First, Table 1 displays evidence that H1 is correct—experiences of SGBV have different psychological and social effects than other types of trauma. The data show

\textsuperscript{16} It is also important to note that respondents may have experienced genuine memory loss about past trauma. This is a problem in all trauma studies that rely on self-reported data.
SGBV experiences lead to a decrease in three social capital component scores (self-blame, social support, and pro-social behavior), as well as the score for total social capital. The statistically significant decrease in social support corroborates the story told by most anecdotal sources on SGBV in Africa wherein stigma and familial and community rejection of survivors is extremely common. On the other hand, this finding contests the SWAY project finding that “being abducted did not impact youth’s overall social support or relationships with family and neighbors. Forced mothers did not report more problems with families or communities” (Annan et al. 2008, viii). Though this study and SWAY both sampled northern Ugandan women, perhaps the effect of being abducted specifically is different enough from general SGBV to explain this contrast. The direct focus on youth also likely contributed.

The most notable evidence of a positive social reaction to trauma (as many trauma studies currently suggest) is seen in the positive and statistically significant coefficient on social trust. This finding is in direct contradiction to the theoretical framework of this paper, but one potential explanation is that women who had experienced more acts of violence could be more likely to 1) report some of the crimes against them and 2) have beneficial interactions with police and other local officials. If this was the case, they may have more trust in these officials than a woman who felt the lower levels of violence imposed on her would not be taken seriously. Because trust is essential to post-conflict stability and economic prosperity, this unexpected finding demands future attention.

Table 2 displays further evidence of a difference between SGBV and other trauma. Scores for total number of traumatic events experienced and SGBV-related events experienced both have a statistically significant positive impact on PTSD scores. But scores of non-SGBV experiences actually have a negative impact on PTSD scores. This result is somewhat surprising. One potential explanation is that SGBV experiences actually have a stronger impact on PTSD scores than we see here. In order for the coefficient on total trauma score to be positive when one of its components (non-SGBV) has a negative effect, the other component (SGBV) must have a larger positive effect. SGBV’s large coefficient (relative to non-SGBV and total trauma) seems to support this intuition. Together, these results support the assertion that SGBV-related experiences have a different and larger psychosocial impact than other types of trauma.

Testing H2: PTSD is an important causal mechanism in the relationship between trauma and social capital

However, the presence of PTSD alone does not imply that H2 should be accepted. H2 being true also requires that PTSD have a negative impact on social capital, and this hypothesis is not supported by the data. The lack of a statistically significant relationship does not necessarily mean that psychological distress has no impact on social capital. It seems more likely PTSD is just not capturing the concept with
enough accuracy. Preliminary tests suggest that when PTSD indicators describing more "objectively debilitating" symptoms are separated and then regressed on social capital the effect becomes significant. This particular analysis was not included in the models of this study, but call for future exploration.

Misreporting and measurement error may also be reducing PTSD's impact on social capital in these regressions. A potential proxy relationship implied in the variable "history of counseling" may support this claim. History of counseling has a negative impact on social capital in every model except social support (where a counselor may well be perceived as a form of social support) and holding public office/serving on a committee. Though this impact is almost never statistically significant, the negative sign is telling and the size of the coefficient relatively large. With a larger sample size, this would probably be more statistically persuasive. Due to both cultural norms and a serious lack of mental health services, receiving counseling is uncommon in Uganda. It seems probable then that the women who have overcome these barriers and received counseling (and willingly admitted they received it) were those who had a particularly substantial psychological need. Thus, history of counseling may serve as a valid proxy for psychological distress. If this is the case, PTSD (or the psychological distress it represents) also has a far greater impact on social capital than this currently data shows.

"Married" may also be acting as a proxy for SGBV experiences. In an ideal quantitative world, the collected data on traumatic experiences would be sufficient. In the real world of northern Uganda, where, legally, domestic violence is "any beating that goes beyond what is reasonable" (Uganda Law Reform Commission 2009, 2010), domestic discord is a deeply uncomfortable topic and many women are prone to downplay or deny any marital abuse. In my experience, on several occasions, an NGO worker provided (unsolicited) information about a woman I was about to interview, but, when questioned, the respondent would report contradictory information. Of course, this example is not conclusive, but, having spent many previous hours with SGBV survivors, there were several indications that respondents did not always answer truthfully.

Data collected by the Uganda Demographic and Health Survey of 2006 also suggest a high likelihood that respondents in my study were not willing to report the extent of their experiences. This credible, nationwide study found that 60% of Ugandan women had experienced physical violence from family members since the age of fifteen (Uganda Bureau of Statistics 2006, 287). That is 10% higher than the findings of this study, but the national survey (and Amnesty International) still suggests their numbers are too low due to underreporting (Ibid., 285; Amnesty International 2010, 26). Two-thirds of women who reported abuse say it was inflicted by their intimate partner (Uganda Bureau of Statistics 2006, 287). The same study also found that, of the 39% (compared to the 26% found in this study) of women between ages fifteen and forty-nine who had experienced sexual violence, almost half reported the per-
petrator was their intimate partner (Ibid., 291–92). This corroborating data suggests marital status alone may tell nearly as much about a woman’s experience with SGBV than her own words will. Therefore, the large (relative to “single”) negative impacts of “married” and “single” indicate SGBV may have a much larger effect than is currently observed in this data.

In sum, the impact of SGBV on social capital may be more complex than suggested by the framework currently offered by prominent approaches in the literature. This study attempted to add precision to the available framework by isolating the impact of experiencing SGBV from other experiencing other types of trauma. The data suggest that when trauma is not treated as a “lump sum,” certain experiences have a strong impact on both individual psychology and broader social capital. This study also hypothesized that PTSD could be a key causal mechanism in clarifying the causal story in the current literature on traumatic experiences. However, the data did not support this portion of the theory.

Post-conflict literature—be it psychology, sociology, political science, economics—needs to move toward developing better measures rather than continue the back-and-forth of whether or not psychosocial interventions are indeed necessary. Does sexual and gender-based violence have a unique impact on social capital? The results of this study suggest the answer to this question is “yes.” But it finds an equally significant need for better organization and much more nuanced methods and measurements of the complicated relationships between variables of psychological distress and social capital.

REFERENCES


sylvania Press.


Clancy, Mary Alice and Brandon Hamber. 2008. Trauma, peacebuilding, and development: An overview of key positions and critical questions. Paper presented at the Trauma, Peacebuilding, and Development Conference, September 9–11, in New Delhi, India.


Mels, Cindy, Ilse Derluyn, Eric Broekaert and Yves Rosseel. 2009. Screening for traumatic exposure


presented at the Annual Meeting of the International Society for Traumatic Stress Studies, San Antonio, TX, October.

## APPENDIX

### Table 1: Direct Effect of SGBV on Social Capital Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Models</th>
<th>1: Total social capital</th>
<th>2: Self-blame</th>
<th>3: Social support</th>
<th>4: Social trust</th>
<th>5: Pro-Social behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td></td>
<td>139.554*** (12.589)</td>
<td>30.529*** (4.335)</td>
<td>39.09*** (3.978)</td>
<td>22.831*** (3.086)</td>
<td>41.116*** (4.667)</td>
</tr>
<tr>
<td>SGBV trauma (# events experienced)</td>
<td>-2.057* (1.117)</td>
<td>-0.272 (0.458)</td>
<td>-0.801* (0.409)</td>
<td>0.556* (0.286)</td>
<td>-0.34 (0.506)</td>
<td></td>
</tr>
<tr>
<td>Non-SGBV trauma (# events experienced)</td>
<td>-0.147 (0.566)</td>
<td>-0.009 (0.208)</td>
<td>0.058 (0.179)</td>
<td>-0.124 (0.143)</td>
<td>0.089 (0.243)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.097 (0.214)</td>
<td>0.042 (0.064)</td>
<td>-0.012 (0.064)</td>
<td>-0.026 (0.05)</td>
<td>0.102 (0.078)</td>
<td></td>
</tr>
<tr>
<td>History of counseling</td>
<td>-3.966 (4.658)</td>
<td>-1.027 (1.586)</td>
<td>0.402 (1.656)</td>
<td>-1.16 (1.05)</td>
<td>-1.745 (1.844)</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>1.287 (1.608)</td>
<td>0.647 (0.448)</td>
<td>0.887** (0.434)</td>
<td>-0.175 (0.407)</td>
<td>-0.137 (0.687)</td>
<td></td>
</tr>
<tr>
<td>Income (in thousands of Ugandan shillings)</td>
<td>2.435 (1.613)</td>
<td>1.109* (0.615)</td>
<td>0.708 (0.495)</td>
<td>-0.822* (0.417)</td>
<td>0.390 (0.698)</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>-3.419 (4.622)</td>
<td>-3.249 (1.933)</td>
<td>-2.108 (1.698)</td>
<td>0.849 (1.146)</td>
<td>-0.084 (2.011)</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>-2.215 (5.11)</td>
<td>-1.366 (2.168)</td>
<td>-5.017*** (1.833)</td>
<td>-1.279 (1.233)</td>
<td>5.167 (2.133)</td>
<td></td>
</tr>
<tr>
<td>Number of children for whom you are currently main caregiver</td>
<td>-0.136 (0.797)</td>
<td>-0.338 (0.354)</td>
<td>-0.008 (0.26)</td>
<td>0.28 (0.179)</td>
<td>-0.226 (0.317)</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>76</td>
<td>76</td>
<td>76</td>
<td>76</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.1407</td>
<td>0.1485</td>
<td>0.2360</td>
<td>0.2281</td>
<td>0.1369</td>
<td></td>
</tr>
<tr>
<td>SER</td>
<td>17.611</td>
<td>6.57</td>
<td>5.576</td>
<td>4.049</td>
<td>6.778</td>
<td></td>
</tr>
</tbody>
</table>
## Table 2: Impact of Traumatic Experiences on PTSD Score

<table>
<thead>
<tr>
<th>Variable</th>
<th>Models</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>Intercept</td>
<td>34.785***</td>
</tr>
<tr>
<td></td>
<td>(7.462)</td>
</tr>
<tr>
<td>Total # traumatic events experienced</td>
<td>0.464*</td>
</tr>
<tr>
<td></td>
<td>(0.245)</td>
</tr>
<tr>
<td>SGBV trauma (# events experienced)</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>--</td>
</tr>
<tr>
<td>Non-SGBV trauma (# events experienced)</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>--</td>
</tr>
<tr>
<td>Age</td>
<td>-0.069</td>
</tr>
<tr>
<td>(0.134)</td>
<td>(0.132)</td>
</tr>
<tr>
<td>History of counseling</td>
<td>0.994</td>
</tr>
<tr>
<td>(2.825)</td>
<td>(2.771)</td>
</tr>
<tr>
<td>Education</td>
<td>0.614</td>
</tr>
<tr>
<td>(0.939)</td>
<td>(0.898)</td>
</tr>
<tr>
<td>Income</td>
<td>1.851</td>
</tr>
<tr>
<td>(1.155)</td>
<td>(1.209)</td>
</tr>
<tr>
<td>Married</td>
<td>4.833</td>
</tr>
<tr>
<td>(3.423)</td>
<td>(3.901)</td>
</tr>
<tr>
<td>Single</td>
<td>2.978</td>
</tr>
<tr>
<td>(3.438)</td>
<td>(3.295)</td>
</tr>
<tr>
<td>Number of children for whom you are currently main caregiver</td>
<td>0.683</td>
</tr>
<tr>
<td>(0.513)</td>
<td>(0.478)</td>
</tr>
<tr>
<td>n</td>
<td>76</td>
</tr>
<tr>
<td>R²</td>
<td>0.1537</td>
</tr>
<tr>
<td>SER</td>
<td>11.464</td>
</tr>
</tbody>
</table>
Table 3: Indirect Effect of SGBV on Social Capital Variables via PTSD

<table>
<thead>
<tr>
<th>Variable</th>
<th>Models</th>
<th>Variable</th>
<th>Models</th>
<th>Variable</th>
<th>Models</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2: Self-blame</td>
<td>3: Social support</td>
<td>4: Social Trust</td>
<td>5: Pro-Social Behavior</td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>29.646*** (3.866)</td>
<td>39.772*** (4.190)</td>
<td>19.228*** (3.154)</td>
<td>39.778*** (4.956)</td>
<td></td>
</tr>
<tr>
<td>PTSD score</td>
<td>-0.061 (0.73)</td>
<td>-0.054 (0.059)</td>
<td>0.013 (0.045)</td>
<td>0.034 (0.069)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.042 (0.074)</td>
<td>-0.012 (0.065)</td>
<td>-0.025 (0.049)</td>
<td>0.107 (0.077)</td>
<td></td>
</tr>
<tr>
<td>History of counseling</td>
<td>-1.149 (1.694)</td>
<td>-0.043 (1.486)</td>
<td>-1.269 (1.118)</td>
<td>-2.056 (1.757)</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>0.721 (0.643)</td>
<td>1.048* (0.564)</td>
<td>0.054 (0.425)</td>
<td>-0.125 (0.667)</td>
<td></td>
</tr>
<tr>
<td>Income (in thousands of Ugandan shillings)</td>
<td>1.078 (0.665)</td>
<td>0.712 (0.593)</td>
<td>-0.899** (0.447)</td>
<td>0.279 (0.702)</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>-3.442* (1.875)</td>
<td>-2.459 (1.669)</td>
<td>0.453 (1.256)</td>
<td>-0.552 (1.974)</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>-1.383 (2.025)</td>
<td>-5.023*** (1.781)</td>
<td>-1.229 (1.341)</td>
<td>4.949** (2.107)</td>
<td></td>
</tr>
<tr>
<td>Number of children for whom you are currently main caregiver</td>
<td>-0.381 (0.296)</td>
<td>-0.058 (0.265)</td>
<td>0.147 (0.199)</td>
<td>-0.279 (0.314)</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>76</td>
<td>76</td>
<td>76</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.1419</td>
<td>0.1905</td>
<td>0.1209</td>
<td>0.1341</td>
<td></td>
</tr>
<tr>
<td>SER</td>
<td>6.4984</td>
<td>5.6969</td>
<td>4.2884</td>
<td>6.738</td>
<td></td>
</tr>
</tbody>
</table>
### Table 4: Type and Reported Frequencies of Non-SGBV Traumatic Events

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Witness of beatings or torture</td>
<td>75 (90.4)</td>
</tr>
<tr>
<td>A frequent or regular lack of food or water</td>
<td>73 (89)</td>
</tr>
<tr>
<td>Witnessed a serious accident</td>
<td>68 (81.9)</td>
</tr>
<tr>
<td>Serious physical injury of family member or friend</td>
<td>61 (74.4)</td>
</tr>
<tr>
<td>Someone shot bullets at them or their home</td>
<td>52 (62.6)</td>
</tr>
<tr>
<td>Witness of killing</td>
<td>47 (56.6)</td>
</tr>
<tr>
<td>Disappearance or kidnapping of other family member or friend</td>
<td>46 (56.1)</td>
</tr>
<tr>
<td>Forced to carry heavy loads or other forced labor</td>
<td>45 (54.9)</td>
</tr>
<tr>
<td>Another family member or friend was murdered or died violently</td>
<td>43 (51.8)</td>
</tr>
<tr>
<td>Disappearance or kidnapping of spouse or child</td>
<td>39 (50.7)</td>
</tr>
<tr>
<td>Abduction</td>
<td>41 (50)</td>
</tr>
<tr>
<td>Displaced from home</td>
<td>39 (47.6)</td>
</tr>
<tr>
<td>Betrayed and put at risk of death or injury by someone known</td>
<td>38 (45.78)</td>
</tr>
<tr>
<td>Serious accident (vehicle, machinery, fire etc.)</td>
<td>37 (44.6)</td>
</tr>
<tr>
<td>Spouse or child was murdered or died violently</td>
<td>31 (40.3)</td>
</tr>
<tr>
<td>Family member or friend was raped or defiled</td>
<td>24 (36.4)</td>
</tr>
<tr>
<td>Forced to physically harm someone who is not a family member or friend</td>
<td>28 (34.2)</td>
</tr>
<tr>
<td>Witness of rape or sexual abuse</td>
<td>21 (25.6)</td>
</tr>
<tr>
<td>Forced to physically harm a family member or friend</td>
<td>20 (24.1)</td>
</tr>
<tr>
<td>Prevented from burying friends or family members</td>
<td>(18.3)</td>
</tr>
</tbody>
</table>

### Table 5: Type and Reported Frequencies of SGBV Traumatic Events

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threats and other verbal abuse from a family member</td>
<td>64 (77.1)</td>
</tr>
<tr>
<td>Beating to the body from a family member</td>
<td>41 (49.4)</td>
</tr>
<tr>
<td>Attack with a panga (machete) or other weapon</td>
<td>36 (43.4)</td>
</tr>
<tr>
<td>Tied up or locked up as a prisoner</td>
<td>32 (39)</td>
</tr>
<tr>
<td>Beating to the body from a non-family member</td>
<td>26 (31.3)</td>
</tr>
<tr>
<td>Rape or defilement (rape of minors)</td>
<td>26 (31.3)</td>
</tr>
<tr>
<td>Made to have sex with their husband when they did not want to</td>
<td>19 (25.7)</td>
</tr>
<tr>
<td>Sexual abuse or sexual humiliation</td>
<td>15 (18.1)</td>
</tr>
</tbody>
</table>
Introduction

What is the significance of the discovery of the atom? The knowledge that everything in the universe can be broken down into these fundamental particles, the smallest units of matter, has revolutionized the scientific community. If we understand what affects the foundations of the world, we can better understand how it functions as a whole. The same principle can be applied to economic development. The atom of an economy is the entrepreneur—the individual who sees an opportunity in a problem, has an idea on how to improve it, and creates her own small enterprise. One of the issues with trying to promote economic growth within developing countries is we do not often focus our analysis and efforts on the atoms, which in this research is entrepreneurial activity. The work of microfinance organizations has highlighted the benefits of small business on individual welfare and overall economic growth, but there has not been enough emphasis on what drives those individuals to begin such ventures. If we can better learn what impacts the individual decisions of entrepreneurs, whose ventures comprise the aggregate economy so often studied in development, we can gain additional tools for improving the quality of life for all those living in poverty.

One of the greatest factors impacting entrepreneurship is risk. As Venkataraman states, “bringing new products or markets into existence always involves some element of downside risk” (1997). Indeed, risk often provides the opening for an entrepreneur to capitalize on others’ aversion. Risk is the very force that propels developed economies; stock markets, future prices, and investment capital all center on the prospect of high-risk, high-yield ventures. In developing nations, however, these driving
forces of growth are generally nonexistent. The capacity to deal with risk is underdeveloped. This risk aversion often extends to the individual level. Many individuals are unable or unwilling to engage in crucial poverty-reducing entrepreneurship, because such activities involve levels of risk that reach beyond the scope of their coping abilities and resources. The communities in which those individuals live, however, offer important mechanisms by which social safety nets may be administered, both in the formal and informal sector. Social risk management is, at this level, intertwined with social capital and the underpinnings of community life. In turn, entrepreneurship is related to both risk and, as entrepreneurs are individuals living within communities, social capital. This paper seeks to explore the impact that social capital has on levels of risk-taking and hence, entrepreneurship. It thus provides insight into the basest elements of economic growth.

**Literature Review**

To understand the basic unit of economic growth, the entrepreneur, it is important to understand the context in which an entrepreneur goes about her business; measurements of social capital operationalize the strength of social bonds between people, providing a way to empirically describe an entrepreneur’s context. Social capital is measured by the basic notion of social exchange, which encompasses trade, the sharing of experiences, and all human contact that takes place over the vast interpersonal networks created by these exchanges (Fafchamps 2006). The strength of these networks can facilitate economic growth.

In determining the most important elements of the study of social capital, two trends have been established; measuring social capital either in terms of network relationships, i.e. membership in clubs or organizations (Putnam 1993, Eroglu 2009), or measuring social capital in terms of trust in other individuals or legal institutions, thus manifesting itself in civic cooperation (Fafchamps 2006, Knack and Keefer 1997). However, the reach of social capital is not limited to the social sphere. Nations that have more social capital, according to the second definition, have been shown to have better overall economic growth (Ibid.); thus, it is appropriate to expect the same to be true of individual economic endeavors.

Social capital reduces the costs of doing business; this includes facilitating trade by reducing the transaction costs of contract enforcement. It also reduces search costs of exchange, with interpersonal networks providing a circuit for information circulation (Fafchamps 2006). Social capital can in itself be considered an asset, accumulated throughout an individual’s lifetime and subject to depreciation; thus, the individual can expect a degree of return on their social capital, although the extent is unknown (Gertler 2006, Garcia et al. 2008).

Risk is daunting to the individual entrepreneur because they are constantly faced with situations where the outcome is unknown. Holzmann describes this risk aver-
sion, or the reluctance of individuals to engage in high-risk or even medium-risk activities, as prevalent among the poor (2001). The most critical aspect of risk aversion for those in the developing world is the problem of consumption smoothing. Risky situations can lead to income variability, which leads to shocks in consumption, assuming there are no smoothing mechanisms. In this setting, even small shocks can lead to severe destitution (Holzmann 2001). Krishna shows that income diversification (reducing risk) is the greatest factor in the ascent from poverty, while vulnerability to risk, particularly for illness, is the greatest factor in the descent into poverty (2010). For this reason, those in poverty are extremely risk averse. Additionally, research on income risk among rural communities demonstrates that poorer households pursue less risk-intensive options, impacting their production and investment decisions (Morduch 1990, Alderman and Paxson 1992, Rozenwieg 1993). These tendencies toward risk aversion have been shown to have negative consequences for both individuals and the economies of developing countries. Ventures with the highest risk are also generally associated with the highest yields, both on a macro-level, where high-risk capital fuels economic growth (Obstfeld 1994) and for individual returns, as risk aversion deters the adoption of the most rewarding technologies and practices for production (Rosenweig 1993, Holzmann 2001).

Developing countries, because of their particular vulnerability to risk, must seek out ways to manage risk. Recent literature has been keen on identifying the mode of risk management among people in poverty. As may be expected, comprehensive government welfare programs and formal insurance institutions have failed to reach the majority of citizens of the developing world. Budget insolvency, political instability, and lack of infrastructure have blocked access for those who need it most (Morduch 2006). Morduch and Conning (2002) describe how individuals often rely instead on informal risk-sharing activities, particularly those centered on communities. Platéau shows that informal insurance can be successful in reducing risk because of the quality of connections that are established within communities (1997). Reciprocal gift giving is one major aspect of these activities, but they also include remittances from migrants, family dowries, and social norms for care of the elderly and sick. Morduch and Conning also describe more private insurance mechanisms, such as individual savings, which can take the form of either monetary or physical stocks like cattle or land (2002). Morduch argues that this level of informal insurance can often be more effective than other means, because it solves the classic issue of asymmetrical information common with insurance and risk management everywhere. Social risk mitigation can also result in the generation of new social capital through networking and bonding (Conning 2002).

Social capital aids entrepreneurs by mitigating risk in community settings; however, some problems may arise in ways that weaken the protection of strong social capital levels in a community. For example, an earthquake or another type of disaster
may occur and wipe out large portions of a community, leaving no collective pool for insurance provision (Holzmann 2001, Morduch 1996). These types of challenges have been investigated in empirical studies, which conclude that social capital and social risk mitigation are not always effective in decreasing poverty, mainly due to a lack of resources to reciprocate help, personal pride, and widespread, covariant shocks (Eroglu 2009, Morduch 1996, Alderman and Paxson 1992). One example, involving health risks, showed that measured elements of informal social insurance are unable to cover low-frequency and high-loss events such as adult disability; those within well-established, well-connected communities fared no better than those without (Gertler 2006). However, research involving child nutrition showed that in cases involving idiosyncratic risks, even large ones, households with greater social capital were better able to cope with losses (Carter 2003). These varied studies demonstrate the difficulty of measuring social capital, and of constructing social safety nets on an informal basis that can mitigate large or covariant risks.

One purpose of strong social capital is the anticipated increase of entrepreneurial activity. Aside from research related to general risk taking, the direct literature on entrepreneurship is as varied and unique as the businesses of entrepreneurs. Yet, from a business standpoint entrepreneurship involves the endowment of existing resources with new wealth-producing capacity (Drucker 1985). Innovation is a key part of economic growth; entrepreneurs have traditionally been associated with innovation (Venkataraman 1997). While any business activity should help lift individuals out of poverty through increased income and economic output, lasting and long-term growth can only come through innovation and technological improvement (as per the Solow growth model). Venkataraman points out that despite the lack of agreement on a definition for entrepreneurship, it follows from the premise that markets are most often inefficient to some degree, and it is on these inefficiencies that entrepreneurs seek to capitalize (1997). In this manner, entrepreneurship not only creates wealth and economic growth for individuals, but improves the market functionality of the economy as a whole.

Many scholars of entrepreneurship have also discussed the inherent relationship of entrepreneurship and risk. There is a high level of uncertainty surrounding any new idea or venture, which often concerns its feasibility, desirability, marketability, and so forth (Amit et al. 1990, Henrekson 2010). As levels of risk increase, holding entrepreneurial skill constant, entrepreneurs seek more and more to spread that risk throughout their network, mainly through seeking investors (Amit et al. 1990). If entrepreneurs are more confident in their own abilities, they will seek less risk-sharing, wishing to capture as much of the profits for themselves as possible. The tie here to social capital is evident: The larger and stronger the social network, the more investment options an entrepreneur has at her disposal to mitigate risks as necessary.
Two recent publications have explicitly examined the role of social capital on entrepreneurship. The first, by Bauernschuster et al. (2010), looks at the effect of club membership on the likelihood of being an entrepreneur. As entrepreneurs face resource constraints (i.e., a lack of capital for new ventures), they must find ways to involve others and utilize their capital. Bauernschuster’s study highlights the importance of informal social networks in small communities (and likewise, in the developing world) that lack more formal venture capital institutions. The second study focuses not on the effects of social capital on financing a small business, but on identifying the opportunity to create one in the first place. Ramos-Rodriguez et al. find that, despite the importance of an entrepreneur’s own skill and know-how, external knowledge is also essential for business creation. Individuals with more access to social capital—i.e. those who know more people—will be exposed to more ideas and possible business opportunities (2010). Interestingly, weak ties to individuals outside an entrepreneur’s immediate circle are more likely to produce opportunity than strong, inner-circle ties (Singh 1999). In each of these studies, social capital has been shown to have a positive effect on the incidence of entrepreneurship.

While this is encouraging, the current research has not yet made a sufficient empirical link between social capital and entrepreneurship in terms of the promotion of risk taking. Holzmann comes closest, claiming that good social risk management programs should accomplish two things: the enhancement of livelihood and the encouragement of risk-taking (that is, entrepreneurship) (2001). The purpose of this paper is to expand on that latter goal, and to explore the consequences of individual risk-taking, in particular the risks associated with small business start-ups. These higher risk ventures can make a substantial difference in the trajectory of poverty for the poorest of the poor, contributing to economic success and chronic poverty alleviation. Thus, we seek here to address the gap in current literature of social capital’s effects on risk-taking ventures, connecting the realm of community driven social security with potential growth-fueling entrepreneurship.

**Theory and Hypothesis**

We argue that social capital mitigates risk. Before testing this relationship, we must define two types of risk: exogenous and endogenous. The failures of community-based and informal social insurance to help individuals cope with shocks are caused by exogenous risks—random, unforeseen events caused by circumstances beyond an individual’s control and not related to an individual’s choices or actions. Examples of exogenous risk include both idiosyncratic shocks, like accidents, illness, or sudden unemployment, and covariant shocks such as epidemics, famines, or general economic crises.

The other type of risk we identify is endogenous risk, that is, risk associated with actions deliberately undertaken by the individual, and of which the individual
is at least partially aware prior to the action. Shocks classified under endogenous risk include the potential for a new business to fail or for a new type of crop or technique to yield less than the expected amount. Of course, some of the exogenous shocks are correlated to an individual's choices—the propensity to become ill is affected by nutritional choices or by how often one visits the doctor; however, consideration of these risks are not generally incorporated into decision making, and furthermore, most households in developing countries have little leeway in such choices in the first place. True endogenous risks must be associated with calculated decisions.

The utility of classifying endogenous risk allows for the ability to assess a cost-benefit (risk-benefit) analysis. However, without the benefits of social capital, many individuals would not be able or want to undertake such endogenous risks, because they are otherwise vulnerable to exogenous shocks and do not have sufficient coping mechanisms in the case of endogenous failures.

Drawing from the literature discussed above, it is easy to see the first link in the entrepreneurship chain begins with social capital: social interactions create resources that individuals may utilize in times of variability and need. Although levels of support are varied, and not all informal insurance schemes are successful, social capital creates a better safety net than would exist for a single individual. Considering the often corrupt state of many developing countries, even access to most government welfare programs is based on some degree of personal connections. In general, if an individual feels more secure and less vulnerable to exogenous shocks, he or she will be less risk averse, and more likely to undertake ventures with a degree of endogenous risk. If, as was found in much of the literature, community or family connections satisfy this need for risk management, then social capital has an important impact on encouraging risk-taking behavior. There is also the potential for community-based insurance against the failure from endogenous risk; however, in this analysis, the most beneficial role for social, capital-based safety nets is the peace of mind that results in a greater willingness to take on new ventures.

A second and more direct impact of social capital on entrepreneurship uses trust as a measure of social capital (Knack and Keefer 1997). As stated in the earlier discussion on the definitions of social capital, trust in other individuals, as well as in national institutions and cooperation, facilitates trade. Trust, if appropriately placed, reduces the transaction costs associated with exchange, namely, the risk of nonpayment or deception, that must usually be made up for by formal enforcement and contracting. Thus, if there is more trust in a community, there should be more trade, providing more opportunity and demand for small businesses and other non-farm risk-taking endeavors. Similarly, social capital is inherently networked nature provides a larger and more accessible market for these ventures, adding yet another direct effect on entrepreneurship. This also corresponds to an improved degree of endogenous risk-management: The more people in an individual's network, and the stronger the social
capital bonds between them, the availability of potential investors increases (Amit et al. 1990, Bauernschuster et al. 2010), thus dividing the impact of possible failure. This concept fits well with Platteau's model of balanced reciprocity (1997): If one invests in others' opportunities, one can more easily expect an eventual return on investment. While low-income levels and lack of formal mechanisms may hinder this type of investment in many situations, the possibility remains for even a minor positive impact of social capital on risk-taking.

Entrepreneurship is an enigmatic phenomenon that is thought to be based more on natural-born instinct and intuition than on outside factors. Yet a systemic study of entrepreneurs, the vital atoms of economic growth, and what affects them cannot be neglected if we are to understand this key element of economic development. We assert that external factors affect entrepreneurship, not the least of which is social capital. Thus it is our hypothesis that increasing social capital will result in higher levels of entrepreneurship.

Methods and Measures

Social capital is most commonly measured by calculating associational membership and/or trust. This type of measurement quantifies social capital as a cause or consequence resulting from attitudes of cooperation. The majority of literature focuses solely on these two aspects; however, economic activity and interactions can be a critical source of social capital (Garcia et al. 2008). Relationships of trust can be generated in these experiences, specifically in developing countries, because individuals recognize that the efficiency attained in economic activity cannot be reached without the cooperation of the majority. Therefore, we feel it necessary to use a more encompassing definition of social capital. Also, in many measures of social capital, true capital is not accounted for. In order for something to be considered capital it must be produced, it must be productive, and it must be lasting (Garcia et al. 2008). Therefore, in our model we use a measure of social capital that incorporates both economic activity and the measurement of true capital.

As our theory states, social capital should have a positive effect on entrepreneurial activity. In the broader sense, entrepreneurial activity is activity of people who undertake innovative ventures, financing and engaging in business in an effort to create economic goods. In order to quantify such activity we are using the variable total early stage entrepreneurial activity (TEA) from Global Entrepreneurship Monitor (GEM), which uses survey data to capture economic activity. TEA is the percentage of the adult population (18-64) that are currently nascent entrepreneurs or owners-managers of a new business that has operated for at least three but no more than forty-two months. This measurement allows us to capture all people who are in pursuit of new ventures and people who have recently engaged in new ventures, capturing a larger range of our definition of entrepreneurial activity. Most commonly within the
literature, entrepreneurial activity only encompasses the number of newly registered businesses as a measurement of entrepreneurial activity. This does not capture any informal activity, which is most common in developing countries, nor does it capture nascent activity. By only measuring the number of newly registered companies, we would fail to capture the full effect of social capital on entrepreneurial activity. We are not attempting to demonstrate that businesses’ success is dependent on social capital; rather, we posit that social capital facilitates entrepreneurship. By including nascent entrepreneurs, we can accurately measure this activity.

Various controls are used in this model to more fully isolate the effect of social capital on entrepreneurial activity. To control for fear of risk taking, we include a fear of failure variable. GEM captures this and is measured as the percent of the adult population who indicate that fear of failure would prevent them from starting a venture. We define informal investment as the percent of the adult population that has provided money or economic assistance for new businesses started by someone else in the past three years. The Human Development Index (HDI) allows us to control for the internal conditions of the state. HDI is a composite measure of achievements in three basic dimensions of human development: a long and healthy life, access to education, and a decent standard of living. For ease of comparability, the average value of achievements in these three dimensions is put on a 0 to 1 scale. Though our measurement of entrepreneurial activity encompasses more than just state monitored activity, it is important to control for state regulations on starting new businesses. State regulations may create impediments at certain levels of business, thus deterring activity. Therefore, we include the number of start-up procedures required to start a business, as measured by the World Bank. Start-up procedures are those required to start a business, including interactions to obtain necessary permits and licenses and to complete all inscriptions, verifications, and notifications to start operations. In the same vein, we include a variable for the average number days required for someone to complete these procedures, controlling for increased opportunity costs of lengthy start-up procedures and bureaucratic backlog. This has been observed by de Soto to have a negative effect on rates of business creation (2000). Both variables are included because, while a state may not have a large number of regulations, if the processing time is unreasonably long, the result will be the same in discouraging entrepreneurship.

To test whether social capital has an effect on entrepreneurial activity, we use a regression model. With entrepreneurial activity as our dependent variable and social capital as our independent variable, we are able to examine and measure their relationship. Fifty-six countries, both from the global north and global south, are used in our analysis. Because of missing and inconsistent data by year, we are unable to execute time series data. Thus, we use an average from 1996 to 2005 of both social capital and entrepreneurial activity. Taking the average smooths the effects of an isolated incidence that may have happened on a given year, such as 9/11 in 2001.
time series data, we would be able to control for such events; however, because of inconsistent data, we are unable to use such analysis, which led us to use an average over nine years.

In addition to these two variables, we use a number of controls. If a country has too many procedures, regardless of the strength of social capital, it has the potential to impede entrepreneurial activity; therefore, we hold number of start-up procedures constant. If a country has too few procedures it may be a sign of an inept bureaucracy, which taking the logic further exhibits systemic problems within the country. Thus, we use a quadratic formula for specifying the number of start-up procedures. The number of days it takes, on average, to start a business is controlled for as well. It is also squared, because, as with number of start-up procedures, there is likely to be an optimal minimum number of days that will best encourage business start-up and entrepreneurship. Fear of failure is included to control for personal attitudes toward entrepreneurship. For example, if I have score high in social capital but my fear of failing in an endeavor is also high, I will not start a business despite my level of social capital. Thus, by holding fear constant, we come closer to isolating social capital and entrepreneurial activity. HDI allows us to control for poor conditions in general. A broken system will impede entrepreneurial activity no matter how high social capital ranks in the community. Thus, by including HDI, we hold internal conditions constant. Finally, controlling for informal investment removes wealth of the community constant. A community that is wealthy will be more prone to lend money, making entrepreneurship easier; thus, these countries would inevitably have more entrepreneurial activity despite their social capital scores. Therefore, by controlling for this, we see how social capital affects entrepreneurial activity despite the cash flow of a community.

**Analysis and Discussion**

The primary results of the test of our model show a significant positive effect of social capital on entrepreneurial activity, holding all else constant, this supports our hypothesis. We use a robust least squares regression model with variables for entrepreneurship and social capital, and with control variables for the number of start-up procedures, for the fear of failure in society, for informal investments, and for average time it takes to start a business in days. Our unit of analysis is countries, encompassing a total of fifty-six countries with comprehensive data. The summary of each of these variables is shown in Table 1. It is interesting to note that the mean percentage of adults engaged in nascent entrepreneurship is 11 percent, which is quite high and may indicate a high turnover rate for new businesses.

In forming the final model, we tested several variations of regressions to determine the individual roles of each variable. An initial simple regression showed resulted in an R-squared of 0.004, suggesting that social capital explains 0.4 percent
of the variation in entrepreneurial activity. The slope coefficient for social capital was 0.00653, with a standard error of 0.0112, meaning that with a unit increase in our measure of social capital, a 0.681 percent increase in entrepreneurial activity is expected; however, this standard error does not generate a p-value that is low enough to allow us to reject the null hypothesis, indicating that this relationship is statistically insignificant (see Table 3, Regression 1).

Next, a multivariate regression was run between social capital and entrepreneurial activity, including all of the control variables in this research. Because we expect that there will be an optimal number of start-up procedures and number of days to start a business (as explained in the previous section), we also include the quadratic measure for both variables. This model showed a statistically significant positive relationship between social capital on entrepreneurial activity, holding all else constant (see Table 3, Regression 2). This regression resulted in an R-squared of 0.679, meaning that the independent variables used explain 67.9 percent of the variance in entrepreneurial activity. In this model, the slope coefficient for social capital was 0.0198, meaning that with a one standard deviation increase in our measure of social capital, there is an expected 1.208 percent increase in entrepreneurial activity (that is, 1.208 percent more adults would be engaged in new small businesses) holding all else constant. The standard error for this relationship is 0.00748, from which a p-value of 0.011 is produced, allowing us to reject the null hypothesis that there is no relationship between social capital and entrepreneurial activity with 99.9 percent confidence.

In checking for multicollinearity, we found a high correlation between the number of start-up procedures and average time to start a business. This is a logical result, given both are measures of similar restrictions on the ease of doing business. To determine which is a more accurate predictor of entrepreneurship, we ran two models, each including only one of these measures (Table 3, Regressions 4 and 5). Both the linear and quadratic measures for both variables were included in each test. Given the results of these regressions, and the lack of significance of the number of days required to start a business, we decide to keep only the significant measure of number of start-up procedures for our final model. These results imply that the combined monetary and opportunity costs of additional start-up procedures outweigh the simple opportunity costs of the additional days required for business creation.

Our final model is then Regression 5 (Table 3) showing the relationship between social capital and entrepreneurial activity, with the following controls: Number of start-up procedures, number of start-up procedures squared, fear of failure, and informal investment. This model supports our hypothesis and demonstrates the high significance of the effect of social capital on entrepreneurship but also demonstrates the importance of other business-related factors. The slope coefficient for social capital is 0.0192, meaning that for a unit increase in social capital there is an expected 0.0192 percent increase in entrepreneurial activity. To understand this substantively, a move-
ment of one standard deviation in social capital will result in a 1.17 percent increase in entrepreneurial activity. This is a modest, but substantively significant change: If an additional 1 percent of individuals are engaging in small business activity, additional jobs are created, and the economy as a whole will increase proportionally.

The multicollinearity test also revealed high levels of correlation for the Human Development Index (Table 2). To address this issue, we used the HDI to parse out the data between high and middle-to-low-developed countries instead of a control variable, providing a more comparable and interesting frame of analysis. We used our final model and ran it using the two sets of observations, first for countries with above high human development levels and then for those with below middle human development (using the HDI distinctions). The results are shown in Table 4.

While dividing the sample results in a loss of statistical significance for the second group (below middle), some of the coefficients still illustrate an interesting difference in effects. The parsed out regressions show that social capital has nearly twice the effect on entrepreneurship for those countries that have below middle human development. One potential implication of this result is that entrepreneurship in less-developed countries is more dependent on informal social connections for its success. This supports our theory and hypothesis in that area with less comprehensive social institutions, including those that contribute to risk management, social capital is the crucial mechanism to prompting entrepreneurship.

Conclusion

As with all observational analysis, we acknowledge there is a potential problem with endogeneity present in our model. There are reasons to believe that increased entrepreneurship actually leads to increased social capital, reversing the causal chain we have presented. While business relationships undoubtedly increase levels of social interaction, we feel that because our measure of entrepreneurship focuses on very new businesses, it requires a degree of social capital beforehand. We are thus reasonably confident that our model reflects the true direction of effects, with increased social capital prompting entrepreneurship. In terms of the data itself, we also acknowledge that these results are limited by the quality and methodology of data collection. Further, we acknowledge that our results may be affected by omitted variable bias. Despite these limitations, we feel justified that our selection of data accurately tests our hypothesis.

The results of our statistical analysis confirm the hypotheses put forth above: Social capital has a statistically significant, albeit modest, effect on entrepreneurial activity. This finding has important, real-world applications: Because formal insurance is not available to a large portion of the world's population, and because insurance, as a method of risk-management, is requisite for economic growth, any replacement for insurance in a developing world setting will be helpful in increasing economic activ-
ity. We have shown that informal methods of risk-management via social capital have a positive impact on entrepreneurship, the atomic unit of economic growth. Thus, fostering an increase in social capital may be an alternative way to promote poverty-reducing growth, from an individual level up to the aggregate. Because of the potential implications of this study, more research is needed both in establishing better measurements of social capital and in the analysis of data relating to social capital.

REFERENCES


GLEAVE, PETREY, and CARROLL


APPENDIX

Table 1: Summary of Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Observations</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Activity</td>
<td>77</td>
<td>11.04065</td>
<td>6.899262</td>
<td>3.1</td>
<td>32.47</td>
</tr>
<tr>
<td>Social Capital</td>
<td>80</td>
<td>118.4074</td>
<td>61.01492</td>
<td>31.16338</td>
<td>401.2133</td>
</tr>
<tr>
<td>Social Capital (without Ireland)</td>
<td>79</td>
<td>114.8276</td>
<td>52.27041</td>
<td>31.16338</td>
<td>253.831</td>
</tr>
<tr>
<td>Number of Start up Procedures</td>
<td>185</td>
<td>8.532046</td>
<td>3.251969</td>
<td>1.714286</td>
<td>19</td>
</tr>
<tr>
<td>Fear of Failure</td>
<td>77</td>
<td>33.61962</td>
<td>8.914809</td>
<td>18</td>
<td>65</td>
</tr>
<tr>
<td>Human Development Index</td>
<td>172</td>
<td>0.6204358</td>
<td>0.1876696</td>
<td>0.17675</td>
<td>0.9292</td>
</tr>
<tr>
<td>Informal Investment</td>
<td>75</td>
<td>4.352788</td>
<td>2.966205</td>
<td>0.5</td>
<td>15.5</td>
</tr>
<tr>
<td>Average Time to Start a Business</td>
<td>190</td>
<td>33.81368</td>
<td>57.52744</td>
<td>1</td>
<td>694</td>
</tr>
</tbody>
</table>
### Table 2: Variable Correlation

<table>
<thead>
<tr>
<th></th>
<th>Social Capital</th>
<th>Number of Start up Procedures</th>
<th>Fear of Failure</th>
<th>Human Development Index</th>
<th>Informal Investment</th>
<th>Average Time to Start a Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Capital</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Start up Procedures</td>
<td>-0.1945</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear of Failure</td>
<td>-0.0187</td>
<td>0.2197</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Development Index</td>
<td>0.1923</td>
<td>-0.6281</td>
<td>-0.0425</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informal Investment</td>
<td>-0.0918</td>
<td>0.2556</td>
<td>-0.1616</td>
<td>-0.5505</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>Average Time to Start a Business</td>
<td>-0.1675</td>
<td>0.6730</td>
<td>0.1084</td>
<td>-0.3861</td>
<td>0.0687</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

### Table 3: Robust Least Squares Regressions

<table>
<thead>
<tr>
<th>Entrepreneurial Activity</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Capital</td>
<td>0.00653**(0.0112)</td>
<td>0.0165*(0.00981)</td>
<td>0.0198**(0.00746)</td>
<td>0.0186**(0.00866)</td>
<td>0.0180***(0.00657)</td>
</tr>
<tr>
<td>Social Capital (outlier omitted)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Number of Start up Procedures</td>
<td>-</td>
<td>0.922****(0.205)</td>
<td>1.339**(0.566)</td>
<td>-</td>
<td>-0.973***(0.447)</td>
</tr>
<tr>
<td>Number of Start up Procedures²</td>
<td>-</td>
<td>-</td>
<td>0.0995****(0.0331)</td>
<td>-</td>
<td>0.0946***(0.0265)</td>
</tr>
<tr>
<td>Average Time to Start a Business</td>
<td>-</td>
<td>-</td>
<td>0.0585*(0.0651)</td>
<td>0.133*(0.0837)</td>
<td>-</td>
</tr>
<tr>
<td>Average Time to Start a Business²</td>
<td>-</td>
<td>-</td>
<td>0.000328*(0.000497)</td>
<td>0.000254*(0.000608)</td>
<td>-</td>
</tr>
<tr>
<td>Fear of Failure</td>
<td>-</td>
<td>-</td>
<td>-0.161*(0.0975)</td>
<td>-0.118*(0.0865)</td>
<td>-0.148*(0.0970)</td>
</tr>
<tr>
<td>Informal Investment</td>
<td>-</td>
<td>-</td>
<td>1.094**(0.451)</td>
<td>1.418****(0.455)</td>
<td>1.316****(0.397)</td>
</tr>
<tr>
<td>Human Development Index</td>
<td>-</td>
<td>-</td>
<td>-11.89*(9.067)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Constant</td>
<td>9.584****(1.486)</td>
<td>0.545*(2.083)</td>
<td>19.66***(8.128)</td>
<td>3.364*(3.749)</td>
<td>7.711*(4.044)</td>
</tr>
<tr>
<td>Observations</td>
<td>57</td>
<td>56</td>
<td>55</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.004</td>
<td>0.287</td>
<td>0.679</td>
<td>0.589</td>
<td>0.660</td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1
Table 4: Parsed Sample Based on the Human Development Index

<table>
<thead>
<tr>
<th>Entrepreneurial Activity</th>
<th>High Human Development and above</th>
<th>Medium Human Development and below</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Capital</td>
<td>0.015*** (0.004)</td>
<td>0.038 (0.034)</td>
</tr>
<tr>
<td>Number of Start up Procedures</td>
<td>-1.060** (0.462)</td>
<td>-1.270 (5.038)</td>
</tr>
<tr>
<td>Number of Start up Procedures$^2$</td>
<td>0.091*** (0.030)</td>
<td>0.095 (0.214)</td>
</tr>
<tr>
<td>Fear of Failure</td>
<td>-0.106** (0.044)</td>
<td>-0.058 (0.333)</td>
</tr>
<tr>
<td>Informal Investment</td>
<td>2.017*** (0.349)</td>
<td>0.794 (0.560)</td>
</tr>
<tr>
<td>Constant</td>
<td>4.766* (2.624)</td>
<td>9.733 (25.02)</td>
</tr>
<tr>
<td>Observations</td>
<td>38</td>
<td>18</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.818</td>
<td>0.414</td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1
When Power Does Not Corrupt: NGO Vulnerability and Political Corruption

by Megan Spencer

Abstract

Field research in Uganda winter 2011 led to hypotheses regarding the prevalence of corruption in NGOs. Do NGOs experience internal corruption? As the organizations are often located in highly corrupt political environments, is it possible that NGO–politician partnerships are a potential source of that corruption? Using a countrywide survey with an embedded list experiment, I address both of these questions. I present the vulnerability theory of corruption and hypothesize that increasing amounts of vulnerability correlate strongly with higher amounts of corrupt practice. Due to the information gaps between NGOs and donors, as well as the ubiquity of NGOs in developing nations, I contend that NGOs often experience levels of vulnerability, which lead them to engage in malpractice. Using multiple regression analysis, I conclude that vulnerability does significantly increase corrupt practices; however, the list experiment showed that NGO-politician partnerships are not necessarily a source of that corruption.

Introduction

Sitting with Ugandan Presidential Candidate Norbert Mao, my research partner and I listened as Mao explained his preference for NGO-sponsored programs over the local and national government’s sponsored programs. From his comments, I thought it might be easier to work closely with NGOs, which in many ways are isolated from sluggish bureaucratic processes and often respond quicker to emergencies than local or national government. His thoughts matched my preconception of NGO efficiency and trust; research shows that foreign and domestic donors also prefer NGOs, because the fear of corruption deters investment in government. However, when speaking about the relative efficiency of NGO and governmental organizations, Mao illustrated interesting observations, which imply these two markets may not be as separate or as
different as I previously believed. He has seen briefcase NGOs, corrupt or inefficient organizations, connected to churches where the pastor was rewarded for increasing NGO funds and could be seen driving fancy cars around town. Nonchalantly, Mao also asserted that sometimes politicians use NGO funds to benefit themselves or their friends. These unexpected anecdotes provide the basis of my research.

The popular perception of nongovernmental organizations (NGOs) is that they are isolated and independent of government influence. Donors, beneficiaries, and citizens alike share Mao's opinion—NGOs are supposedly more efficient than the government, because their isolation protects them from procedural and political weaknesses common to the public market. Some have described NGOs as significant checks on government (Flannary and Watt 1999, 529–31) and support the potential of NGOs to act as a "counter-balance" to the "interventionist state" (Szeftel 1998, 234). This means the state has particular political or manmade weaknesses that altruistic and nonprofit organizations can avoid, detect, and make up for. The private and the public spheres were originally separated to avoid the potential for private markets to do just that (Szeftel 1998, 234). Past policy decisions incorporated mechanisms to create and strengthen an independent civil society, which could curb the effect of the state in the private market. The effect most commonly assumed is corruption, defined in this research and many others as "the abuse or misuse of an office of trust for private gain" (Heidenheimer, Johnston, and LeVine 1999, 876). However, Szeftel, quoting Heywood, argues that the dissociation and deregulation of the NGO market could possibly have "helped blur the lines between public and private spheres" (Heywood 1997, 14 in Szeftel 1998, 234), thus obscuring the line where one ends and the other begins. As the NGO market increases in independence and isolation, it is more difficult to monitor, thus more difficult to guard from political influences.

NGOs, though deemed apolitical, altruistic, and independent of their environment, are intricately connected with all aspects of political and social life (Fisher 1997, 441; Streeten 1997, 206; Clarke 1998, 52). The purpose of the organization may be to provide the sustainable development otherwise not afforded the society by local and national government; however, it is becoming increasingly more obvious that NGO survival depends on many interconnected relationships, albeit political in nature (Zaleski 2006). NGOs cannot survive solely on their own resources; therefore, it is probable to suppose that NGOs have a more complex connection to government than many have previously assumed. Likewise, it is interesting to speculate about how the state of the government affects the NGO, both in structure, governance, and efficiency. Mao elucidated a possible incentive behind NGO–politician interaction, which has spurned many questions in regards to these relationships. Do NGOs experience internal corruption? Are NGO–politician partnerships a potential course of corruption?

The purpose of this paper is to test whether NGOs are willing to partner with potentially corrupt politicians and to examine the extent that corruption, possibly
from politicians, has manifested itself within the NGO. I present a list experiment and survey employed among Ugandan NGOs in winter 2011. The list experiment identifies whether NGOs are willing to enter a potentially corrupt partnership with politicians. I then performed multiple regression analysis using levels of vulnerability and self-reported corrupt practice, both of which were obtained through the survey data.

I propose the vulnerability theory of corruption as an explanation for why NGOs might engage in corrupt practice, in general. I posit that higher levels of vulnerability will incite an NGO to engage in otherwise undesirable corrupt activity. Vulnerability is defined here as the state of high uncertainty of an entity’s future stability. More specifically, vulnerability for NGOs is defined by their years of operation, the difficulty with which they obtain funding, and their number of full-time staff. I classify vulnerable organizations as those who are more recently established, find funding difficult to come by, and have low levels of staff. I suggest a more vulnerable NGO might temporarily forgo its independent and altruistic goals to secure funding, resources, or manpower in quick and potentially corrupt ways. I hypothesize that higher vulnerability increases the number of internal corrupt practices performed by individuals in the organization. I also hypothesize a significant number of NGOs will be willing to engage in a potentially corrupt partnership with a local politician.

In what follows, I outline the available literature on vulnerability in the NGO environment while highlighting the benefits of cross-market interaction. I also define corruption and provide evidence to support the claim that corruption is prevalent in the Ugandan political environment. I develop the vulnerability theory of corruption and present the testable hypotheses for this paper. The next section is devoted to the design of the regression and list experiment, and the final section presents the results of both tests.

**Literature Review**

There is little debate about the priority of NGOs in regard to survival—NGOs need funding in order to compete with the increasing ubiquity of nonprofit organizations. Vulnerability in the NGO market is illustrated in academic literature; however, little research analyzes the effect of this vulnerability on NGO governance. Below is a summary of the literature regarding NGO vulnerability. I hope to contribute to this literature by examining another way NGOs can overcome their vulnerable states—engaging in corrupt practice.

If NGO survival depends on funding, vulnerability is most easily explained by examining the donor-NGO relationship. Information gaps in the donor market in regards to NGO development and relative need cause confusion and inefficiency in aid allocation. The search for a clear and concise description of the definition, prevalence, and efficiency of nongovernmental organizations worldwide will most assuredly end in frustration. There is much uncertainty about what constitutes an NGO, which makes
identification of reliable, needy NGOs more difficult (Fisher 1997, 447). The rapid increase in NGOs around the world (Reimann 2006, 45; Streeten 1997, 194) and the nonstandardized qualifications for formation and sustainment have made it virtually impossible to identify, count, and evaluate the organizations (Streeten 1997, 194). Some national governments have published rough estimates, which provide some intuition regarding the spread and dominion of the market. In the first official estimate, the Indian government declared a staggering 3.3 million registered nongovernmental organizations—one for every four hundred Indians, and this is not including those not registered under acts such as the Societies Registration Act of 1860 or the Mumbai Public Trust Act (Shukla 2010). NGOs need funding, especially in developing countries, but the donor pool is too small to support the starving millions.

As NGO listings worldwide become more accessible, donor ability to evaluate and compare organizations is nearly impossible. There lacks in the market a standardized evaluation mechanism capable of not only comparing relative efficiency between organizations but also illuminating the actual needs of each organization. NGO evaluation tends to be internal, contextual, and developed for their specific donors, thus it is difficult for organizations to self-evaluate in such a way that worldwide donors can gain the necessary information. However, this is not entirely an NGO's fault. The organizations are experiencing what Fowler describes as "multiple accountabilities, demands, and expectations—which more often than not are in conflict with each other" (Fowler 1996, 63). Organizations' many non-linear and competing relationships have a threatened survival due to the literal inability to standardize evaluation and meet the demands of their increasingly diverse set of donors.

Literature has highlighted methods that NGOs may employ to decrease their vulnerability and secure survival. NGOs in Israel have been seen to deviate from their planned missions and goals to advance different political and ideological stances (Steinberg and Lassman 2003), which may provide better resource opportunities. It is also possible that mission deviation could be used to find funding in different sectors other than their original sector. An NGO originally established in the health sector might find competition too steep and may thus redirect their efforts toward an alternate field where more funding is available. This transfer of focus undermines the developmental purpose of an NGO—to provide specific and needed care to a particular group of people. Such decisions decrease the legitimacy of the market, which contributes to speculative donor approval and ultimately less funding.

The individuals that NGOs associate with are also crucial to attracting more donor funds. If the organization acquires an increase in volunteers, it gives the impression that it is working on worthwhile projects. NGOs desire an increased workforce, which can illuminate the purpose and reputation of the organization. The NGO also desires to hire a "charismatic leader" to direct and publicize such events (Streeten 1997, 207). The organization may believe this leader represents the relative success of
one NGO compared to the next. It is easy to identify vulnerable organizations by their changing workforce over time and their popularity with available volunteers. All of these elements signal stability to the donor market; the lack of any might contribute to less funding and more vulnerability.

I have specified several sources of vulnerability in the NGO market as well as many ways NGOs try to mitigate their vulnerable state. My research adds to the vulnerability literature by examining whether NGOs in high states of vulnerability might perform corrupt practices with or without political interaction. I present the vulnerability theory of corruption below, which explains why I hypothesize a significant relationship between vulnerability and corruption.

**Theory**

The vulnerability theory of corruption posits that vulnerability increases an entity’s willingness to engage in corrupt practices. Vulnerability is defined as the degree of uncertainty about the individual or organization’s future stability. A high degree of uncertainty might lead individuals in the organization to make rash decisions that maximize their short-term utility but might decrease efficiency in the long run. Willingness to be corrupt, therefore, ranges depending on how dire the circumstances appear for an individual or organization.

In assessing the causal logic, it is important to note that I assume that NGOs naturally have altruistic goals that prioritize honesty and efficiency. Therefore, I suggest that a nonvulnerable NGO will not value corruption in any fashion. However, when an organization becomes increasingly more vulnerable, the benefits of corrupt practices outweigh the utility from best practices. Internal corruption is explained using this framework, because if the organization is struggling, the individuals in the organization might also be struggling, increasing the likelihood they engage in corrupt behavior such as stealing funds or falsifying records or reports to appease superiors.

Corruption between individuals and organizations is also explained with the vulnerability theory of corruption. Corruption provides a quick and mutual exchange of benefits between two parties. For example, an NGO needs to be officially registered at the local level in order to legitimately compete with other organizations in its sector. The local civil servant in charge of registration experiences vulnerability from financial duress, employment instability, and inefficient competition. The vulnerability theory of corruption postulates that this mutual state of vulnerability increases the likelihood for a corrupt exchange of information or services. Bribes demanded by the civil servant are paid by the NGO. An NGO leaves registered, and a civil servant is wealthier.

I recognize vulnerability is not the only motivation for corrupt practice. Greed, selfishness, spite, competition, etc. are other potential motivations that may be conjoined or separate from vulnerability in affecting willingness to be corrupt.
Despite these other motivations, I argue that analyzing vulnerability and its power to change behavior is an important endeavor. I can measure vulnerability, and if vulnerability is found to significantly alter practice, I can, theoretically identify and decrease vulnerability and thus effectively counter corruption. From this explanation, I present my first hypothesis.

**Hypothesis 1:** Higher levels of vulnerability lead to higher occurrences of internal corrupt practices.

The main underlying theory is presented above—vulnerability affects willingness to be corrupt. However, an extension of that simple theory is an analysis of NGO–politician interaction in particular. I posit that, due to the political environment, politicians and NGOs might find themselves in mutually vulnerable states, which increases the possibility of corrupt practice in their interaction.

Civil society and politics each suffer from a state of vulnerability at different times in their establishment. I have previously discussed the ways in which NGOs experience vulnerability. To recap, NGOs need funding and donor support; however, due to information gaps between the organizations and their donors, NGOs are often unsupported. Also, the increasing numbers of NGOs in the market make it more difficult for all NGOs to obtain funding. In order to decrease their vulnerability, NGOs might change their mission, seek for funding outside their specified goals, partner with other organizations, or work with the local and national government.

It is this last possible option that I seek to analyze more fully. I know politicians, too, experience high degrees of vulnerability while in office. The political business cycle is evidence that politicians make different spending decisions near election time in order to satisfy their constituents and ensure votes (Golden and Poterba 1980; Nordhaus 1975; McCallum 1978). Without votes, the politician will lose the opportunity to exercise power. Politicians, therefore, are almost constantly in a state of vulnerability. I assume then that if both the politician and the NGO are vulnerable, there is a higher likelihood that corrupt practices will exist in the NGO–politician partnership.

Therefore, in this paper I also test the possibility that an NGO might engage in corrupt interaction with a politician. From the aforementioned explanation, I hypothesize the following.

**Hypothesis 2:** A significant number of NGOs will be willing to partner with a potentially corrupt politician.

**Research Design**

I developed a survey with an embedded list experiment to gather information regarding NGO structure, focus, and stability, as well as their experience with politics and corruption. The survey data provided the variables for the multiple regression
used to test Hypothesis 1, and the list experiment provided the evidence to test Hypothesis 2. The details of the survey and list experiment are explained below.

Location

The survey was designed and distributed in Kampala, Uganda, in March 2011. Uganda, the Central Eastern African nation comprising approximately 33 million people, has nearly eight thousand registered NGOs and many unregistered nonprofit organizations. Due to the high number of organizations and their accessibility, Uganda has become a hot spot for NGO research in the last decade. I performed the survey and experiment there in order to add to the existing literature on Ugandan NGOs. I also believe the Ugandan NGO market is relatively representative of nonprofit markets in other developing nations. Therefore, my external validity is assumed to be high.

Subjects

The NGOs surveyed were the NGO database prepared onsite in Kampala a year before the experiment. The database included NGOs from across Uganda, and the surveys were sent to 1200 NGOs across sectors.

Survey

The NGOs were sent an e-mail inviting them to participate in a survey regarding their experience in development. I partnered with DENIVA, a Kampala-based NGO interested in evaluation. They sent the survey in their name. The survey was designed to gain both experimental and observational information, both of which are used in this paper.

VULNERABILITY QUESTIONS

I designed several questions to gauge information about each NGO's stability and vulnerability, my independent variable. These questions were presented at the beginning of the survey as background information. Though I also gathered information on the number of donors, the number of grant proposals submitted in a year, and the number of volunteers, I decided not to use these variables in my vulnerability measure. Instead, I used years in operation, difficulty in obtaining funding, and number of full-time staff. I felt these three questions would draw more reliable answers due to the simplicity of each question and the expectation that different employees would give similar responses.

The organization first indicated how long the organization had been in operation. The multiple-choice design allowed them to click one of six options, which were eventually coded 1 to 6. One corresponded to less than six months, and six corresponded to more than twenty years. The higher the number, the longer the organization was in operation. Secondly, I had the organization rate on a scale of 1 to 7 how difficult it felt it is to obtain funding. The higher the rating, the more difficult it is for the organization to obtain funding. Lastly, I had the organization type the number of
full-time staff working for the organization. These three variables were used to create the vulnerability measure.

CORRUPTION VARIABLES

The dependent variable of the regression analysis is the number of corrupt practices the organization had witnessed or heard of in their organization. To obtain this information, I gathered data on corrupt practice with the following question.

Listed below are some practices found among many organizations. Please specify whether you have witnesses or heard of anyone in your organization doing the following practices. Please select yes if you have witnessed or heard of anyone in your organization doing the practice.

1. An individual stealing funds.
2. An individual paying a bribe to a governmental worker.
3. An individual purposefully creating records or reports with false information.

Essentially, I asked them if they had heard or seen individuals stealing funds, paying bribes to government workers, or falsifying records or reports. I combined the “Yes” responses to these corrupt practices and standardized the variable to obtain a continuous measure of internal corrupt practice. This variable then became my dependent variable for the regression analysis.

CONTROL VARIABLE

I asked each organization how strongly they agree with the following statement: “Local politicians interact closely with organizations in your sector.” They indicated how strongly they agreed on a scale of 1 to 5—one being that they strongly disagreed and five being that they strongly agree.

The second control variable was whether the organization desired to work more closely with elected politicians on local projects. They indicated “Yes” or “No,” and this variable was a dichotomous control in the regression.

Lastly, I controlled for whether the surveyor was a male or a female with a dichotomous gender variable.

LIST EXPERIMENT QUESTIONS

The list experiment was designed to gauge whether organizations are, on average, willing to enter into potentially corrupt partnerships with local politicians. Since this is a sensitive question, one in which the NGO might not answer honestly, I created a list experiment. A list experiment allows us to see the prevalence of a particular mindset without requiring the organization to oust their true opinions. If I required such, the organization might lie.

In setting up the list experiment, half the organizations received the sensitive question in a direct fashion. Essentially, I asked them the following:
Listed below are potential funding opportunities. Please specify whether you be willing to partner, officially or unofficially, with each of the following entities. Please specify yes for an entity if you would be willing to partner. Please select no for an entity if you would not be willing to partner.

1. A foreign organization that is interested in supporting your mission statement.
   - Yes  - No

2. A local NGO that may need your service and funding in the future.
   - Yes  - No

3. The national government that desires to fund a specific project in your sector.
   - Yes  - No

4. A foreign government that requires the aid be used to promote the foreign government's own national interests.
   - Yes  - No

5. A foreign donor with a questionable reputation.
   - Yes  - No

The organizations answered this question directly—clicking yes or no to whether they would be willing to partner with these potential donors. None of these items are sensitive; therefore, I do not anticipate that any of the responses were untruthful. This method of asking directly was used to model Corstange’s LISTIT model (Corstange 2009), which I subsequently did not employ in the analysis. However, since none of these questions are sensitive, asking Yes/No questions produces the same number of Yes responses as asking them the more traditional list experiment question, “How many of the following partners would you be willing to partner with?”

The indirect question is presented below. Instead of clicking yes or no for each question, the organization was asked only to write how many of the potential donors they would be willing to partner with.

Listed below are potential funding opportunities. Please read the list and determine how many of the following potential donors you would be willing to partner with, officially or unofficially. Please do not say which entities your organization would be willing to partner with, only how many.

After reading the list, please mark the total number of potential donors you would choose. For example, if you would like to partner with any four of the donors below, you would tick “4.” If you only like three of them, you would tick “3,” etc.

A foreign charity that is interested in supporting your mission statement
A local NGO who may need your service and funding in the future
A local politician who wants to allocate your NGO's resources to his own constituents
The national government who desires to fund a specific project in your sector
A foreign government that requires the aid be used to promote the foreign government's own national interests
A foreign donor with a questionable reputation

How many of the previously listed donors would you be willing to partner with?

HOW MANY TOTAL:
The organization then clicked the multiple-choice option indicating how many organizations they would be willing to partner with.

The list experiment design allows me to compare the number of potential partners reported by each organization when asked directly and indirectly. If the sensitive option is a prevalent choice among the organizations, I will see a significant difference in the number of entities the organization is willing to partner with in the indirect group compared to the direct group. This is because the organization might be more willing to admit willingness to partner with a potentially corrupt politician when they are safe from detection. The indirect question requires only the number of partners, not which specific partners. This protects the organization from publicly admitting their private preference. However, if there is a difference between the direct and indirect group, it is attributed to the sensitive option, which was not included in the first list. In the example, the bolded option in the indirect question is the sensitive question of interest. I want to know whether an NCO would be willing to partner with a local politician who requires the allocation of resources be distributed to his or her own constituents. Though this is not explicitly corrupt, the option illustrates a scenario where biased and potentially corrupt allocation of resources can occur.

**DATA ANALYSIS**

To test Hypothesis 1, I developed a vulnerability measure and a total corrupt practice for each organization in the database and performed an OLS regression on prevalence of internal corrupt practice. The regression analysis allows me to see how well vulnerability affects corrupt practice, controlling for how closely politicians interact with organizations in the sector, whether the organization wants to work with local politicians, and whether the individual taking the survey is male.

The vulnerability measure was developed by a factor analysis of the three vulnerability variables—years in operation, difficulty in obtaining funding, and number of full-time staff. The factor analysis confirmed that the three variables had a natural grouping, which I categorized as vulnerability. The measures of corrupt practice were developed by a simple standardization of the number of corrupt practices the organization had witnessed or heard of occurring in their organization.

To analyze Hypothesis 2, I used a t-test to compare the number of partners the organizations chose in the direct versus the indirect question. This test measured whether the difference in potential partners was statistically different in the indirect group compared to the direct group. If a statistically significant difference exists, it means that the sensitive option only available on the indirect question is a highly prevalent option among organizations.

**Results**

Hypothesis 1 posits that increasing levels of vulnerability will lead to more occurrences of internal corrupt practice. I tested this hypothesis with a linear multiple
regression, controlling for interaction with local politicians, desire to work with local politicians, and gender.

I can support Hypothesis 1 due to the significant relationship between vulnerability and corruption as seen in Table 1. Regression 2 uses robust standard errors due to the heteroskedastic nature of the data. (For the test of heteroskedasticity, see the Appendix). The regression shows that as the vulnerability measure increases by one point, the number of corrupt events is predicted to increase by .197. Substantively, this means that if the vulnerability measure increases by 5 units, the number of reported corrupt practices will increase by 1. I argue this is substantively significant, because the factors that make up the vulnerability measure can vary significantly over time. For example, the vulnerability rating should change drastically in one year if the organization increases its full time staff. This effect is also statistically significant with a p-value less than .05. I am at least 95% confident that there is a significant relationship between vulnerability and corrupt practice. All three control variables also significantly explain corrupt practice. However, the regression as a whole explains only 9 percent of the variation in self-reported corrupt practice. This is not a very good fit, and I recognize many more variables are needed to accurately predict and explain corruption in these organizations.

Table 1: Regression of Corruption on Vulnerability

<table>
<thead>
<tr>
<th></th>
<th>Corruption (1)</th>
<th>Corruption (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vulnerability</td>
<td>.1970**</td>
<td>.1970**</td>
</tr>
<tr>
<td></td>
<td>(.0909)</td>
<td>(.0907)</td>
</tr>
<tr>
<td>Close Interaction in Sector</td>
<td>.2466***</td>
<td>.2466***</td>
</tr>
<tr>
<td></td>
<td>(.0910)</td>
<td>(.0772)</td>
</tr>
<tr>
<td>Desire to work closer locally</td>
<td>.5454*</td>
<td>.5454***</td>
</tr>
<tr>
<td></td>
<td>(.2878)</td>
<td>(.1892)</td>
</tr>
<tr>
<td>Male</td>
<td>.3682*</td>
<td>.3682*</td>
</tr>
<tr>
<td></td>
<td>(.2104)</td>
<td>(.2182)</td>
</tr>
<tr>
<td>Constant</td>
<td>.4011</td>
<td>.4011</td>
</tr>
<tr>
<td></td>
<td>(.4265)</td>
<td>(.3363)</td>
</tr>
<tr>
<td>Summary stats</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$/ adjusted $R^2$</td>
<td>.1161 / .0926</td>
<td>.1161 / .0926</td>
</tr>
<tr>
<td>$n$</td>
<td>155</td>
<td>155</td>
</tr>
</tbody>
</table>

Notes: OLS regressions; Regression 2 reports heteroskedastic robust standard errors while Regressions 1 is run non-robust. Standard errors reported in parentheses. Statistical significance is reported at the 0.01 (***) , 0.05 (**), and 0.1 (*) levels.
Hypothesis 2 suggests the list experiment should reveal that a significant amount of NGOs are willing to partner with a potentially corrupt politician. Table 3 summarizes the mean number of potential partners for both the direct and the indirect questions. It is important to note the indirect question did generate a greater number of potential donors—2.04 compared to 1.91. However, the difference is not statistically significant, as seen by the two-sided p-value of .5644. This means the list experiment did work—organizations did feel more comfortable responding on the indirect question; however, the organizations did not have more information to report. Willingness to partner with a politician who required allocation of resources to his or her own constituents is not prevalent among Ugandan NGOs, thus I must reject Hypothesis 2.

Table 3: Test of the difference between direct and indirect self-reported corruption

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct</td>
<td>1.9118</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>(.1997)</td>
<td></td>
</tr>
<tr>
<td>Indirect</td>
<td>2.0462</td>
<td>130</td>
</tr>
<tr>
<td></td>
<td>(.1069)</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>-.1344</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>(.2327)</td>
<td></td>
</tr>
<tr>
<td>Ha: Diff&lt;0</td>
<td>.2822</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.5644)</td>
<td>.7178</td>
</tr>
<tr>
<td>Ha: Diff=0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ha: Diff&gt;0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Difference is equal to the mean of the direct minus the mean of the indirect. Degrees of freedom was 162 and the t-stat was -.5775. Standard errors reported in parentheses. Statistical significance is reported at the 0.01 (***) , 0.05 (**), and 0.1 (*) levels.

Conclusion

Though there seems to be a connection between vulnerability and corruption, this paper has many limitations, which decrease our ability to generalize this theory at this time. First, the lack of control variables affects the predictive strength of my analysis, because our model does not explain much of the corrupt practice in an organization. My model may be suffering from omitted variable bias, which would change the effect of vulnerability on corruption. It is also important to recognize that if vulnerability influences an organization’s willingness to engage in corrupt activity, I still do not understand exactly how it does so. Potentially, I can aid vulnerable organizations in an effort to curb corruption; however, this is an arduous task considering the amount of struggling NGOs and CBOs (community based organizations) in developing nations such as Uganda. My analysis of NGO-politician partnerships failed to provide a source of that corruption, so future
research should focus on explaining the mechanisms with which vulnerability affects corruption. In doing so, we can understand exactly how to aid specific types of vulnerable organizations.

Despite these limitations, my study does provide relevant information regarding vulnerability in general. We can measure it and see its effect on a range of issues in the nonprofit market. My study also fills a gap in literature examining cross-market interaction between the nonprofit and public sphere. My survey in general illustrates the prevalence of NGO-politician interaction, and it provides evidence that NGOs desire and expect to work with local government. These two markets are dependent on one another in many ways, especially in the area of development. We must expect that issues plaguing the political environment might over time come to affect the civil society. More research into the potential for this spillover is necessary. Based off the initial purposes and idealized notion of civil society, modeling politics would be destructive to the market’s ultimate goals. If we discover wide scale evidences of this spillover effect, we need to stop treating civil society as the solution and find more effective ways to provide sustainable development.

REFERENCES
Clarke G. 1998. Non-governmental organizations (NGOs) and politics in the developing world. Political Studies Association 46, no. 1. 36–52.

54


**APPENDIX**

**Table 2: Test for Heteroskedasticity of Regression 1**

<table>
<thead>
<tr>
<th>Breusch-Pagan / Cook-Weisberg test for heteroskedasticity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ho: Constant variance</td>
<td></td>
</tr>
<tr>
<td>Ha: Heteroskedastic</td>
<td></td>
</tr>
<tr>
<td>chi</td>
<td>7.13</td>
</tr>
<tr>
<td>probability</td>
<td>.0076</td>
</tr>
</tbody>
</table>

55
Constructivist Theory and Overcoming the Gender Gap in Education in Latin America

by Kristen Staib

Education is "universally acknowledged to benefit individuals and promote national development" ("Women in Development," 2011). Historically, there has been a noticeable discrepancy between the number of boys and girls afforded the opportunity to receive an education. While the gender gap in education has greatly decreased in recent decades, there are still great disparities between males' and females' access to and participation in education across the globe, especially in the developing world. Latin America has done surprisingly well in narrowing the gender gap in education, especially in comparison to other developing regions in Africa and Asia.

In fact, most of Latin America's accomplishments are comparable to what North America, Europe, and northern Asia have achieved in providing fair education for both boys and girls.

As demonstrated by Figure 1, all of North America, Europe, and Australia has less than 5 percent difference between men and women's education levels, and no cultural or legal restrictions on females' education. Likewise, much of Latin America—including Peru, Bolivia, Venezuela, and Argentina—has achieved equity in education comparable to that in the West. Those Latin American states that have not achieved less than 5 percent difference between men and women's secondary education all fall between 5-10 percent difference in education rates, except for Paraguay.

According to the International Monetary Fund, most Latin American countries (except Chile and Argentina) fall within the category of "developing countries," sharing this category with many African and Asian countries. While Latin America has, in general, fared better economically than much of Africa and Asia, it is still puzzling that Latin America should have such a slight gender gap when compared with the
Discrepancy In Education

Figure 1. Source: http://womanstats.org/data/images/map3.7education_discrepancy_compressed.jpg.

...rest of the developing world. Many theories of international relations seek to explain the reasons behind such occurrences. Such theories may illuminate why some Latin American states have effectively narrowed the gender gap in education.

One Approach to Explaining International Cooperation

One well-known theory of international cooperation that may explain much of states' behavior is the constructivist theory, a subset of the cognitivist theory. This school of thought is based on the assumption that states are not the sole actors on the international scene. International organizations, including nongovernmental organizations, may also play formative roles. Constructivism emphasizes social standards between states and organizations, and the perception of what is socially acceptable (Bream and Stiles 2010, p. 16). Actors' preferences may change due to outside forces or what is perceived to be permissible on the international scene.

Many rationalist models of international cooperation would argue that state behavior should be explained in terms of utility-maximizing (Hasenclever 1997). However, constructivists take a different approach, citing that state behavior can better be summarized as the "logic of appropriateness" rather than the utilitarian "logic of consequentiality" (March and Johan 1989). Rather than calculate their own self-interested goals and calculate which choices would yield maximum benefits, actors who act based on the logic of appropriateness are driven by the rules that "define relationships..."
among roles," basing decisions upon what one actor "owes" other actors (Hasenclever 1997, p. 156). Actors are more likely motivated by a desire to conform to social norms and to develop a positive reputation among peers than achieving their own material gains (Brem and Stiles, 16). States prefer to adhere to social norms of duty and obligation, fairness and conformity—even to the detriment of other immediate self-interests.

Constructivism lends itself to a more malleable framework of ideas: Not only can self-interests change, but also actors’ identities and roles on the international stage as rules and ideas shift and evolve over time. Once self-interests are developed, decisions will naturally follow a rational pattern; however, these preferences may change at any time. Because the rules of the game are apt to change, so are actors’ own roles (and their identities and preferences). When faced with which rules to follow or which regime to take its cues from, actors ultimately choose between which international institutions appear to be the most legitimate.

Ian Hurd defines legitimacy as an actor’s beliefs that a specific rule or institution ought to be obeyed (2007, p. 7). Legitimacy is inherently subjective, as it depends on relations between actors and institutions. Furthermore, this belief is “defined by the actor’s perception of the institution. The actor’s perception may come from the substance of the rule or from the procedure or source by which it was constituted.” These perceptions affect an actor’s behavior, as they are internalized and “[come] to help define how the actor sees its interests” (Hurd 2007, p. 7). States each make decisions based on a number of factors, and a major factor in a state’s decision-making process is whether or not its choices will adhere to international norms.

One may ask, does one theory best describe states’ behavior in international relations? Does one theory of international relations best explain Latin American states’ ability to improve the gender gap in education? This paper considers the cases of two different case studies mainly through the lens of one international theory: constructivism. As with other theories of international relations, constructivist theory may successfully account for some states’ behavior. However, due to varying circumstances and contexts from country to country, constructivism cannot satisfactorily explain all state behavior all of the time. While students of international relations may seek for the most parsimonious theory, it seems that no one single theory of international relations cannot adequately explain all state behavior.

Constructivists would hypothesize that Latin American states would follow the policies of organizations or rules that they perceive to be legitimate. Specifically, then, constructivists would estimate that Latin American states would form their own education policies after legitimate leaders’ education policies.

In this case, consistent with constructivist theory, Latin American states that view the UN’s international treaty CEDAW as a legitimate treaty that shaped and diffused the norms and ideas of women’s right to equality of education would align their policies with these international norms.
Indeed, scholars agree that such shifts in education can be traced to these social interactions. Gray, Kittlison, and Sandholtz (2005) say that international interactions hinge on norms and ideas to the extent that a "country internalizes norms and ideas," which are "diffused through cross-national interactions" (p. 299, emphasis added). This international interaction directly relates to the a country's level of integration "and social condition of its women" (Ibid.).

Limitations

Inherent in the study of legitimacy is a recognition that the term legitimacy is, itself, a subjective concept. Therefore, gauging a state's or organization's legitimacy can be difficult. Additionally, legitimacy is relative, and largely lies within the understanding and preferences of the actors within states' governments and institutions. While one state might perceive an organization to be legitimate, another state might not.

This paper will examine the qualitative data from the United Nations and from various states' governments, considering all of the evidences in what contributes to an actor's legitimacy.

For instance, does the state do anything to react to the organization that would suggest the state supports its cause or recognizes its importance? This may be evidenced verbally, as in a speech from a government official; legally, as the signing, ratifying, or passing legislature; or may include any other cues from states, verbal or of another nature.

Also, as constructivism asserts that states desire to adhere to social norms, it is worth noting then, that a legitimate organization or leader must have some kind of support or following from a number of states or organizations. In order to create social norms, an actor (whether it be a state, organization, or other unit of measurement) has to believe there is some sort of pressure to adhere to regulations or behaviors that others are adhering to. I will look for evidence that other states or organizations respect and/or have adhered to the policies or practices asserted by the legitimate leader.

Culture, language, history, leaders' personalities, and other factors may all contribute to determining an organization or leader's legitimacy. Admittedly, it is impossible to correctly infer states' motivations in every instance when one can look only at the outcomes or policies made by any given state. As such, this paper will focus on an analysis as to whether Latin American governments responded to legitimate actors. Whether or not these policies were or were not effective is another matter altogether; for the purposes of this paper, the outcomes of those policies are not as relevant as the policies and their creation.

Knowing what motivated individuals', governments', and states' behaviors is difficult—to a large extent, we simply cannot infer causality based on what we know.
The United Nations: A Legitimate Leader On the Global Stage?

The United Nations has emphasized the rights of women since its inception in 1945. One of its main tenets reaffirms “faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women” (“Short History of CEDAW Convention,” n.d.). Historically, a woman’s humanity alone did not prove sufficient for her to gain rights that were presumed to be natural for men.

The 1960s saw an awakening to the realities of the patterns of discrimination against women. In response, many organizations were created in opposition to these social injustices. In 1964, seven years after the Declaration on the Elimination of Discrimination against Women had been adopted, the CSW decided create a “single, comprehensive, and internationally binding instrument to eliminate discrimination against women” (Ibid.). Thus began the process for the writing of the text of the Convention on the Elimination of All Forms of Discrimination against Women (or CEDAW) from 1976 to 1979.

CEDAW was passed by the UN General Assembly in December 1979. Also known as the Treaty for the Rights of Women or the International Bill of Rights for Women, CEDAW explicitly defined and established women’s rights. In summary, states who agree to abide by the convention committed themselves to take measures against discriminating women in all forms (CEDAW: Text of the Convention, n.d.).

As one of the major and preliminary actions taken to define and establish equality for women, CEDAW became a major factor in influencing Latin American states’ shifts toward greater gender equity in their education policies.

Countries that have ratified the convention are “legally bound to put its provisions into practice” and must submit national reports at least every four years regarding the measures they have taken to comply with their treaty obligations (CEDAW: Text of the Convention, n.d.).

On 1 March 1980, the convention opened for signature at the United Nations Headquarters. That year, the following Latin American countries were all signatories of the convention: Argentina, Chile, Colombia, Costa Rica, The Dominican Republic, El Salvador, Haiti, Honduras, Mexico, Nicaragua, Panama, and Venezuela. Brazil, Guatemala, Peru, and Uruguay followed in 1981, and Belize did not sign the convention until 1990 (CEDAW Ratification, 1979).

As is demonstrated by Chart 1, most states signed the treaty within the first one or two years. To date, CEDAW has been ratified by 186 nations (Chapter IV, Human Rights, 1979). Granted, a number of those states had ratifications, accessions, and successions, but the sheer number of states who signed (and even more who later ratified the treaty) is noteworthy.

For a visual image of the number of states that have participated in CEDAW since its approval in 1979, refer to Figure 2.
### Chart 1: Signing and Ratification of CEDAW

<table>
<thead>
<tr>
<th>Participant</th>
<th>Signed</th>
<th>Ratified</th>
<th>Participant</th>
<th>Signed</th>
<th>Ratified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>July 1980</td>
<td>Dec. 1989</td>
<td>Paraguay</td>
<td>Apr 1987</td>
<td></td>
</tr>
</tbody>
</table>

Data taken from “CEDAW Ratification Table,” 1979. I included Latin American states to demonstrate how Latin American states, as neighbors, possibly took cues of what would be social norms by observing how its neighbors reacted to the treaty. Additionally, I included a number of influential countries that might be perceived as legitimate leaders and by example could influence how Latin America states act or how they perceived CEDAW and its legitimacy.

---

Participation in the CEDAW
- Signed and Ratified
- Only signed
- Acceded or succeeded
- Non-signatory
- Unrecognized state, abiding by treaty

Figure 2. Source: “CEDAW Participation and Map.” Citizens for Global Solutions, Inc http://globalsolutions.org/human-rights/cedaw. 20 November 2011.
Again, an international organization or regime's legitimacy may be defined as actors' beliefs that a specific rule or institution should be obeyed (Hurd 2007, 7). While the idea of legitimacy in international cooperation is implicitly subjective, the sheer number of signatories and states who went on to ratify the treaty seems a sufficient cause to assume that many state actors would view CEDAW as a legitimate treaty, and therefore its rules ought to be obeyed.

Article 10 in Part Three of the Treaty specifically discusses the importance of equality between men and women in receiving an education. The specific education policies that this article discusses are that states should first take all measures to eliminate discrimination against women and grant them equal rights in education (CEDAW: Full Text of the Convention, n.d.). Next, it states that women should have access to the same quality of education as men.

Among other initiatives included in Article 10 is the statement that female dropouts would be reduced on all levels. CEDAW states, "The reduction of female student drop-out rates and the organization of programmes for girls and women who have left school prematurely" (Ibid., n.d.).

Note the language used in this article, and the specific aims to achieve greater parity in education worldwide. These objectives were later adopted by Latin American states as their own, demonstrating how their policies mirrored UN international policy. This paper focuses on two case studies from Latin America: Peru and Bolivia. These cases were chosen largely due to the availability of information in regards to data from CEDAW and states' education policies.

**Peru**

Historically, Peru has experienced a large gender gap in education, like many other Latin American countries. Though this gap has not been completely overcome, Peru has made large strides in eliminating the disparity in men's and women's education. In fact, Peru had already been implementing some policies that improved the situation of women preceding the creation of CEDAW.

Peru had a great disparity between the number of men and women enrolled in school. As demonstrated in Table 4, 43 percent of the women birth cohort between 1925 and 1939 had not received schooling. Compared to the percent of males of the same birth cohort who had received no schooling (15.2 percent), this means that there were almost three times as many females than males who had not received any schooling. However, this number dramatically increased over the next several decades. The proportion of women who never attended school fell dramatically over the next several decades, from 43 percent to just 8 percent in the 1960s (King 1991, p. 17).
Table 4: Highest Level of Education, by Birth Cohort and Sex (percentage of sample)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Females</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No School</td>
<td>43.0</td>
<td>36.5</td>
<td>28.1</td>
<td>19.7</td>
<td>12.6</td>
<td>8.3</td>
</tr>
<tr>
<td>Primary</td>
<td>40.7</td>
<td>42.5</td>
<td>39.6</td>
<td>37.1</td>
<td>32.2</td>
<td>27.6</td>
</tr>
<tr>
<td>Secondary</td>
<td>12.5</td>
<td>15.0</td>
<td>22.7</td>
<td>28.0</td>
<td>38.3</td>
<td>46.5</td>
</tr>
<tr>
<td>Postsecondary</td>
<td>3.8</td>
<td>6.0</td>
<td>9.7</td>
<td>15.2</td>
<td>16.9</td>
<td>17.6</td>
</tr>
<tr>
<td>Average years attended</td>
<td>3.1</td>
<td>3.2</td>
<td>4.8</td>
<td>6.6</td>
<td>7.0</td>
<td>7.6</td>
</tr>
<tr>
<td><strong>Males</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No school</td>
<td>15.2</td>
<td>10.8</td>
<td>8.5</td>
<td>3.9</td>
<td>2.6</td>
<td>3.3</td>
</tr>
<tr>
<td>Primary</td>
<td>57.9</td>
<td>53.8</td>
<td>42.7</td>
<td>34.1</td>
<td>25.2</td>
<td>24.0</td>
</tr>
<tr>
<td>Secondary</td>
<td>18.5</td>
<td>19.9</td>
<td>32.4</td>
<td>36.4</td>
<td>45.1</td>
<td>54.6</td>
</tr>
<tr>
<td>Postsecondary</td>
<td>8.4</td>
<td>15.5</td>
<td>16.4</td>
<td>25.6</td>
<td>27.1</td>
<td>18.1</td>
</tr>
<tr>
<td>Average years attended</td>
<td>4.8</td>
<td>6.6</td>
<td>6.8</td>
<td>8.3</td>
<td>8.7</td>
<td>8.3</td>
</tr>
</tbody>
</table>

Source: King 1991, p. 18

Table 1: Education of Males and Females, Aged 15 and Over, 1940–81

<table>
<thead>
<tr>
<th></th>
<th>1940</th>
<th>1961</th>
<th>1972</th>
<th>1981</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percent Literate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>42</td>
<td>61</td>
<td>73</td>
<td>82</td>
</tr>
<tr>
<td>Females</td>
<td>55</td>
<td>74</td>
<td>83</td>
<td>90</td>
</tr>
<tr>
<td>Urban</td>
<td>31</td>
<td>48</td>
<td>62</td>
<td>75</td>
</tr>
<tr>
<td>Rural</td>
<td>-</td>
<td>82</td>
<td>88</td>
<td>92</td>
</tr>
<tr>
<td><strong>Mean Years of Schooling</strong></td>
<td>1.9</td>
<td>3.1</td>
<td>4.4</td>
<td>6.0</td>
</tr>
<tr>
<td>Males</td>
<td>2.4</td>
<td>3.8</td>
<td>5.1</td>
<td>6.7</td>
</tr>
<tr>
<td>Females</td>
<td>1.4</td>
<td>2.4</td>
<td>3.6</td>
<td>5.4</td>
</tr>
<tr>
<td><strong>Highest Level of Education Attended (percentage)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No School</td>
<td>58</td>
<td>39</td>
<td>27</td>
<td>16</td>
</tr>
<tr>
<td>Males</td>
<td>45</td>
<td>26</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>Females</td>
<td>69</td>
<td>52</td>
<td>37</td>
<td>23</td>
</tr>
<tr>
<td>Primary</td>
<td>34</td>
<td>48</td>
<td>48</td>
<td>42</td>
</tr>
<tr>
<td>Males</td>
<td>47</td>
<td>58</td>
<td>54</td>
<td>44</td>
</tr>
<tr>
<td>Females</td>
<td>27</td>
<td>38</td>
<td>42</td>
<td>40</td>
</tr>
<tr>
<td>Secondary</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Males</td>
<td>6</td>
<td>14</td>
<td>24</td>
<td>35</td>
</tr>
<tr>
<td>Females</td>
<td>3</td>
<td>9</td>
<td>17</td>
<td>28</td>
</tr>
<tr>
<td>Postsecondary</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Males</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Females</td>
<td>0.3</td>
<td>1</td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>

Sources: Literacy Rates: Government of Peru 1981, Fernandez 1986

Source: King 1991, p. 2
Tremendous changes began around the 1940s and 50s due to major economic changes in education policy reforms (King, p. 5). Over the next several decades, the Peruvian government focused specifically on “expanding and improving the quality of public education . . . to accelerate economic development and redistribute income” (Ibid., p. 4). Between 1955 and 1970, enrollment ratios for girls rose from 65 percent to 99 percent, narrowing the large differences in enrollment between males and females. Boys born between 1955 and 1964 also showed the largest enrollment increases, but since males began the 1950s with relatively high rates of enrollment, their gains were much less dramatic than gains for females (Ibid., p. 4). Refer to Table 1 to see some of the major changes in the literacy rates between boys and girls from the 1940s to 1980.

In short, Peru had made strides to improve the gender gap in education decades before CEDAW came into being. While the enrollment and amount of school completed increased significantly for both genders, Peruvian education policy especially helped females to enroll in and stay in school.

**Peru and CEDAW**

Peru signed CEDAW in July 1981 and ratified the treaty in September 1982, making it one of the first Latin American states to ratify the treaty. However, its prompt signing and ratifying of the treaty may reflect Peru's approbation for and desire to comply with CEDAW's tenets. We cannot infer with certainty that the Peruvian government's perception of CEDAW's legitimacy as an international treaty. However, its immediate signing and prompt ratification appear to be strong indicators that CEDAW established a social logic of appropriateness or international norm the Peruvian government felt ought to be followed.

In its first report to CEDAW in 1991, the Peruvian government reported that CEDAW's Article 2 "accords with our Constitution as expressed in article 2 of title 1, chapter 1.2, on the person: every person shall have an equal right to ‘opportunities and responsibilities’ regardless of gender. Additionally, the law recognized that women's rights 'are not inferior to those for men’”(CEDAW/C/13/Add.29 1991: 5).

From its first report, the Peruvian government acknowledged CEDAW’s tenets were already in alignment with its own 1979 constitution. Both sought for equality of opportunity and treatment between men and women.

Also worth mentioning is that in Peru's first report to the CEDAW committee, the government stated: “In the event of dispute between [an international] treaty and the law,” treaties prevail. “Hence, the Convention (CEDAW) has a binding force which protects and supports women against any discrimination” (Ibid., p. 5, emphasis added).

This statement illustrates how the Peruvian government signed and ratified CEDAW, knowing it would be bound by its tenets—even insomuch that CEDAW might supercede its own national laws. Again, this demonstrates evidence that Peru
STAIB

was willing to sacrifice a portion of its own autonomy in order to adhere to the international norms established by CEDAW.

Additionally, the Peruvian government further stated that CEDAW repealed and replaced part of its own legislation: “As a consequence of CEDAW, the Peruvian Civil Code of 1936 has been repealed and replaced by a new Civil Code promulgated in July 1984, in which there is amendment of the obsolete and marginal provisions contained in the former Code with respect to women...” (Ibid.).

Indeed, in its report to CEDAW, the Peruvian government indicated it has adopted facets of its laws as its own, even replacing some of its own legislature. The Peruvian government must have viewed CEDAW with some sense of legitimacy in order to make such a bold move to adopt its tenets into their own national policy.

In its first government report to the CEDAW Committee (1991), Peru reported on a new educational system that was enforced in 1982. This system “cover[ed] male and female pupils at all levels, grades and modalities of instruction” and was so successful that “its mean annual growth rate exceeds the average for Latin America and the Caribbean (according to UNESCO)” (CEDAW/C/1998/II/L.1/Add.7, 1997). The same year that Peru ratified the convention (1982), it enforced a new educational system meant to improve the status of women in education. It is important to recognize the timeline and the proximity of Peru’s ratification with the new educational system, as this supports a constructivist hypothesis that state governments mirror the policies of legitimate international actors like the UN.

In reply to Peru’s report to the CEDAW Committee in 1998, the CEDAW Committee responded the Peruvian government had made efforts to comply with its commitment to the convention, “notwithstanding the difficult situation” Peru faced due to the “economic crisis and terrorist violence” (Ibid.).

Constructivism posits that states will act in accordance with social norms and the “logic of appropriateness,” even if it may not be the most utilitarian choice. While the CEDAW Committee acknowledged the state of Peru had many other crises, including the economy and terrorism, the government made a concerted effort to comply with its commitment to the convention. This may be an indication that (consistent with constructivism) states would choose to conform to social norms and maintain their reputation among their contemporaries, even if it is inconvenient or to their own detriment.

Furthermore, the gender gap in education improved despite the increase in poverty. Poverty posed a major threat to fully implementing the convention, as it 44 percent of Peruvian women in 1998, with 18 percent of women living in extreme poverty (Netherlands Institute of Human Rights, 1998). Despite these abnormally high poverty rates, the gender gap continually improved in education during these years in regards to the percentage of primary and secondary level students but actually worsened in regards to the number of females enrolled in primary education. Refer to Chart 2.
Evolution of Educational Levels, with a Breakdown by Sex (people aged 15 and above)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W/o formal ed</td>
<td>16.2</td>
<td>17.1</td>
<td>12.6</td>
</tr>
<tr>
<td>Primary</td>
<td>42.8</td>
<td>37.2</td>
<td>31.5</td>
</tr>
<tr>
<td>Secondary</td>
<td>31.0</td>
<td>34.7</td>
<td>35.5</td>
</tr>
<tr>
<td>Higher</td>
<td>10.1</td>
<td>11.0</td>
<td>20.4</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>MEN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W/o formal ed</td>
<td>9.0</td>
<td>9.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Primary</td>
<td>44.6</td>
<td>37.7</td>
<td>31.9</td>
</tr>
<tr>
<td>Secondary</td>
<td>34.4</td>
<td>38.0</td>
<td>39.5</td>
</tr>
<tr>
<td>Higher</td>
<td>11.9</td>
<td>13.3</td>
<td>21.6</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>WOMEN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W/o formal ed</td>
<td>23.1</td>
<td>24.9</td>
<td>18.0</td>
</tr>
<tr>
<td>Primary</td>
<td>40.9</td>
<td>34.8</td>
<td>31.0</td>
</tr>
<tr>
<td>Secondary</td>
<td>27.7</td>
<td>31.5</td>
<td>31.7</td>
</tr>
<tr>
<td>Higher</td>
<td>8.4</td>
<td>8.8</td>
<td>19.3</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Women w/ second. and higher ed</td>
<td>36.1</td>
<td>40.3</td>
<td>51.0</td>
</tr>
</tbody>
</table>

Source: CEDAW, p. 65

The percentage of women without formal education decreased from 23.1 to 18.0 from 1981 to 1993. This indicates that despite economic and terrorist challenges, the Peruvian government maintained its emphasis on education and the gender gap. Additionally, the number of women who received a secondary education during increased by 4 percent during this time period.

However, it is extremely noteworthy that the percentage of women in primary education actually decreased from 40.9 in 1981 to 31.9 in 1993—nearly a 10 percent decrease. As the Netherlands Institute of Human Rights reported that long-term poverty “led to serious deterioration in the quality of life of millions of women, who [had] no access to education, medical and hospital services, employment and the basic resources needed for subsistence.” Despite the overall national strategy to alleviate poverty, women’s situation worsened even more—especially in rural and indigenous areas (1998).

Although the situation did worsen for women in regard to primary education during this time period, according to this source, this is largely attributed to the long-term conditions of extreme national poverty. Despite the government’s progress and
its policies to combat the issue of poverty, it continued to pervade and took a heavy
toll on the primary education rates for women.

Despite the dramatic drop in women’s primary education due to poverty—espe­
cially in rural areas—we must note the number of men to receive a primary education
in this time also decreased but by an even larger margin. While the situation wors­
ened for women, it worsened by a larger margin for men, which actually closed the
gender gap more (relatively speaking).

Since that time, Peru has created more programs, policies, laws, and plans for the
advancement of women. These programs include the Educational Development of
Rural Girls and Adolescents Act in 2001 and a number of other acts meant to change
the status of women in the family (CEDAW/C/SR.583 and 584, 2002).

In 2002, the CEDAW Committee noted, “With concern that, notwithstanding the in­
troduction of significant legal changes for implementation of the provisions of the Con­
vention, inequality between men and women is still a reality in Peru (Ibid.). Furthermore,
the convention’s committee suggested that despite improvements, it was still concerned
at the alarmingly high rate of female illiteracy—especially in rural areas. Also of concern
were the high numbers of girls and adolescents dropping out of school in rural areas
(Ibid.). Despite these critiques from the committee, Peru’s continued dedication to nar­
row the gender gap verifies the perceived legitimacy. Evidently, gender inequality still
exists in Peru. However, the country is making great strides, particularly in education.

In its report to CEDAW in 2004, the Peruvian government mentioned a number
of new programs and initiatives it had begun in order to more effectively close the
gender gap. In fact, it explicitly mentioned a program it began in conjunction with
UNICEF in 2003, la Campaña de Matrícula Oportuna por el Derecho a la Educación.
This measure works “to eliminate segregation through education and reduce the
school dropout rate, which is particularly high among girls and female adolescents”
(Consideration of Reports . . . Convention 2004, p. 20). The program sought this by
“[encouraging] girls to enroll in school, [reducing] their dropout rate, and [ensuring]
that they progress through the grades at the appropriate age, so as to give full effect
to their right to education” (Ibid., p. 40).

In 2002, Peru’s Ministry of Education also partnered with the UN Children’s
Fund and UNICEF in a cooperation agreement called “Building Citizenship among
Adolescents Returning to Primary Education,” a program that encourages girls to
stay in school rather than abandon their studies (Ibid., p. 67).

In addition to a number of other policies, programs, and initiatives Peru created
in order to better help women enroll in and stay in school, these two programs are
particularly noteworthy, because they focus on dropout prevention programs. Only
a few years earlier (in 1994), the CEDAW Committee made the exact recommenda-
tions for Peru to do just that; or, in the committee's own words, "The Committee requests the State party to set up programmes specially designed . . . to keep girls in school" (CEDAW/C/1998/II/L.1/Add.7, 1998). It is significant that these initiatives took place soon after the committee's recommendations to create such programs, and they were done in conjunction with UN organizations.

As discussed, a constructivist view of states' behavior would conjecture that Peru would make educational reforms as a reaction to a legitimate authority's example or leadership (in this case, CEDAW). Before CEDAW's inception, equity in women's education was not necessarily an international priority. Despite societal influences such as economic crises, terrorist violence, and social prejudices, it is noteworthy that Peru's government has prioritized the Convention's tenets above their own national law, meaning that some aspects of their own constitution are overridden by CEDAW's "binding force" (CEDAW/C/13/Add.29 1991, p. 5).

While history reveals these changes were already well under way before CEDAW came about, Peru's policy changes appear to be consistent with constructivist theory. Thus, one may conclude the constructivist theory provides a fairly accurate explanation as to the education policy trends in Peru.

Bolivia

Historically, Bolivia has also had a wide gender gap in education. Bolivian education policy largely followed along the same vein as revolutionary nationalism (P. Rivera 1992, p. 23) from the 1950s until the 80s, when the government suddenly took a more neoliberal approach to education.

In 1952, the Bolivian people raised up in a nationalist movement and the Nationalist Revolutionary Movement (MNR) party took power. Before the era of CEDAW, Bolivia had adhered to the Bolivian Education Code of 1956 (P. Rivera, p. 23-24). This code established basic principles for national education, including "free, compulsory, democratic, and unified" education (Ibid., p. 25). The structure of the education system and the government's abrupt end six years later meant teachers' unions largely dominated the education system. To this day, "teachers still believe that the educational system must be completely under their control, including the appointment of the minister of education" (Ibid., p. 25). This strong desire for internal power may dictate teachers' and the government's perceptions of international legitimacy for CEDAW.

The code was the most important legislation for the mass education of peasants, whereas before, education had been largely an elitist tradition. However, over the course of the next few decades, Bolivia's government experienced several military overthrows. The 1972 military coup of General Hugo Banzer yielded yet another change in education policy, especially as Banzer "was more concerned with the ideological control of education than with the pedagogical improvement of the system" (Ibid., p. 26). After twenty years of military control of the state, Bolivia finally had its
first freely elected government in 1982. The new ruling party, the Democratic Popular Unity, "faced a country in political and economic crisis." It sought to re-establish the Bolivian Educational Code, and set several goals to accomplish by the year 2000. These goals are to eradicate illiteracy, provide primary schooling for all children, and improve educational quality and efficiency. Of these goals, however, literacy was the main priority (ibid., p. 27). These were the circumstances which Bolivia found itself around the time that the CEDAW came into being.

Bolivia and CEDAW

In May 1980, Bolivia was among the first group of states to sign CEDAW. However, Bolivia did not ratify the treaty until June 1990. It was difficult to find any data that might hint as to why Bolivia waited to ratify the treaty. Though it waited ten years to ratify the treaty after signing, Bolivia spoke out in strong support of CEDAW in its first report to the committee: "Bolivia wishes to express its support for the Convention and calls on all the world's countries to ratify it as quickly as possible."

Also, in the introduction of this first report, the government made this admission: "The Government does not have sufficient budgetary resources to meet basic infrastructural needs and requirements, especially in the rural areas. Thus, 86 percent of the rural population is without drinking water and 64 per cent without health services" ("Consideration of Reports Submitted by States Parties" 1991, p. 9).

The second statement concedes the Bolivian government values an international organization's legitimacy, and they wish to endorse CEDAW’s legitimacy by encouraging other states to ratify it as well. As one author said earlier, “To the extent that a country internalizes norms and ideas diffused through cross-national interactions, it incorporates those norms and ideas into its domestic policies, laws, and institutions.” As Bolivia internalized international norms and ideas, it recognized that it could have an influence upon other states by further diffusing and endorsing those norms and ideas. This is precisely what constructivists would predict to happen: Because norms and interactions matter, states' social interactions can have an influence on other states' preferences and interests.

Additionally, the government asserted that it did not have sufficient funds to meet its citizens' basic needs. Constructivists argue that more important than meeting its own basic economic needs at times, states act in accordance with a "logic of appropriateness." In other words, states will conform to international social norms, even if it is to their detriment. This statement regarding Bolivia's need to address poverty and basic needs demonstrates more of a rational choice model of international theory rather than constructivist theory. More important to Bolivia than adhering to social norms were its people's own basic needs. In this case, rational choice theory may provide a better explanation of the Bolivian government's behavior than constructivism.

Around the time Bolivia ratified the treaty, the average national illiteracy rate was 27 per cent, being 31 percent in rural areas and 7.8 percent in urban areas. Ad-
ditionally, there are 4.7 and 2.25 illiterate women for every illiterate man in urban and rural areas, respectively. In general, the illiteracy rate for women was 2.5 times higher than that for men (Ibid., p. 25). Bolivia had a large margin for improvement in regards to equity between the genders in literacy.

In a report from the CEDAW Committee to Bolivia in 1995, the committee’s comments were full of praise for Bolivia’s efforts since ratifying the treaty, stating that Bolivia had undergone major efforts to promote gender policies to advance the status of women. The committee praised Bolivia for overcoming its formerly gender-neutral policies that reiterated gender stereotypes (CEDAW/C/BOL/1 1995). Thus, the Bolivian government acted almost immediately after ratifying (they only ratified the convention in 1990) by introducing gender-specific policies.

The committee also highlighted another act of legislation that was of particular importance: Bolivia mandated that grass-roots organizations pursue gender perspectives in their policies. Indeed, soon after its ratification of the convention, Bolivia began to take seemingly enormous strides in its policies towards greater gender equity.

This also held true in Bolivian education policy. The CEDAW Committee “commended the educational reforms, which were aimed at providing bilingual education, favouring thereby the education of girls, and the development of a multicultural society crossing gender barriers” (Ibid.).

Bolivia took immediate action in efforts to overcome gender inequalities with policies and initiatives. In its report to CEDAW over a decade later (in 2006), Bolivia reported that CEDAW’s convention “[has] made it possible for the country to promote policies favourable to women,” (CEDAW/C/BOL/2-4 2006, p. 2). Indeed, Bolivia partly gave credit to CEDAW as a factor that made it possible to make more gender-specific legislation, programs, and policies. This immediate implementation of gender-specific policies and credit given to CEDAW as a basis for promoting such policies is consistent with constructivist theory. Based on the government’s language regarding the convention and its immediate compliance with its agreement, Bolivia’s shift in education policy may have been in response to the CEDAW’s tenets and Bolivia’s ratification of the treaty.

Furthermore, the government attributed its strengthened resolve to comply with CEDAW tenets “by subsequent ratifications of international conventions and declarations such as the Beijing Declaration and Platform for Action, the Convention of Belem Do Par and others, that have been the primary basis for the consolidation of laws and regulations which grant women equal rights” (“Consideration of Reports Submitted by States Parties Under Article 18 of the Convention, Combined Second, Third, and Fourth Reports of States Parties, Bolivia 2006, p. 2).

The Bolivian government itself cited legitimate international organizations and initiatives as relevant factors that catalyzed change and reformation. Just as constructivism would predict, Bolivia internalized the logic of appropriateness in furthering gender policies, even attributing its motivation partly to these conventions and treaties.
ties. In fact, the government acknowledged that while progress had been made, it was not yet sufficient, but "the advances made [would] need to receive a fresh impetus. Additionally, the Government of Bolivia faces many shortcomings and new challenges" (Ibid., p. 12). Apparently the government sought further CEDAW Committee support and suggestions as legitimization for their own policies.

While Bolivia did see many improvements in its illiteracy rates, the differences between men and women are still astounding. In 2006, Bolivia reported that while "the overall figures for illiteracy have gone down from 37 to 14 percent, the difference in the rate as between men and women in rural areas exceeds 23 percent" (Ibid., p. 3). Unlike its report in 2006, the CEDAW Committee presented Bolivia with a report that was scathing in comparison to the prior report.

While the Bolivian government had stated in its 2006 report that the gender difference is "shrinking," even in rural areas, the committee came back with the suggestion for the state to approach poverty alleviation programs with a gender perspective, paying particular attention to women in rural areas (CEDAW/C/BOL/CO/4 2008).

The committee added the stinging statement, "The Committee is concerned that the most recent educational reform has not dealt with these subjects in depth," and invited the state party to "adopt all necessary measures" in order to improve illiteracy and dropout rates for women in Bolivia (Ibid., p. 2008). In short, the committee's assessment of Bolivia's reforms in 2008 since its last report to Bolivia in 1998 reflected much more disappointment that Bolivia had not taken greater measures to improve the status of its women.

This is not to say that Bolivia has not made strides in improving the education gap between men and women. However, the committee's change from one report to another provides a stark contrast. The first report praised Bolivia for its initiatives and policies that focused on a gender perspective. However, the second report from the committee in 2008 expressed disappointment in Bolivia's failure to help its women gain greater access to education.

Bolivia has lessened the gender gap, but the disparity between genders is still large. The gap between those living in urban areas and those living in rural areas is even larger. Initially, Bolivia took a number of measures to address the gender gap, but it seems that women's education is considered a less-important initiative in recent years.

It is noteworthy that Bolivia waited ten years to ratify the treaty after it had signed. This delay may reflect Bolivia's attitude towards CEDAW as a legitimate leader. If Bolivia had viewed CEDAW a legitimate leader, or if it had felt more pressure to conform to societal norms, Bolivia might have ratified the convention much earlier. However, Bolivia was one of the later Latin American states to ratify the treaty, and in recent years, women's issues in education seem to have been prioritized lower on its agenda.

Interestingly, the Bolivian government verbalized that some of its main reasons for paying heed to gender issues are due to international treaties and conventions,
including CEDAW. In its first report to CEDAW, the government also mentioned that its basic infrastructural needs exceeded the its budget—in 1991, “86 percent of the rural population [was] without drinking water and 64 per cent without health services” (“Consideration of Reports Submitted by States Parties Under Article 18 of the Convention, Initial Reports of States Parties, Bolivia 1991, p. 9). In such dire circumstances, basic needs for survival such as drinking water and health services may (understandably) take precedence over the initiatives for greater equity in education. When confronted with how to spend the government budget too small to fund basic infrastructural needs, one can see why these funds would not be allocated to priorities such as girls' education programs.

Thus, constructivism might provide some insight into shifts in Bolivian policy. Bolivia signed and ratified the convention, though it delayed more than most Latin American states. Bolivia has made changes its legislation to improve girls’ education. However, its policies have largely focused on closing the economic gap between rural and urban.

Ultimately, Bolivia’s lack of attention and allocation of resources to girls’ education may simply be related to its larger, more pressing needs, such as the eradication of poverty and providing access to water and healthcare. Without such basic needs in place, it may not matter how legitimate a world leader is, how strong social norms are, or how appropriate it seems to comply with a commitment made by ratifying an international treaty. Constructivism does not fully explain Bolivia’s behavior in regards to its policies on education. In cases such as Bolivia’s, a rational choice theory of international relations seems much more applicable.

Conclusion

While a gender gap in education still exists, many states have made great strides in overcoming the gender gap. Latin America is an example of this. In spite of poverty, economic, terrorist and other challenges, states have continued to make progress and espouse the principles of the convention. There are many theories of international relations that seek to describe states’ behavior, including constructivism.

Consistent with constructivist theory, some Latin American states seem to follow the example of CEDAW’s education policies towards women. Peru, which signed and ratified CEDAW almost immediately, had already implemented a number of education initiatives to improve education for women, and continued to adhere to the committee’s requirements and suggestions. Despite the economic and terrorist issues in Peru, women’s equity in education continued to receive attention from its government. These evidences suggest Peru has sought to behave according to the “logic of appropriateness” established by CEDAW and comply with international norms.

However, some states’ behavior is inconsistent with constructivist theory. Bolivia, for example, has acknowledged the relevance and importance of CEDAW and has verbally recognized the importance of the treaty. However, Bolivia seems to have
largely failed to adopt many gender-specific policies. This could be due to the fact that Bolivia has many other internal needs that supercede the issue of equity in women’s education. Rational choice models of international relations theory seems a better fit for Bolivia’s actions. Ultimately, Bolivia’s choice not to follow social norms seems to be one of utility rather than a logic of appropriateness.

In regard to Latin American education policy, constructivism may explain some states’ behavior in cases where states view CEDAW as a legitimate leader, where it is also part of the states’ interests to allocate resources to education reforms, and where states have internalized international norms and ideas. However, constructivism may fail to explain cases where states’ own infrastructural needs take precedence over international norms and ideas, such as with Bolivia. Although international relations theories may be useful in describing some cases, circumstances within states vary widely enough that no single theory can sufficiently explain all states’ behavior.

REFERENCES


Duryea, Suzanne. Galiani, Sebastian; Nopo, Hugo; and Piras, Claudia. 2007. “Educational Gender Gap in Latin America and the Caribbean.” Inter-American Devel-


Salcedo, Carmen Apaza. 2009. “Diálogos en Educación.” Internationale Weiterbildung und Entwicklung gGmbH. 10 October 2011. <http://www.dialogos-en-educacion.org/actualidades/educaci%C3%B3n-y-g%C3%A9nero-en-el-per%C3%BA-avances-y-permanencias> This article, while not an official government statement, discusses the advances and current issues in Peruvian education policy.


Full of Regret: Possible Economic and Psychological Predictors of Voter Turnout Rates

by Marc B. Watterson

Abstract

Economic prosperity has been at the forefront of political campaigns for over two centuries in America. The state of the economy and indications of its performance have been used as political fodder to pull citizens to the voting booths. While America has suffered from rather anemic performances at the polls, the perceived state of the economy does make a difference in how, when, and how often people choose to vote. The question is whether poor or prosperous economic indicators spur people to vote en masse and what psychological effect might explain these results.

Do employment conditions in the state affect whether or not people turn out to vote? Voter turnout rates from the last five midterm elections of a president’s first term in office are used to estimate the effect that unemployment rates and the competitiveness of a race have on voter turnout. Both unemployment and the competitiveness of the highest office race (Congressional or Gubernatorial) have positive effects on voter turnout. Individual analysis of states with the highest and lowest unemployment rates complement my findings. When people feel like their previous vote or failure to vote contributed to a perceived decline in the economy, they are more inclined to vote in an attempt to change their circumstances. Conversely, when a person feels like their previous vote or failure to vote contributed to a perceived improvement or sustainment in the economy, they are more likely to not feel the need to vote to change or sustain the circumstances they in which they find themselves. High unemployment rates both increase a person’s desire to seek for change and increase their likelihood to vote. This behavior is consistent with the theory of regret.

1. Voter turnout is often associated with voter efficacy. Low voter turnout is thus associated with citizens having a very negative attitude toward their own ability to effect change in government through their individual actions. Thus, low voter turnout is perceived to be a negative indicator of people’s perceptions of their government.
Introduction

The American electorate uses many gauges and criteria when judging the performance of their elected leaders. While a politician's attitudes, actions, and overall appearance to voters plays an important role, nowhere are these gauges more apparent than in voters' perception of the economic well being of the country in relation to how it reflects upon the president of the United States, the United States Congress, and the governors of each state.

Political institutions, parties, and news organizations continuously contract polling agencies to quantify how economic indicators might affect the popularity of elected leaders. But do economic indicators, such as the stock market or unemployment, have an effect in voting booths on Election Day? Put succinctly, does dissatisfaction with the state of the economy—in particular, national and state unemployment rates—lead to higher voter turnout?

Theoretical Background

The research on this subject has been vast and quite thorough in the past, yet academia continues to debate whether strains on the economic system create impassioned desires to go out and vote. Seymour Lipset argues that "groups subject to economic pressures with which individuals cannot cope, such as inflation, depression, monopolistic exploitation, or structural changes in the economy, might also be expected to turn to government action as a solution and to show a high voting average" (1960, p. 192). Political participation and voter efficacy is thus correlated with the economic performance of both nation and state. Voters who witness or perceive negative changes in the economic stability of their nation or state are more likely to feel their civic participation can change the course of the economy (Milbrath and Goel 1977).

Samuel Kernell suggests the American psyche is much more inclined to punish than reward political figures for economic conditions (1977, p. 54). Surveying the results of midterm elections, he claims presidents who fail to convey positive messages of the economy toward an electorate are more likely to see former supporters defect to their political opponents. Such attitudes speak volumes of the fickle nature of the American electorate and their perceived efficacy to enact change en masse when their expectation (realistic or not) are not met. Such attitudes and conclusions give credence to the theory of current American politics acting much like a pendulum, constantly swinging back and forth (Martin 1906; Byander and Hart 2006).

Analogous to this argument is the work of Morris Fiorina, who also argued that voters engage in rational responses to economic and social conditions. In what he termed "retrospective voting," Fiorina claims the American electorate engage in Simple Retrospective Evaluations (SRE) wherein, through their personal experiences and evaluation of the past and current conditions of the country, voters rationally tie perceived failings in the direction of the country to those whom they have elected. This tendency to engage
in retrospective voting is such a pivotal force in voting that it leads to some citizens vot-
ing for candidates of a political party they have never supported before (Fiorina 1981).

However, the tide of research that claims economic indicators keep people at home
rather than project them to the polls on voting day are impossible to ignore. Steven
Rosenstone contends that "when a person suffers economic adversity his scarce re-
sources are spent holding body and soul together, not on remote concerns like politics.
Economic problems both increase the opportunity costs of political participation and
reduce a person's capacity to attend to politics" (1982, p. 25). Such claims assert that indi-
viduals are more concerned about trying to survive and function on an individual level.
"Citizens whose chief worry is making ends meet, holding onto their job, or finding one,
may well find any interest they might have in the broad affairs of politics deflected to
coping with finding a way to deal now, or as soon as possible, with the most immediate
and pressing of 'bread-and-butter' problems" (Brody and Sniderman 1977). This train
of thought supports the economic theory of opportunity costs. As it relates to my theory,
citizens simply do not have the time or energy to engage in the political process. Such
causal theory also suggests voter efficacy is negatively affected by the perceived state of
the economy, spurring citizens to simply stay home—or continue to go out and look for
work—rather than head to the polls. This line of thinking suggests voter attitudes and
general distrust of the government and its institutions will increase in negativity as the
perceived state of the economy continues to falter or shows anemic signs of growth.

So which is it? Do citizens make it a point to voice their discontent when the
economy is flailing, or do they find themselves more concerned with the day-to-day
struggle to provide for their wants and needs? Are citizens empowered by their per-
ception of the economy or feel the immensity of the institution is beyond their ability
to change on an individual, or group, basis?

While many scholars have studied this topic extensively over the past few de-
cades, the timeliness of this study and its potential predictive power for the upcom-
ing election make it an invaluable intellectual contribution to the state of knowledge.
Most of the studies related to this subject were published over twenty years ago
as scientists and psychologists studied the possible effect of the Carter economic
turmoil and recession that plagued Reagan's first few years in office (Fiorina; Fritz;
Kernell; and Rosenstone).

However, the state of the country, the immensity of the economy, and the re-
sources available to each individual in this day and age would astonish and amaze
researchers of the past few decades. None of them could have predicted the perva-
siveness of technology in our modern era or the overwhelming effect it has had on
every facet of society—especially the economy and politics. Quite simply, the technol-
ogy of today changes the rules and assumptions of the past.

Also, the relative perception of economic indicators changes drastically over
time. While voters in 1982 would have been relieved to see unemployment rates in
the 8 or 9 percent range, voters of today are outraged and galvanized by these figures. Voters, especially among the Generation X and Millennial generations, have grown up in a world expecting a job for every person, a home for every family, and a system that works to satiate their needs. They do not have the disposition to recognize the ebb and flow of the economy over the years. Economic indicators, especially unemployment rates, could have a much stronger impact on their feelings of political efficacy than their generational forbearers.

The importance of such a modern study could also have a tremendous effect on how candidates attempt to spur voter turnout. If a significant correlation exists between unemployment rates and voter turnout, candidates will be able to fine tune their campaigns to know exactly which issues to "push," because they are most likely to appeal to the electorate. The ability for candidates to refine messages and recognize the most important issues to voters is the key to encouraging citizens to get to the polls. Recognizing that generational gaps might exist in attitudes toward economic indicators will also be of value to candidates as they attempt to shape political discourse amongst the electorate, and in particular, their supporters. With extremely intense partisanship and dissatisfaction levels of congress at record lows, finding issues that are not just important to voters but are proven to increase voter turnout will be of tremendous importance to political discussions.

**Data and Methods**

The premise behind my theory is that high unemployment rates in individual states during election years have a positive effect on voter turnout rates. As was stated earlier, my theory is consistent with the theory of regret, because individuals feel both empowered and compelled to enact political change. These individuals express these attitudes of regret by seeking to change the institutions they see as responsible for their current economic conditions (Arceneaux 2006).

The theoretical framework of my research question is intended to simply account for the effect of unemployment rates on voter turnout. My justification for not including other variables is to begin anew the discussion of what possible psychological and political effect a state's unemployment rate has on the general voting public. While I do not have individual level data to suggest the psychological effect exists, the state level data and subsequent analysis that my research delves into opens the door to suggest more research should be done in this area.

As was discussed earlier, the generational and technological effects on today's economy are such that they vary drastically from what the country experienced twenty years ago. This is not to say generational effects should discount every political theory regarding voter turnout and economic conditions done in the past. But a practical revisiting of these past theories helps us to understand if those same conclusions hold true today.
The following variables were included in the full unemployment effect model to control for economic, political, and other determinants of U.S. voter turnout. Because all of these variables are contained within panel data, one can safely assume that omitted variables that are not included in the model will be accounted for through the state and time effects inherent in running regression models of panel data.

1. Voter Turnout: From research done by Dr. Michael McDonald of George Mason University, voter turnout for each election year is calculated by taking the "vote for highest office divided by the voting-eligible population." According to McDonald "the voting-eligible population is the best estimate of the number of people eligible to vote." Thus VEPHOTR stands for Voting-Eligible Population Highest Office Turnout Rate (McDonald 2010).

2. Unemployment: A measure of the non-seasonally adjusted, average unemployment rate for each state for the given year (1982, 1990, etc.) as recorded by the Bureau of Labor Statistics. The figures used reflected the average unemployment rate in the given year.

3. State: A list of the fifty individual states comprising the United States of America.

4. Year: For this project, data was collected for the years 1982, 1990, 1994, 2002, and 2010. Each of these years represent the first midterm elections a new U.S. president faced.

5. Competitive: Refers to the competitiveness of the race for the highest office in each state for a given year. In states where both a Senatorial and Gubernatorial election were held, the average for these two were taken. In states where neither a Senatorial or Gubernatorial election were held, the House of Representative elections were examined and the average margin of victory used to calculate its competitiveness. For this variable, 0 = a Noncompetitive Race and 1 = a Competitive Race. The standard of competitiveness was set at 5 percentage points, meaning that races that were decided by 5 percentage points or less were deemed competitive.

Because I am using fixed effects estimates, I do not focus on variables that do not change over time. Also, many individual level variables that may contribute to voter turnout are simply not present in the state level data. Therefore, the analysis I have chosen to engage in is at the state level.²

I chose to test my theory with state data because of its broader implications in national elections. Simply gathering data on a community basis would lack broader

---

² Because of this, I have chosen to omit some variables that may contribute to voter turnout such as level of partisanship (Fiorina 2002), proximity to voting precincts (Gimpel, Dyck, and Shaw 2004), one’s perceived interest in the election or those running for office (Goldstein and Ridout 2002), presence of a robust social movement and one’s association with the movement (Burden 2000), and voter knowledge of the issues and candidates (Matsusaka 1995). Also, other economic indicators such as stock market performance, interest rates, socioeconomic status, and others are not used here. Future studies would be useful to explore the effect of these variables.
predictive power in that voter turnout rates are rather salient across state levels (Gimpel, Dyck, and Shaw 2004). The same could be said across regions as well (Fullerton and Borch 2008).

Using a total of five election years for fifty states satisfies the law of large numbers needed for these quantitative tests to be statistically valid. Including past data would also help as I analyze what the perceived effect of generational gaps might be. Do people simply become accustomed to economic indicators such as unemployment rates as time goes on? Are spikes in voter turnout likely to happen only when the electorate perceives that the relative rates are concerning?

I chose to use the average unemployment rates for the specific election years because of how widely publicized these figures are throughout the year and how voter’s awareness of them is likely to build as elections draw near. Media outlets and political figures recognize that citizens’ political views and efficacy are affected by economic indicators—though to what extent remains to be seen. Attempting to use the unemployment figures for September or October only might skew the results if they are not reflective of the overall performance of the year, especially since doing so might have negated the possible effect of the unemployment rates improving or diminishing leading up to the election—though further analysis of this subject would be very interesting, especially as to its possible effect on voter turnout.

The decision to not gather data on a county level was constrained not only by time parameters for the project but also by the possible limitations in finding specific data at that level of analysis. More research could be done in this area.

To gain more insight into the effect of unemployment on voter turnout, quantitative data will be used in my analysis. Knowing which people are most likely to vote might help us understand the forces underlying voter turnout. Identifying the people most likely to vote provides empirical generalizations about voting which might then contribute to theoretical explanations of voter turnout.

Because the data I collected is from multiple years, with their associated voter turnout and unemployment rates, I ran a regression test of analysis. These tests were run accounting for both state and time fixed effects. Doing this allows me to control for all of the omitted variables that were not included in my study that might otherwise have an effect on voter turnout. Running this regression across both state and time controls for any broad effects of a certain culture and accounts for any variables that might affect voter turnout in a given year (like a social movement that seeks to spur voter participation). Other statistical tests were run to gauge the relationship between my variables and ensure that my estimators are not biased.

3. As will be witnessed by the strength of my regression results, the individual coefficients are statistically significant at the 1 percent level.
4. A Breusch-pagan test to determine if my data is heteroskedastic with accompanying robust standard errors to account for heteroskedasticity was also run during my tests to ensure validity.
Results

All data gathered for this project had 250 observations, except for voter turnout, which only had 249. The data for Louisiana in 1982 could not be located.

Table 1: Summary Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Error</th>
<th>Number of Obs.</th>
<th>Min and Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voter Turnout</td>
<td>42.9</td>
<td>7.7</td>
<td>249</td>
<td>20.2-64.1</td>
</tr>
<tr>
<td>Unemployment</td>
<td>6.7</td>
<td>2.3</td>
<td>250</td>
<td>2.3-15.6</td>
</tr>
<tr>
<td>Competitiveness</td>
<td>0.29</td>
<td>0.45</td>
<td>250</td>
<td>0-1</td>
</tr>
</tbody>
</table>

As we look at the data (individual tables and graphs are contained in the Appendix) we begin to see the general layout and typical observations for our figures (see Table 1). Voter turnout has varied greatly over these years, with citizens showing significant levels of efficacy in the frequency of their voting behavior. Unemployment has also seen tremendous highs and lows during these observed years, though the mean rate typifies an “acceptable” amount of unemployment—though the perception of this figure depends on one’s comparison of relative performance across years. We also see that a vast majority of political races are not competitive.

Observing Figure 1, one can see why it was necessary to employ a regression analysis for both time and state effects. By separating the years from one another and clustering states together (measuring their uniqueness in comparison with their neighbors), our data became more clear and conclusive in its findings.

Figure 1: Scatterplot of Voter Turnout and Unemployment by Year and Across All Years

Mississippi, Virginia, Kentucky, and Georgia consistently had both low voter turnout rates and low unemployment rates while Minnesota, Alaska, Maine, Montana, Oregon and the Dakota’s all had consistently high voter turnout rates and moderately high unemployment rates.

Table 2 contains the result from my fixed effects regression.5 The data revealed what variables affect voter turnout. The variables measuring unemployment and race

---

5. As the option to cluster either by state or time was available (Stata does not allow both to be run at the same time), the high degree of variance in voter turnout in each state made clustering by state the most logical choice.
competitiveness were held constant throughout this model so my variable on voter turnout would be more accurate. My regression model also contains State clustered standard errors. These were included to account for possible autocorrelation problems that might arise as I ran regressions for state and time fixed effects.

Table 2: Regression Model

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment</td>
<td>0.661</td>
</tr>
<tr>
<td></td>
<td>(0.197)</td>
</tr>
<tr>
<td>Competitive</td>
<td>2.614</td>
</tr>
<tr>
<td></td>
<td>(0.599)</td>
</tr>
<tr>
<td>State Effects?</td>
<td>yes</td>
</tr>
<tr>
<td>Time Effects?</td>
<td>yes</td>
</tr>
<tr>
<td>Clustered SE?</td>
<td>yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F-Stats &amp; p-Values</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Effects</td>
<td>1.07</td>
</tr>
<tr>
<td></td>
<td>(0.381)</td>
</tr>
<tr>
<td>State Effects</td>
<td>1538.14</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
</tr>
<tr>
<td>Constant</td>
<td>37.90</td>
</tr>
<tr>
<td></td>
<td>(1.215)</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.789</td>
</tr>
</tbody>
</table>

These regressors were estimated using panel data for 50 U.S. states for midterm elections in years 1982, 1990, 1994, 2002, and 2010 (249 observations total [no data for Louisiana 1982]), described in Appendix. Robust standard errors are given in parentheses under the coefficients, and p-values are given in parentheses under the coefficients. The individual coefficients are statistically significant at the 1 percent level.

Observing Table 2, one can see the coefficients for unemployment and race competitiveness are both statistically significant and reveal a positive effect on voter turnout when time and state effects are taken into account. I can therefore conclude that as the unemployment rates in a given state rise, the voter turnout in those states will rise as well. Thus, from my regression model one could say that a state with an unemployment rate of 9.8 percent (which was the National average for October 2010), would see a 5.98 percent jump in voter turnout rates (9.8 * 0.611 = 5.98). Thus, higher unem-

6. Note: For Table 2, voter turnout is the dependent variable.
7. Though not contained in this model, it is interesting to note that when time and state effects are not accounted for, our regression models including unemployment suggests a statistically significant negative effect on voter turnout rates. Such results reveal the value of controlling for these effects and might suggest the variance in unemployment rates over the years can skew our results (Unemployment rates were much higher in the 1980s than they were in the 1990s and early 2000s).
loyment rates contribute to higher voter turnout rates. With statistically significant coefficients, the data suggests for every one percentage point that unemployment rates go up, voter turnout rates increase by 0.661 percent.

My regression model also suggests the competitiveness of the race for highest office in each state is also statistically significant and reveals that race competitiveness has a positive effect on overall voter turnout, confirming research done by other researchers (Pacheco 2008; Gerber and Green 2005). Again, observing my regression model one can see that voter turnout rates are 99 percent likely to see around a 2.6 jump when statewide races are competitive.

Based on my regression model, I could predict voter turnout with a state that has an unemployment rate of 7 and a competitive race to be:

\[ 7.0 \times 0.661 = 4.6 + 2.6 = 7.2 \rightarrow 7.2 + 37.9 = 45.1 \]

As an example, for Washington in 2002, unemployment was 7.3 percent and there was not a competitive race. The regression results suggest with a base constant of 37.9, voter turnout should be:

\[ 7.3 \times 0.661 = 4.8 + 37.9 = 42.7 \]

The actual voter turnout rate was slightly below that at 41.8 percent. However, the ability to statistically predict voter turnout in a state, based solely on the unemployment rate, within less than a point supports my article. As another example, Colorado in 2010 had an unemployment rate of 8 percent and a competitive race. Our regression analysis would predict a voter turnout rate of:

\[ 8 \times 0.661 = 5.288 + 2.614 = 7.9 + 37.9 = 45.8 \]

The actual voter turnout was slightly better than that at 47.6 percent. However, these findings are consistent with my data, because Colorado saw the highest unemployment rates in 2010 out of the five years I was examining and also saw the highest voter turnout rates out of those five years.

**Discussion**

My findings are in direct correlation with my causal theory, because higher unemployment rates lead to voters turning to the election booth to try and change their economic environment. These results are consistent with the theory of regret. More research is necessary to determine if this is the true causal explanation.

While my regression model is shown to effectively predict voter turnout rates based upon unemployment rates in a given state, the question remains as to why people who are concerned about unemployment turn out to the polls to vote. The contributions from other researchers cited earlier suggest people are so petrified by unemployment they are concerned with little else. As an unemployed forty-one-year-old autoworker explains, "When you have no job, it's like dying—except you don't stop breathing. Your whole source of motivation is gone" (Fritz 1980, 68). But what motivation is he talking about? The regression model clearly shows unemployment
rates accurately predict voter turnout rates. Could it be that a large portion of Americans are actually motivated by regret for their, or others, choice in the previous election? This suggests regret is not only present among people who are unemployed but also among those who are employed and recognize the economy in a state they feel needs to be improved. It appears more research is needed to determine which group comes out to vote more.

While my data and research were focused on the effect of unemployment on a state level, I also found there might be other regional factors at work effecting voter turnout. While I will not speculate as to the many independent variables that might suggest differences between people living in different regions in the U.S., my data clearly suggests that Westerners turn out in greater numbers on Election Day than any other region. More research into this field must be done to understand the relationship region has on voter turnout.

Conclusion

My data is consistent with a theory of regret—though it should be noted the data has not produced direct evidence about individual psychology or regret. As a state’s unemployment rate rises, so does its voter turnout rates in midterm elections during a president’s first term in office. More research that incorporates other years must be conducted in the future to test whether the theory holds true for all election years.

The significance of such findings would be strengthened by further studies attempting to narrow what other, if any, economic indicators might affect voter turnout, including which indicators might vary in importance over time. Further studies into the attitudes and behavior of generation cleavages and age cohorts should also be conducted to explore their effect on voter participation and political efficacy.

REFERENCES

Arceneaux, Kevin. 2006. The federal face of voting: Are elected officials held accountable for the functions relevant to their office? Political Psychology 27, no. 5 (October): 731-54.


Byander, Fredrik, and Paul Hart. 2006. When power changes hands: The political psy
psychology of leadership succession in democracies. Political Psychology 27, no. 5 (October): 707-30.


Sigma: Journal of Political and International Studies is a multidisciplinary journal that serves as a publishing forum for undergraduate student papers in the fields of political science and international studies. Sigma is sponsored by the BYU chapters of Pi Sigma Alpha (National Political Honor Society) and Sigma Iota Rho (Honors Society for International Studies). For more information on these student organizations, please see their respective sites at http://tinyurl.com/BYUPAS and http://tinyurl.com/BYUSIGMA.

Sigma is published annually. We accept papers written on a broad range of topics related to political science and international affairs. For more information concerning submitting papers or working on staff, please contact the editorial committee at byusigmajournal@gmail.com or visit our website at politicalscience.byu.edu/sigma.

Publication of this journal is supported by the Political Science Department and the David M. Kennedy Center for International Studies at BYU. We also wish to thank the Kennedy Center Communications team for their editorial and graphic design assistance.