State Cooperation with International Criminal Tribunals: An Investigation of International Warrant Enforcement

Abstract

International criminal tribunals (ICTs) cannot apprehend suspects, and states hesitate to put forth costly effort to arrest those indicted for war crimes. Yet many suspects have been arrested or surrendered to ICTs of their own accord. Understanding why some suspects are arrested and others are not can illuminate why states will cooperate with international justice more generally. We present a formal model of a suspect who surrenders or evades arrest and a state that devotes some level of effort to apprehension. We draw on this theory as well as interviews conducted at ICTs in the Hague to present international-, state-, and suspect-level expectations over when and how suspects are likely to surrender or be captured. We use these insights to model the risk capture or surrender in an event history framework, utilizing newly collected data on all individuals indicted by the International Criminal Tribunal for the Former Yugoslavia (ICTY). We show that (a) increasing risks of arrest encourage suspects to surrender rather than remain at large, (b) state incentives to cooperate and the relative costs of evasion shape the probability of suspects coming before the court, and (c) those suspects that do remain at large are most likely to be captured when their state is either minimally or maximally exclusive.

Keywords:
International Courts, Enforcement, Cooperation, Post-Conflict Justice, Human Rights

International criminal courts and tribunals (ICTs) struggle to prosecute and deter criminals not because they lack the ability to punish violators of international law but because they cannot *apprehend* their suspects. ICTs have no capacity or authority to find and arrest suspects, relying primarily on oft-unwilling states to do so. States torn by recent civil conflicts often lack the infrastructure to honor ICT requests, and fresh wounds linger in politics: cooperating with international courts may influence leaders' ability to gain or retain office, and public support for suspected war criminals can facilitate evasion—sometimes in plain sight. Furthermore, third-party states that might like to pursue suspects are usually unwilling to violate others' sovereignty in the process.

These difficulties notwithstanding, many ICT suspects *have* been brought to trial. The International Criminal Court (ICC) issued a warrant for the arrest of Bahar Idriss Abu Garda for war crimes in Darfur, and he surrendered a mere ten days later. Congolese authorities captured Thomas Lubanga Dyilo, ultimately convicted of crimes committed in the Democratic Republic of the Congo, a month after the ICC issued a warrant. Yet the International Criminal Tribunal for the Former Yugoslavia (ICTY) issued a warrant for the arrest of Ratko Mladic in 1995, and Serbia apprehended him only in 2011, sixteen years later. While the ICC has only seen four warrants successfully executed of fourteen issued since its opening in 2002, the ICTY has seen *all* 162 of its suspects brought to the Hague for trial, with wide variation in their time spent at large.[1] This raises an obvious question. Why are some suspects accused by ICTs brought to trial soon after their indictments, while others remain at large for much longer?

[1]Details on each of these cases and all of those either in progress or completed by these institutions can be found on their respective websites: the ICC (http://www.icc-cpi.int/) and the ICTY (http://www.icty.org/).

Explaining this variation speaks to broader questions of state compliance with international institutions. Unlike trade and security, where cooperation can be supported by threats of retaliation or reciprocity, states are loath to expend resources to encourage others' cooperation over issues outside their own sovereign interests, such as human rights practices, environmental protection, public health, and international humanitarian law. Some work argues that states will comply in these issue areas when they value the issue at hand or when there are domestic or international political rewards for compliance in an essentially unilateral fashion (Chayes and Chayes 1993, Calvert 1995, Downs, Rocke and Barsoom 1996, Gray 2009, Simmons 2009, Hill 2010, Lupu 2015, von Stein 2015). However, compliance with ICT indictments is *not* a unilateral decision. When governments pursue them, suspects try to evade, suggesting that our ability to observe compliance will be a function of the strategic interaction between pursuing governments and evading suspects. In other words, observed compliance is not a straightforward function of a willingness or desire to comply, even when noncompliance is unlikely to be punished by other states.

We develop a theoretical model of these interdependent decisions, where (a) a suspect chooses whether to surrender to trial at an ICT or attempt to evade arrest and (b) a state allocates efforts to apprehend a suspect who remains at large—that is, it allocates efforts to comply with international warrants. In equilibrium, authorities devote more effort to apprehending suspects as the political rewards from cooperation increase, while the risk that state efforts result in arrest leads suspects to surrender instead. If factors that raise the risk of arrest encourage surrender, then those suspects who remain at large are a biased sample, which alters the expected relationships between the relative costs and benefits of pursuit and evasion on the probability of apprehension. While the benefits of compliance

and the costs of evasion have linear effects on the probability of surrender, they have non-linear effects on the probability of apprehension in the sample of suspects that remain at large.

Our empirical models draw upon newly collected data on suspects indicted by the ICTY, all of which have been brought before the Tribunal, yielding an uncensored dataset of warrants and surrender/capture incidents. Using case information, periodic reports, and press releases from the ICTY and secondary sources, we have coded information on each suspect's background, crimes, circumstances, and arrest, as well as international and domestic political conditions that influence state choices. Studying all suspects accused by the ICTY provides us with significant variation in the type of suspect, the country in which they evaded capture, and, most importantly, the duration of time they remained at large after their warrant was posted and the manner of their arrest, whether surrender or apprehension.

Our theoretical model helps us identify an appropriate research design; we estimate two empirical models of the strategic processes determining first the suspect's choice to surrender or evade and then the risk of apprehension for those suspects remaining at large. First, a two-step regression procedure simulates the choice to surrender or enter the at-large pool as a function of the expected risk of apprehension. The political benefits from cooperation with ICTY warrants (approximating the level of domestic support for cooperation) and the relative costs of apprehending particular suspects (as a function of information advantages and their alleged responsibility in crimes) populate a model a suspect might use to predict his own risk of apprehension, which we then use as a regressor predicting his choice of surrender. In a second analysis, we estimate a Cox proportional hazards model of the risk of apprehension for those suspects who chose to enter the biased sample of at-large suspects

by refusing to surrender. These models help us to understand the conditions under which states actively comply with an international criminal court's edicts and the conditions under which those efforts translate into the court's desired outcomes of arrest and prosecution. The variables we might expect to lead to an increase in the likelihood of arrest, like lower levels of exclusion from politics, actually only do so at extreme ends of the variable's range, since the conditions that make states devote effort to apprehension also lead suspects to self-select out of the at-large pool.

By examining their most pressing barrier to enforcement—the problem of arrest—we speak to the effectiveness of ICTs, as well as to the enduring question of when and how states will comply with the dictates of international institutions. Rather than using ratification patterns or other indirect data to draw conclusions about state *perceptions* of institutional effectiveness (e.g., Gilligan 2006, Kelley 2007, Simmons and Danner 2010, Chapman and Chaudoin 2013), we utilize new data on the actual efforts of the ICTY, states, and international institutions, as well as characteristics of each suspect, to determine how these variables affect state compliance and shorten the length of time that suspects remain at large. This allows us to draw conclusions about ICT effectiveness based on the actual behavior of states. Importantly, we argue—and find evidence to suggest—that the question of compliance with international institution requests is not simply a matter of state effort. Instead, it is a strategic interaction of counterefforts, expectation, and censoring.

The Effectiveness of ICTs

International criminal courts and tribunals (ICTs) attempt to prosecute the unprosecutable. After devastating wars or crimes against humanity, there are international and domestic pressures to punish those responsible, create records of the events, establish justice or remedy for victims, and facilitate societal recovery. Postwar states like Rwanda, Yugoslavia, Sierra Leone, or Uganda are often unable to meet these goals with local institutions, having to wait years for independent and powerful courts to (re-)emerge. Both rebel and government actors are usually responsible for war crimes, and many of these continue to hold or have obtained political power in the post-conflict period. Holding power means wielding authority over those who would arrest and try the accused for their alleged crimes, which compounds the obstacles to successful prosecution.

Interested observer states and international organizations have stepped in to create ICTs to take legal action for post-conflict justice when domestic courts are unable to do so. We define ICTs as international institutions granted the legal authority to prosecute, try, and impose sentences on individuals accused of war crimes, crimes against humanity, and/or genocide.[2] The United Nations took primary responsibility for international tribunals associated with the Former Republic of Yugoslavia and Rwanda, and it provided guidance and support to Cambodia and Sierra Leone to manage special criminal tribunals on their own soil. ICTs have also been used to prosecute crimes related to terrorism, as with the Special Tribunal for Lebanon (STL). The ICC, in contrast, is not limited to particular conflicts but instead is permanent, with jurisdiction over war crimes and crimes against humanity if

[2]This definition most notably excludes strictly domestic mechanisms of post-conflict justice and those institutions that function strictly as truth commissions. Both of these face different challenges and incentives than those we discuss in an international, legally-binding context.

they are committed by or in any of its member states. However constituted, ICTs all have international character and legal authority to try those suspects that post-conflict states cannot—those accused of having the highest level of responsibility for crimes committed against vulnerable populations during war.

The UN resolution establishing the ICTY mandates that the tribunal should prosecute those most responsible for the violations of international humanitarian law that took place during the 1990s in the former Yugoslavia and thereby "contribute to the restoration and maintenance of peace" (UN Security Council Resolution S/RES/808 1993). A further hope was that war criminals in other countries might expect to be taken to court for similar crimes, whether through an ad hoc tribunal or the permanent ICC with wide jurisdiction for investigating situations of genocide, crimes against humanity, and war crimes. If an individual expects to be brought to international trial, she may be deterred from committing crimes. However, absent a strong expectation of arrest, deterrence is likely to fail. The success of these institutions comes down to a question of whether an ICT will be able to effectively try and prosecute perpetrators of these crimes.

The relative youth of most ICTs means a dearth of data by which to assess their ability to prosecute criminals who avoid domestic trial; most scholarship focused on ICT deterrence is largely theoretical, whether in social science or legal research. Scholars argue that ICTs fail by discounting political power, and states will be unwilling to surrender authority to international courts as well as to enforce on their behalf (Goldsmith 2003, Goldsmith and Krasner 2003). Others build theoretical models of how ICTs might be able to bring suspects to trial but do not bring evidence to the question (Gilligan 2006, Ritter and Wolford 2012). Ratification patterns indirectly suggest the likelihood that states will cooperate and

hand suspects over to the ICC, under the assumption that a state's agreement to cooperate suggests something about likely compliance (Kelley 2007, Simmons and Danner 2010, Chapman and Chaudoin 2013). In other words, most work assesses efficacy based on arguments about *likely* compliance and *promises* to cooperate, rather than evidence of realized or failed cooperation with ICTs. A more direct assessment of efficacy would look at actual cooperation with ICT requests.

Though ICTs have full authority and capacity to try cases and hand down punishments once suspects are rendered into their custody, the threat of arrest that supports deterrence implicates the always difficult question of state compliance. As international institutions without control over armed forces, ICTs have no independent means of finding and arresting suspects within sovereign states. The primary burden for arresting suspects rests with states,[3] and securing their cooperation under conditions of international anarchy can be quite difficult.

Without strong central authority, cooperation is maintained by the state parties themselves. Reciprocity (Axelrod 1984, Fearon 1998, Barrett 1999) and a desire for the collective material and informational benefits of cooperation (e.g., McGillivray and Smith 2000, Simmons 2000, Voeten 2005) lead to within-group cooperation when it is a matter of concern to multiple states, as in trade or security.[4] Yet an understanding of compliance with institutions governing areas traditionally reserved for domestic politics is elusive. Peer enforcement to support environmental treaties (Dai 2005) and human rights treaties (Ramcharan

[3]Warrants can also be executed by international authorities who are working in the regions where suspects reside, as when Vidoje Blagojevic was arrested by the NATO Stabilization Force (SFOR) in 2001 (ICTY Case Information Sheet IT-98-33/1), but this is relatively rare.

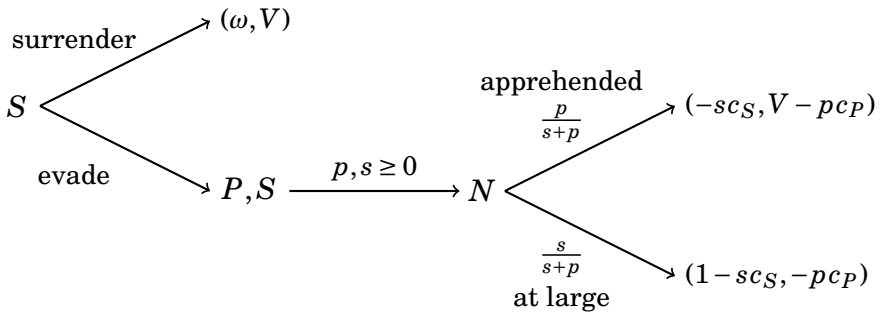
[4]Further, beliefs over the benefits and costs of compliance influence decisions to join the institution in the first place, often leading to questions as to whether IOs themselves motivate compliance at all (Downs, Rocke and Barsoom 1996, Simmons and Hopkins 2005, Von Stein 2005).

1989) is weak and uncommon. Compliance may yield a reputation for good behavior, though it remains unclear whether this facilitates rewards in other areas (Downs and Jones 2002). The most promising explanations for compliance with international institutions center on domestic politics; for example, independent judiciaries (Powell and Staton 2009, Conrad and Ritter 2013, Conrad 2014), legal rules for implementation (Simmons 2009), or legislative controls (Lupu 2015) can make non-compliance more difficult.

We view state compliance with international warrants as a function of the political rewards for state leaders that create *willingness* to cooperate with ICTs and the case-specific challenges that undermine their *capacity* to do so. Domestic groups, for example, may reward leaders for cooperating with post-conflict justice initiatives with political support. As more people develop preferences for such cooperation, and as they develop the capacity to influence government decisions, state authorities should be increasingly likely to cooperate and garner those political rewards (Dai 2005, Simmons 2009, Conrad 2011). Yet states emerging from civil war remain mired in political conflict, with new or fluctuating institutions that continue to exclude groups from political power while those accused of war crimes may retain it. Worries of destabilizing new governments and a lack of interest in cooperation with justice efforts among the powerful will keep states from searching for and arresting suspects.[5] Complicating matters still further, a desire to cooperate may be insufficient to produce compliance if characteristics of the suspect enable successful evasion. This is a particular challenge when those responsible retain (or have obtained) political power; it is difficult to arrest individuals with authority over the police and/or military, such as Milosevic in Serbia and al-Bashir in Sudan. Arrests can be complicated in new states with

[5]Author interview with ICTY official, the Hague, the Netherlands, June 20, 2012.

Figure 1: The sequence of play



old politics; Ante Gotovina was considered a national hero in Croatia, but the ICTY indicted (and eventually convicted) him for war crimes.[6] Explaining compliance outcomes through variation in how long suspects remain at large, as well as the manner of their arrest, requires that we consider both sides of this strategic problem.

A Theory of Surrender, Evasion, and Arrest

We present a simple theory based on the goals of and actions available to a suspect and a pursuer. As shown in Figure 1, suspects choose between devoting effort to evade capture, subject to their limited resources or abilities, and surrendering, while pursuers must choose how much costly effort to put toward apprehending suspects if they do not surrender. These interdependent choices combine to produce surprising implications for how we judge the effectiveness of ICTs in generating compliance with their edicts, which we then leverage in the research design of our empirical analysis. We close this section with a statement of hypotheses that we evaluate in the empirical models below.

[6] Author interview with ICTY official, the Hague, the Netherlands, June 20, 2012.

Model

A suspect indicted for crimes by an ICT (S) may be apprehended by a pursuer (P), or the organization tasked by an ICT with arresting the suspect. While a number of individuals or groups could find and arrest the accused, they have varied incentives to do so, and we need to limit our study to draw clear inferences. As such, we assume the pursuer to be the primary decision-maker(s) acting on behalf the ruling government of the state where the suspect is believed to reside.[7] This is the entity making authoritative decisions as to what effort should be expended to find and arrest the suspect.[8] The pursuer receives $V \geq 0$ for seeing a suspect turned over to the ICT, such that V represents the *political* value the pursuer receives for the suspect going to trial. It can be low in times of public antipathy toward the ICT, or it can be high when the state would receive a political "bonus" from either constituents or international actors for its cooperation. P receives this value whether the suspect surrenders or is apprehended, but it receives 0 if the suspect remains at large.

The suspect, who chooses between surrender and attempting evasion, receives his highest payoff of 1 if he avoids capture and his worst outcome of 0 if he is apprehended, less the costs of evasion efforts in each case.[9] The costs of evasion create the possibility that S may prefer to surrender to the Court rather than expend resources avoiding capture, and surrender yields a payoff of ω. Suspects may believe they will receive good will from the

[7] ICTs such as the ICTY, the STL, and the ICTR have Tracking Units, which are departments of experts with experience in police and military investigations, specifically in tracking fugitives. Their job is not to find and arrest fugitives but to determine where fugitives are most likely to be and assess whether the state is doing all it can to try and arrest them.

[8] While orders are followed by assumption in the model, we discuss below how principal-agent problems can be incorporated into our unitary-actor framework.

[9] We use male pronouns to refer to the suspect throughout our presentation, because 99% of all suspects indicted by any ICT have historically been male, though the ICTY did indict and convict one woman (Smeulers, Hola and van den Berg 2013, 30).

prosecutor or the bench for their cooperation. There can also be benefits from surrender that are not available to those who choose evasion. Vojislav Koštunica, a nationalist Prime Minister of Serbia, refused to execute warrants or otherwise cooperate with the ICTY, including prominently opposing the extradition of former President Milošević.[10] However, in 2006 Koštunica announced that suspects who surrendered themselves to the ICTY would receive state funds for all legal fees, family travel to the Hague, etc. This incentivized some mid-level suspects to surrender to the Court.[11] Suspects may also believe that surrender is less personally risky, because they can choose to surrender to more disciplined security forces less likely to seek extralegal retribution—a choice they would be unable to make if they attempt evasion. Thus, if the suspect surrenders, he receives $\omega \in [0, \overline{\omega}]$, where $0 < \overline{\omega} < 1$.

If the suspect chooses to evade arrest rather than surrender, he and the pursuer choose levels of effort to commit to avoiding ($s \geq 0$) and executing ($p \geq 0$) arrest, respectively. These efforts combine in a contest success function by which the suspect evades arrest with probability $\frac{s}{s+p}$ and is apprehended with probability $\frac{p}{s+p}$. S chooses a level of effort s, for which he incurs marginal cost $c_S > 0$. For many suspects, this effort to remain at large resembles what we might expect of any suspect with average resources—changing identities, fleeing authorities, or hiding in family homes. However, many suspects indicted by international tribunals hold power once the conflict ends. Popular support, control over the police or military, or political office are powerful assets that make it easier to avoid apprehension, even while remaining in public view. The pursuer, for its part, must pay its own marginal costs of effort $c_P > 0$—money, attention, manpower, guarding against agency loss—that it could

[10] http://news.bbc.co.uk/2/hi/europe/1412828.stm, accessed July 16, 2014.
[11] Author interview with ICTY official, the Hague, the Netherlands, June 20, 2012.

use for other purposes.

With players, actions, and outcomes defined, the utility functions are as follows:

$$u_S = \begin{cases} \omega & \text{if surrender} \\ \frac{s}{s+p} \times (1) + \left(\frac{p}{s+p}\right) \times (0) - sc_S & \text{if evade} \end{cases} \tag{1}$$

$$u_P = \begin{cases} V & \text{if surrender} \\ \frac{s}{s+p} \times (0) + \left(\frac{p}{s+p}\right) \times (V) - pc_P & \text{if evade.} \end{cases} \tag{2}$$

Analysis

We identify the unique Subgame Perfect Equilibrium (SPE), which specifies a pair of optimal effort levels for each player (s^*, p^*) and the conditions under which S surrenders to the ICT or chooses the costly lottery of evasion.

Proposition 1. *The following strategies constitute the unique SPE:*

- *S surrenders when $\omega \geq \frac{c_P^2}{(c_P + V c_S)^2} \equiv \hat{\omega}$ and evades otherwise.*
- *In the evasion subgame, $s^* = \frac{c_P V}{(c_P + V c_S)^2}$ and $p^* = \frac{c_S V^2}{(c_P + V c_S)^2}$*

When deciding whether to evade or surrender, the suspect considers how much effort would be optimal to devote to avoiding arrest, which is also a function of the pursuer's optimal effort. In the evasion subgame, each player chooses a level of effort (s^*, p^*) that balances improving the chances of success against the costs of additional effort. Suspects and pursuers with low costs of effort or, put differently, resources and capacity to spare,

enjoy a natural advantage in terms of efficiency. The pursuer devotes greater effort as it becomes cheaper and as its valuation for capturing the suspect rise, but the suspect's costs (or resources) have a nonmonotonic effect on the pursuer's effort. Specifically, p^* rises through low values of c_S, as the pursuer finds it cheap to take advantage of the suspect's rising difficulties, but when c_S is high enough that it drives down the suspect's evasion efforts, the pursuer dials back on its own efforts to economize on the costs of pursuit. Likewise, for the suspect, his effort s^* decreases in his own costs, but a similar nonmonotonic relationship exists for both V and c_P. The suspect's effort increases through low values of c_P but declines through high values, as he tries to economize on his own costs of evasion. Finally, when V is low, s^* increases in V, as the suspect tries to match P's increasing motivation for pursuit with his own efforts, but once V is sufficiently large, the suspect dials his efforts back in what he views as an increasingly lost cause.

Anticipating the required efforts, the suspect can calculate the probability that he will be apprehended if he were to enter the at-large sample and decide if it would be better to surrender instead. If any suspect were to enter the evasion subgame, the probability that the pursuer apprehends that suspect is

$$\Pr(\text{Apprehension}) = \frac{p^*}{s^* + p^*} = \frac{V c_S}{c_P + V c_S}, \tag{3}$$

which increases monotonically in the pursuer's valuation of the suspect going to trial (V) but decreases in its costs of effort (c_P), while increasing in the suspect's costs of effort (c_S). The suspect chooses to surrender when the value of surrender ω is at least as attractive as the net risks of evasion, for which he pays $s^* c_S$ in return for a probability of successfully

avoiding arrest. Unsurprisingly, the suspect will surrender when the terms are sufficiently attractive, but analysis of the cutpoint on ω suggests this threshold becomes easier to satisfy as the pursuer finds it cheaper (low c_P) or more beneficial (high V) to pursue him and as the suspect's own costs of evasion increase (high c_S). In other words, a suspect is more likely to opt for surrender as the factors change in ways that make him more likely to be apprehended in the evasion subgame.

Proposition 2. *Surrender becomes more attractive in the pursuer's value for cooperation V and the suspect's costs of effort c_S and less attractive in the pursuer's costs of effort c_P.*

Should the suspect choose not to surrender, what affects the probability that he will be apprehended? The probability of apprehension specified in Equation 3 describes the unconditional probability that any suspect would be arrested if they were to enter the evasion subgame. However, those suspects who choose evasion over surrender constitute a biased sample in observational data, because they strategically avoid the highest risk of apprehension and surrender instead.

To generate more precise empirical expectations based on this selection process, we characterize the probability of capture conditional on a suspect having chosen not to surrender. We can do this by assuming that ω is distributed uniformly, $\omega \sim U[0, \overline{\omega}]$, such that the prob-

ability of arrest given the suspect's evasion is:

$$\Pr(\text{Apprehension}|\text{Evade}) = \Pr(\text{Evade}) \times \Pr(\text{Apprehension}) \tag{4}$$

$$= \left(\frac{\hat{\omega}}{\overline{\omega}}\right) \times \left(\frac{p^*}{s^* + p^*}\right) \tag{5}$$

$$= \left(\frac{c_P^2}{\overline{\omega}(c_P + Vc_S)^2}\right) \times \left(\frac{Vc_S}{c_P + Vc_S}\right) \tag{6}$$

$$= \frac{Vc_P^2 c_S}{\overline{\omega}(c_P + Vc_S)^3} \tag{7}$$

This conditional probability describes the conditions under which a suspect who does *not* surrender voluntarily will be pursued and arrested. In equilibrium, the suspect surrenders when the value of doing so is especially high *or* when it will be too costly to match the efforts of a determined pursuer. He opts to evade when $\omega < \hat{\omega}$, or when there is a good chance that he will successfully dodge arrest—that is, when conditions make his effort easy and the pursuer's efforts costly. The foregone opportunity to surrender implies that a selection process shapes observational data, as the suspects choosing evasion have lower costs and better expectations of success. Assessing this conditional probability allows our empirical models to take this selection process into account.

First, consider the effect of the pursuer's value for compliance (V). Equation 7 shows that the conditional probability of apprehension increases through low values of V and falls through high values in an inverted-U shape. While low-value targets rely on the pursuer's weak incentives to capture them and opt for a low-risk evasion, the probability of apprehension increases through V until the risk becomes so high that the suspect chooses instead to surrender. Since the conditions that make the pursuer work hardest encourage the suspect

to surrender (see Proposition 2), the suspect remains at large when he is uniquely adept at evasion due to extreme values of other variables, such as costs of effort.

Proposition 3. *As the pursuer's value for cooperation V increases, the probability an at-large suspect will be apprehended increases until $V^{\dagger}$ and then decreases.*

The costs of effort have a similarly nonlinear effect; the probability of apprehension increases through low values of both c_P and c_S but decreases through higher values. Consider Equation 6. As c_S increases, the first term, representing the probability the suspect will choose evasion, decreases while the second term, the probability of apprehension, increases. Conditions that make evasion costly will force a suspect to reduce his efforts to hide, which raises the probability that the pursuer finds and captures him. Thus, surrender becomes increasingly attractive with increasing c_S, meaning that another selection process alters the underlying effects of c_S in the sample of suspects attempting to evade arrest.

Proposition 4. *As the suspect's costs c_S increase, the probability an at-large suspect will be apprehended increases until $c_S^{\dagger}$ and then decreases.*

The change in the compound probability takes the same form as c_P increases, but for different reasons. The pursuer's effort strictly decreases in its own costs for effort (c_P), which decreases the probability of capturing the suspect. This creates incentives for the suspect to surrender when the pursuer's costs are low but to go to ground when the pursuer's costs are high. As the pursuer's costs of arresting the suspect increase, the probability the suspect will attempt to evade capture (the first term) increases, while the probability of successfully arresting him (the second term) decreases. Nonetheless, for low values of c_P, suspects who

contribute low amounts of effort to evade capture enter the at-large pool, making arrests likely even while the state's costs of effort increase.

Proposition 5. *As the pursuer's costs c_P increase, the probability an at-large suspect will be apprehended increases until $c_P^\dagger$ and then decreases.*

The formal analysis has generated empirical implications over both the probability of surrender, which itself depends on the anticipated risk of capture, and the risk of capture in observational data, which depends on a selection process by which suspects choose *not* to surrender. Those factors that increase the expected probability of apprehension work backward to increase the probability of surrender, which means that suspects who choose not to surrender will be a biased sample of all possible suspects. Propositions 3–5 show that this can lead to rather different empirical patterns across the probabilities of apprehension among the pool at-large of suspects, a process that informs the derivation of hypotheses presented next and the selection of empirical models in the subsequent section.

Hypotheses

In this section we translate the implications of the theoretical model into the hypotheses that we test in the empirical analysis. Since choices over surrender and evasion are strategically linked through the anticipated risk of apprehension, we condition hypotheses on the appropriate outcome variable (surrender or apprehension) and sample of suspects (the full sample or those that choose to evade), which leads to divergent and sometimes counterintuitive predictions over the effects of key theoretical variables.

Our first hypothesis concerns the suspect's initial choice over surrender and evasion,

which depends on the expected risk of apprehension if he remains at large. Our theory predicts that the suspect surrenders when

$$\omega \geq \left(\frac{s^*}{s^* + p^*}\right) - sc_S \Leftrightarrow \omega \geq \left(1 - \frac{p^*}{s^* + p^*}\right) - sc_S,$$

where the payoff for evasion falls as the probability of apprehension increases, whatever combination of factors conspires to raise that probability. Hypothesis 1 follows directly.

Hypothesis 1. *The probability that a suspect surrenders increases in the expected probability of apprehension.*

The expected probability of apprehension is a compound concept that represents the suspect's estimate of his efforts combined with the pursuer's if he were to remain at large. As stated in Proposition 2, the variables V, c_S, and c_P have linear effects on the likelihood of surrender because they actually influence his expectation of being arrested. We therefore state hypotheses over that expectation, derived from Equation 3, which is the unconditional probability that *any* suspect who might choose to evade capture would be arrested. We can interpret those factors contributing to the unconditional probability of apprehension as having an indirect effect—as predicted by the theory—on the initial choice of surrender.

We derive two hypotheses based on (a) the political value of cooperation with the court (V) and (b) the suspect's relative costs of evasion, which is roughly the ratio of P's to S's costs of effort (c_P/c_S). The pursuer's value for capturing the suspect (V) is the political gain, international or domestic, of compliance with the court—that is, seeing a suspect brought to trial. It represents any possible benefits the pursuer would receive for the ICT carrying out its mandate. V is low during periods of antipathy to post-conflict justice, or when those who

value the process are excluded from political influence, and it is higher when the state wins domestic popular support or international rewards for its cooperation. This is a state-level construct capturing the domestic politics of support (or opposition to) the Court's mandate of trying suspects. We relegate suspect-specific factors to the relative costs of pursuit and evasion.[12] Any factor raising c_P or lowering c_S makes evasion relatively easier for the suspect.Rather than sort through the elements that advantage P or S in isolation, we measure the *relative* costs of evasion; as it becomes more costly for the suspect to evade arrest *relative to his pursuer's costs of finding him*, his apprehension becomes more likely.

Hypotheses 2 and 3, derived from the unconditional probability of apprehension in Equation (3), characterize the effects of V and c_P/c_S on the full sample of suspects, which approximates the observable factors shaping the risk of apprehension that the suspects in our data were likely to have used in their own surrender decisions.

Hypothesis 2. *The probability that any suspect is apprehended increases in the state's political value of cooperation.*

Hypothesis 3. *The probability that any suspect is apprehended increases in the suspect's relative costs of evasion.*

Our final dependent variable is the conditional probability that an at-large suspect is arrested. As discussed in Propositions 3–5, the strategic process by which suspects choose to remain at large means that both the value of cooperation and relative costs of evasion have nonlinear effects on the probability of arrest in this particular sample of suspects.

Hypothesis 4. *The probability that an at-large suspect is apprehended increases through*

[12] Since they are measured relative to V by construction, this relegation is an innocuous choice.

low values of the state's political value of cooperation and decreases through high values of cooperation.

Hypothesis 5. *The probability that an at-large suspect is apprehended increases through low values of the suspect's relative costs of evasion but decreases through high values.*

These hypotheses capture the essentials of the strategic problem facing ICT suspects and their pursuers: suspects are eager to surrender when evasion is unlikely to be successful, but once they choose evasion, the effect of the relative cost of effort on the probability of arrest is nonlinear. In the following section, we specify a research design informed by the theoretical model and describe the data we use to analyze these hypotheses.

Data and Variables

In this section, we present our newly collected data on suspects indicted by the ICTY and the timing and manner of their arrest (surrender or apprehension) and operationalize key theoretical variables.

The ICTY Suspect Data

The International Criminal Tribunal for the Former Yugoslavia (ICTY) is mandated to try those accused of crimes from a single conflict over a limited period of time, which means that there is a clear beginning and end to its activity. It has a perfect record of warrant execution: all 162 suspects that the ICTY indicted for war crimes, genocide, and crimes against humanity have either surrendered or been apprehended and turned over to the Court, leaving no outstanding warrants as its mandate draws to a close. The resulting

data include 5081 suspect-months of all warrants and subsequent surrenders/arrests from January 2002 to July 2011, not including eighteen suspects who were already in a third party's custody at the time of indictment.[13]

Working from a complete list of cases, we used Court documents supplemented with secondary sources to identify all suspects and collect information about the circumstances by which they came to the Hague for trial.[14] The ICTY publishes Case Information Sheets on its website, which includes a summary of the alleged crime, the details of the indictment, the trial, and other information for each case.[15] These sheets, supplemented by indictments, press releases, and other Court documents, allowed us to collect information such as the dates on which the suspect was indicted and the indictment made public; the suspect's nationality, civil/military background and ethnicity; the charges and the suspect's alleged role in the crime; and verdict and sentencing information. We supplemented these core details with research on the surrender or capture of each suspect and of their time at large using ICTY press releases and secondary (international news media) sources.[16] The data are organized at the suspect-month unit of observation.

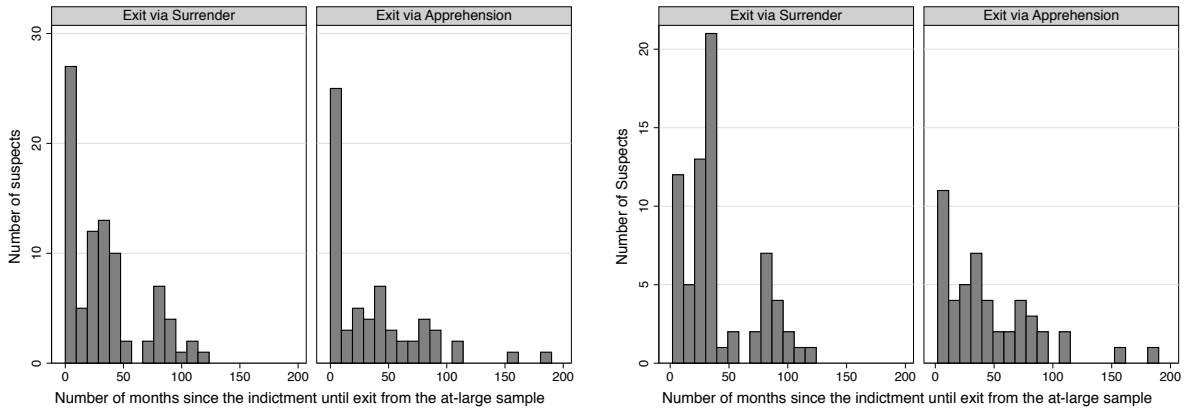
The mean time-at-large in the data is roughly seventy months, with a standard deviation of around forty months, indicating substantial variation in the amount of time that suspects avoided arrest. Figure 2 presents a histogram showing the distribution of suspects across

[13]Some information included in the dataset will not be complete as of writing, such as information relating to ongoing trials, but they are not used in these analyses. These variables will be continually updated until the ICTY's mandate is completed for purposes of future research.

[14]All data along with the codebook used to create the dataset will be available on the authors' websites upon publication.

[15]All Case Information Sheets are available by case number or suspect name on the ICTY's website at URL: http://www.icty.org/action/cases/4.

[16]To ensure inter-coder reliability, each case was coded independently by at least two research assistants, and the authors conducted checks of details for all individual cases.



(a) All suspects

(b) Suspects arrested after 1 month at large

Figure 2: Histogram of suspect months-at-large

months-at-large, where most are clustered between about thirty and seventy-five months, even as considerable numbers fall outside that range—including, at 191 months-at-large, Ratko Mladić, the last suspect to come before the Court. While Mladić's case appears consistent with an ineffective, "toothless" institution unable to win the cooperation of those with the means to arrest its suspects, the substantial number of suspects arrested within one or two years of indictment reveals that suspects and/or states do often cooperate with the Court. With the world—both states that might consider working with or establishing ICTs in the future and individuals weighing the consequences of committing war crimes—watching, the ICTY managed to win sufficient cooperation to bring *all* of its indicted suspects to trial. Given its lack of executive power, this is puzzling. What made some suspects easy to arrest, while others remained at large for years, often at significant cost to the ICTY's public standing? Our data, which track suspects from the time of their indictment to the time (and manner) of their arrest, allow us to model this process explicitly and offer answers to this very question.

Theoretical and Control Variables

Before we can operationalize variables such as the government's value for cooperation with the ICTY, we need to establish which state is playing the game with a given suspect, or the most likely Residing State. It is difficult to know with precision the whereabouts of at-large suspects, but we assume that suspects tend to stay put in their home state. As told to us by an official at the ICTY, even when they have resources to travel, suspects find it easiest to evade arrest when they remain in their home state, near social networks, friendly homes, and familiar places. We first coded a suspect's likely Residing State as the state of his birth. Most of the ICTY indictments list the Court's best information about the suspect's whereabouts at the time of issue; we used this information to update the Residing State for a number of suspects, as it reflects the state the Court has tasked with his apprehension. Unless Lexis-Nexis searches revealed other known whereabouts, we coded the suspect's Residing State to be where they held power, worked, or lived at the time of indictment, as listed in official ICTY documents. In almost all cases, media searches confirm this coding rather than overturn it.[17]

Our first theoretical variables measure the value that a Residing State's government places on cooperation with the international tribunal (V from the theoretical model), i.e. the political rewards the government receives when the Court carries out its mandate. We locate these perceived rewards in two places—the degree of ethnic political exclusion and the state's level of democracy—that shape the government's receptiveness to popular pressure, the material rewards of compliance, or both.

[17]Two suspects evaded capture and were eventually arrested in states outside of the Former Republic of Yugoslavia, and we dropped from the analysis as outliers.

First, we measure the degree to which the governments of Residing States exclude other politically relevant ethnic groups from political power. Particularly in Bosnia and Serbia, many of those accused by the ICTY remained in power in the years following their indictments, and those members of the public who would support turning these figures over to the Court—their victims—were excluded from politics. We draw on the Ethnic Power Relations Dataset (Wimmer, Cederman and Min 2009), which identifies the ethnic groups that are potentially relevant to governance in a state and the extent of their access to state power. The variable *Excluded Population* is the ratio of the size of the excluded population to the total population, which tracks how likely those who would be most supportive of the ICTY are to be excluded from power. Assuming that governments would prefer not to cooperate with the court if free to choose, greater exclusion means greater insulation from popular pressure to pursue suspects. As this ratio increases, groups in power that do not value cooperation can more easily act on those preferences, resisting pressures from those who demand compliance.

Next, transitions away from conflict and toward democracy and the rule of law in the former Yugoslavia shifted both popular and government preferences toward support for post-conflict justice, such that authorities became increasingly willing to pursue ICTY suspects.[18] We use the Unified Democracy Score (UDS) to measure the *Level of Democracy* in the Residing State for a given calendar year while the suspect remains at large within it (Pemstein, Meserve and Melton 2010). UDS estimates the latent concept of democracy underlying ten measures, including institutions, elections, values, rights, participation, and other core ideas. Scores range from -2 to 2 and vary by year. Since the UDS draws on many

[18]Author interview with ICTY official, the Hague, the Netherlands, June 20, 2012.

measures that capture slightly different things that vary at different times, it shows more variation than other democracy scores like the slowly-changing Polity index (see Marshall and Jaggers 2009).

Turning to our second major theoretical concept, the relative costs of evasion, we measure factors that make it relatively cheaper or more expensive for the state to pursue particular suspects. We include variables that cover two different dimensions of the concept: the suspect's alleged level of responsibility for the crime, and the presence of a United Nations peacekeeping operation in the residing state.

Though the ICTY's jurisdiction is limited to those bearing the highest responsibility for crimes committed in the former Yugoslavia, suspects are accused of acts ranging from participating in a criminal enterprise to bearing superior responsibility for crimes against humanity. We expect that suspects who played minor roles in criminal activity will tend to be those who lack the financial, popular, or political resources to evade arrest, such that evasion is particularly costly for them. In comparison, state authorities will have relative difficulty capturing high-profile suspects with power and other resources that enable them to evade arrest at lower personal cost. States will require additional incentives to invest the significant resources needed to locate and arrest suspects former presidents, military leaders, or otherwise popular figures. We therefore expect that those figures who carried out orders should come before the ICTY sooner than those bearing primary responsibility for the crimes.

The suspect's alleged *Role* in the crimes is coded in the source data in one of four ways: Participant, Aiding and Abetting, Complicity, or Responsibility. This listing is in order of the level of responsibility implied by each category, and each suspect is categorized at the

highest level of their responsibility. If, for instance, a suspect allegedly planned an act and participated, he would be coded as Responsible, rather than a Participant. Participants acted according to orders or the specifications of their job as determined by others. Foot-soldiers, prison guards, and trigger-pullers tend to fall into this category. The vast majority of people who participated in crimes with low levels of responsibility during the Balkan wars were either tried in domestic courts or not indicted, but forty-six were charged by the ICTY. By contrast, seventy-one suspects were coded as exercising Responsibility for crimes against humanity, genocide, or war crimes. These actors planned, ordered, or otherwise led others in heinous crimes of a political nature at the highest level of culpability. Frequently, people charged with Responsibility were commanders or leaders; chiefs of staff of the belligerent armies; political heads of states or districts; etc. Janko Bobetko was Chief of the Main Staff of the Croatian army and was indicted for planning, ordering, and committing war crimes such as murder, plunder, and wanton destruction of civilian lives and property (CIS IT-02-62 "Medak Pocket"). The most recognizable suspects tried by the ICTY tend to be included in this category, including Milošević, Mladić, Gotevina, and Karadžiç. We anticipate that these suspects will be more costly for the state to apprehend than suspects accused of complicity or aiding and abetting heinous crimes.

Our final measure of the relative costs of evasion is the presence in the residing state of a United Nations Peacekeeping Operation. Such an operation boosts the capacity of state authorities, allowing them to share efforts with the UN, and makes failures of effort on the part of residing states easier to observe and report. As a result, suspects must work harder to evade a larger number of more capable pursuers, so we expect that the presence of peacekeepers will shift the relative costs of evasion against suspects. Our variable *UNPKO*

equals one in those months during which a UN-mandated peacekeeping operation is present in a given residing state and zero otherwise, with data drawn from the United Nations website.[19]

Finally, we control for three factors that may be related to efforts in the evasion subgame or surrender decisions on the one hand and our main theoretical variables on the other. First, the ICTY issued warrants as either sealed or unsealed. Sealed warrants are private; the tribunal circulates information only to the authorities of the state where the suspect is believed to reside while keeping that information hidden from both suspects and the public. Secrecy can prevent suspects from being tipped off and going to ground, making surprise easier and apprehension easier.[20] Sealed warrants create relative efficiencies in apprehension compared to public indictments, decreasing the state's costs of effort. However, the advantage they provide may be reserved for the hardest cases, where it is most needed. In other words, it is not clear whether sealed indictments lower the net costs of arrest or merely change the already unfavorable baseline for a particularly capable suspect. The variable *Sealed Indictment* equals 1 each month after issuance of a sealed indictment, then 0 for all months during which it is unsealed. A large number of suspects (128) had their indictments sealed for some time before being publicly announced; sealed indictments spent an average of 355 days in secrecy before being publicly announced.

Domestic environments for post-conflict justice also changed with the emergence of domestic war-crimes courts. Serbia, Croatia, and Bosnia each set up domestic war crimes tribunals in 2003, changing the way in which cases were handled both by the ICTY and the

[19]See http://www.un.org/en/peacekeeping/.

[20]Author interview with ICTY official, the Hague, the Netherlands, June 20, 2012.

domestic authorities. With domestic courts in place, the ICTY began to defer cases for domestic trial, especially of lower-level suspects, leaving those with higher responsibility (and greater resources) in the pool of suspects waiting to be brought to international trial. We expect states will be less likely to transfer suspects to The Hague after a domestic tribunal is established, potentially confounding the relationships we expect from our other independent variables. *Domestic War Crimes Tribunal* is coded 1 in the month in which a tribunal was established in a given Residing State and every month thereafter, and 0 otherwise. Finally, we include a marker for *Ethnic Serb*. Serbs represent the largest ethnic group by far in the data, and we would like to limit the extent to which characteristics particular to Serbian suspects—their sheer number, their broader networks across the former Yugoslavia, etc.—dominate our inferences.

It is worth mentioning that our theory includes a concept that does not appear in our empirical models. The probability of surrender is a direct function of ω, or the benefits a suspect would receive from surrendering directly to the Court. In a general sense, these benefits might be the good will of the prosecutor, earned in exchange for cooperation or a plea bargain(Combs 2006, Ritter and Wolford 2012). States have offered financial incentives to surrender oneself for trial, such as legal aid or family assistance.[21] It could even be the case that surrendering directly to an international institution is a safer outcome for the suspect than being captured by one's own authorities, particularly if a civil war is ongoing. In other words, we believe that ω will vary meaningfully across different international criminal institutions and conflict contexts. However, it does *not* vary meaningfully across suspects indicted by the ICTY. Scholarship, legal documents, and personal accounts suggest

[21]Author interview with ICTY official, the Hague, the Netherlands, June 20, 2012.

that the ICTY does not offer reduced sentences for surrender or confession. The prosecutor can recommend that the judicial panel select a reduced sentence for a defendant who cooperates with the process of trial, but the bench is not bound by this recommendation (Combs 2006). With the vast majority of suspects residing in only a few states with similar conflict and institutional contexts, suspects do not vary in the relative risk to their safety from surrender versus evasion. There are no surrender-specific benefits for suspects, so we assume ω to be constant across suspects and omit it from the empirical models.

Empirical Analysis

Our theory yields predictions over two outcomes: surrender and apprehension. However, expectations over the risk of arrest shape the attractiveness of surrender, and the strategic decision over surrender means that the pool of at-large suspects who may be captured is a nonrandom sample of all possible at-large suspects. To deal with this problem, we use a two-step procedure to model the effect of the expected risk of capture on the probability of surrender, then estimate the risks of capture on the observed sample of those suspects that have not surrendered. We detail each set of empirical models and their connections to the theoretical model in turn, beginning with the probability of surrender.

The Probability of Surrender

Our first set of models estimates the probability that a suspect surrenders himself for trial rather than remain at large, where the decision is an explicit function of his expectation that he would be arrested if he chose evasion. The expected risk of apprehension thus informs the

choice to surrender or remain in the pool of at-large suspects. We use a two-step regression procedure, estimating two binary time-series cross-sectional models.

The first empirical model estimates the probability of apprehension as a function of our independent variables. Though only a self-selected group actively evade capture, all suspects play the game at the node choosing to surrender or not. Therefore, we need to model all suspects' expectations of being arrested, regardless of their eventual type of exit. All suspects are in the sample for the model of arrest expectations; the dependent variable equals 1 if a suspect is apprehended by an authorized agent in a given month and 0 if he remains at large. As stated in Hypotheses 2 and 3, a suspect's expectation of apprehension is a *linear* function of the elements that would make him more likely to be arrested *if* he were to decide to remain at large. This is because their expectation is based on all suspects being in the pool and not just those who select in. A suspect's belief about his risk of arrest should also be influenced by how long he has remained at large to date, so we include a cubic polynomial approximation of the number of months that have passed since the suspect was indicted to account for time dependence (Carter and Signorino 2010). This binary time-series cross-sectional (BTSCS) model, estimated using a logistic likelihood function, captures the idea that a suspect formulates his expectations based on observable variables and some amount of error, both of which vary over time within the state in which he resides, and these estimates inform his choices.

Table 1 presents the results of estimating the model of apprehension on the full sample of suspects. 95% confidence intervals are presented below each coefficient. These results lend credibility to the theoretical implications of Proposition 2. As the state perceives increasing political value from cooperation with the ICTY, the probability of a suspect's apprehension

increases (consistent with Hypothesis 2). Increasingly democratic states do tend to arrest more suspects, while suspects in states that exclude a sizable portion of the population from participating in governance are less likely to be apprehended (this coefficient only barely misses statistical significance at $p < 0.051$). Measures of a suspect's relative costs of evasion (Hypothesis 3) perform less consistently. Counter to our predictions, lower-level suspects are *less* likely to be arrested than those in the reference category, and there is no discernible difference between those charged with responsibility and the reference category—nor is there an apparent difference between those residing states with and without UN peacekeepers.

Bear in mind that the estimates presented in Table 1 are based on an *unconditional* data-generating process. Suspects look to the observable world to draw conclusions as if all suspects were included in the at-large pool, which is not the empirical reality. So these estimates do not tell us what we should see in the empirical world, but rather what suspects will use to inform their decision-making process. Essentially, suspects look off the equilibrium path to make their decisions, and we approximate that with the model in Table 1.

The second stage of the regression procedure uses the estimates of a suspect's unconditional (i.e., unselected) risk of apprehension in a model estimating the probability with which a given suspect surrenders at a given time. We use the estimated variance-covariance matrix of the model reported in Table 2 to simulate a sampling distribution for the predicted probability of apprehension. We draw a vector of coefficients from a normal distribution with mean β and variance σ^2_β vectors estimated from the apprehension model and used the sample vector to create a linear index of the likelihood of being apprehended. We repeated this process 5000 times to create 5000 estimated linear indices, thereby incorporating the uncertainty inherent in decision-making into the empirical expectations. These estimates

Table 1: BTSCS Model of Suspects' Expectations of Apprehension

Independent Variable	**Coefficient (S.E.)**
— *State Value for Cooperation* —	
Excluded Population	-4.817 (2.465)*
Level of Democracy	1.271 (0.491)***
— *Relative Costs of Evasion* —	
Role: Participant	-1.017 (0.401)**
Role: Responsibility	-0.486 (0.325)
UNPKO	-0.299 (0.555)
— *Control Variables* —	
Sealed Indictment	-2.782 (0.735)***
Domestic WC Court	-1.121 (0.606)*
Ethnic Serb	-0.436 (0.358)
Time since Indictment	-0.125 (0.026)***
Time since Indictment^2	0.002 (0.000)***
Time since Indictment^3	-0.000 (0.000)***
Constant	-1.389 (0.682)**
Model Statistics	
N	5197
Log-likelihood	-291.050

Sample includes all suspect-months, regardless of exit type.

Significance levels : * : 10% ** : 5% *** : 1%

Table 2: Mean Values of Estimated Parameters of 5000 BTSCS Models of Surrender

Independent Variable	Coefficient (95% Credible Interval)
Estimated Linear Index of Expectation of Arrest	0.911 (0.529, 1.325)**
Time since Crime	-0.009 (-0.109, 0.098)
Time since Crime^2	0.000 (-0.000, 0.001)
Time since Crime^3	-0.000 (-0.000, 0.000)
Constant	-1.459 (-4.701, 1.795)

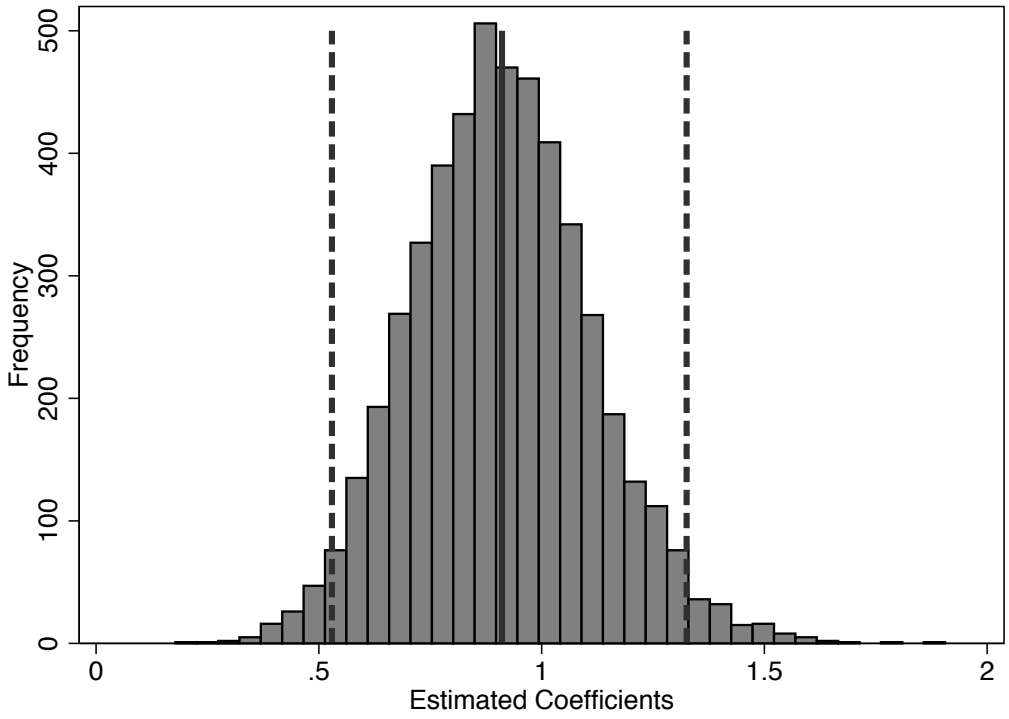
Significance levels : * : 10% ** : 5% *** : 1%

are the primary variable in a model estimating the probability of surrender; the model also includes a cubic polynomial expansion of the number of months that have passed since the alleged crime occurred. We estimate the model 5000 times—once for each of the linear indices produced from the simulation procedure—and summarize the estimated coefficients and variance around them in Table 2.

Figure 3 presents a histogram of all of the estimated coefficients from the models of surrender. Each coefficient is the estimated effect of the simulated linear index from the model of arrest on the probability that a suspect surrenders at time t. Five thousand models of surrender regressed on five thousand simulated arrest expectations yields coefficients that follow a normal distribution, and descriptions of these estimates help us to understand the predicted effects. The mean effect of the expectation of arrest on the probability of surrender is a solid black vertical line in Figure 3 at 0.911, and the 95% credible interval is depicted with dashed lines. In other words, we find support for Hypothesis 1, in that the probability of surrender increases in the expectation that the suspect would be apprehended if he were to try and evade arrest.

Thus, the effects of our covariates on the likelihood of arrest provides insight as to how

Figure 3: Histogram of Coefficients from 5000 Models of Surrender as a Function of Estimates of the Linear Approximation of Suspects' Expectation of Arrest



these covariates indirectly affect the probability of *surrender*. In the theory, the suspect makes a decision about surrender depending on how the observable variables affect the risk that he would be apprehended in the next stage, and Table 2 suggests that suspects will be more likely to surrender as that likelihood of arrest increases. Furthermore, that expectation increases when ethnic exclusion is low, when the residing state is more democratic, and when he is not charged as a participant. Each pattern runs counter to intuition—the first two suggest that suspects surrender to those most willing and able to turn them over to the Court, while the latter has participants remaining at large despite low resources—but our theoretical model and the two-step regression here makes sense of these patterns: suspects are more likely to surrender when they are most vulnerable to arrest, and as we show below

this has implications for observed rates of apprehension for those suspects who choose not to surrender.

The Probability of Apprehension

Since the decision to surrender is based on an expected risk of arrest, those suspects who have chosen not to surrender—those who remain at large—are systematically different than those who exited the sample in the previous analysis. They might be tougher, have more resources, or have some other advantage that allows them to believe they will have better chances in the at-large pool than those who surrender. In this section we test Hypotheses 4 and 5 on a restricted sample of suspects that have not surrendered at time t, using a Cox proportional hazards model to estimate the risk of apprehension in the nonrandom sample of suspects that are sufficiently optimistic about their chances of evasion. When an at-large suspect is apprehended, he exits the data by experiencing a "failure" event, but if he chooses surrender, the Cox model treats his observation as censored, contributing information about the risk of apprehension up until his surrender but not afterwards. Finally, the Cox model assumes that covariates have a time-constant, or "proportional," effect on the hazard rate, and all variables, as well as the full model, pass Grambsch and Thernau's (1994) test of proportionality based on Schoenfeld residuals.

Hypotheses 4 and 5 anticipate nonlinear relationships between the value of compliance with the ICTY (H4) and the relative costs of evasion (H5) and the risk of apprehension, requiring that we include quadratic expansions of the relevant theoretical variables. While the measures of the state's value for compliance (Excluded Population and the Unified Democ-

Table 3: Cox proportional-hazards model of the risk of apprehension

$h(t\|X)$		
Variable	**Coeff. (S.E.)**	**Haz. Ratio**
— *State Value for Cooperation* —		
Excluded Population	-0.595 (0.201)***	0.552
Excluded Population^2	0.023 (0.007)***	1.023
Democracy (UDS)	-0.116 (0.125)	0.890
Democracy (UDS)^2	0.019 (0.009)*	1.019
— *Relative Costs of Evasion* —		
Role: Participant	-0.497 (0.402)	0.608
Role: Organizer	-0.092 (0.310)	0.912
UNPKO	2.300 (0.697)***	9.975
— *Control Variables* —		
Sealed Indictment	-3.100 (0.737)***	0.045
Ethnic Serb	-1.108 (0.340)***	0.330
Domestic Court	-2.159 (0.831)***	0.115
Model Statistics		
Subjects/failures	137/60	
Log Likelihood	-191.045	
LR $\chi^2_{(10)}$	97.16***	

Significance levels : * : 10% ** : 5% *** : 1%

racy Scores) are continuous and easily squared to approximate the theoretical nonlinearities, the measures of the relative costs of evasion—role indicators and the presence of UN peacekeepers—are dichotomous, limiting our ability to asses Hypothesis 5. As such, while we include squared terms on Excluded Population and UDS in the empirical model, we retain the dichotomous measures of the other variables but take care not to interpret them as theoretical variables. We include the same battery of control variables as above, though we no longer need time variables, since the baseline hazard is estimated by the Cox model.

Table 3 presents the results of estimating the Cox proportional-hazards model, where positive values on the estimated coefficients indicate an increased risk of capture and nega-

tive values a decreased risk. Standard errors are reported in parentheses. Hazard ratios are also reported, where values greater than one indicate the proportional effect of a single-unit increase on the hazard rate and values less than one indicate a corresponding decrease in the hazard rate.

We focus first on Hypothesis 4, which anticipates that the risk of apprehension among at-large suspects increases (decreases) through high (low) values of the value of cooperation but decreases (increases) through low (high) values of the same. The hazard rate should decrease as Excluded Population increases through low values, then increase as Excluded Population increases through higher values (a U-shape). As indicated by the negative coefficient on Excluded Population, the positive sign on Excluded Population^2, and the statistical discernibility of each ($p < 0.01$), this is precisely the relationship recovered in the data. By taking the ratio of the two components' coefficients $0.595/0.023 = 25.8$, the model shows that the effect of increases in Excluded Population on the probability of arrest switches from negative to positive as the level of excluded population passes 25.8%. Therefore, we find evidence consistent with the prediction of Hypothesis 4 in Excluded Population. Democracy (UDS), expected to show an inverted-U relationship like V in the theoretical model, fails to show either the expected relationship or consistent statistical significance.

Turning to the relative costs of evasion, our inability to assess the nonlinearities in Hypothesis 5 notwithstanding, we can say that a suspect's alleged role in committing crimes has no discernible effect on the risk of apprehension. However, ethnic Serbs experience a uniquely low risk of apprehension—only 33% the risk of other ethnicities—while the presence of a UN peacekeeping operation in the residing state increases the risk of apprehension by a factor of nearly ten. Both relationships are statistically discernible at $p < 0.01$, as is

the effect of a sealed indictment: suspects under sealed indictment are 4% as likely as those under public indictment to be apprehended at any given time, suggesting that it is indeed the most challenging suspects who have their indictments issued under seal.

Conclusion

The challenge for most international institutions in ensuring compliance is their lack of enforcement power; when states break the rules, institutions can issue rulings and coordinate retaliation, but they generally have no independent ability to punish violations. International criminal tribunals, however, face a different problem. When individuals break the rules, ICTs have the means, in the form of prosecutors and prisons, to punish them, but they lack the independent ability to apprehend their suspects in the first place (Ritter and Wolford 2012). Put differently, states cannot evade capture if they violate international law, but individuals can and frequently do. Yet individual suspects often are arrested, and in the case of the ICTY, *all* of its suspects surrendered or were apprehended.

To explain this variation, we developed a formal model pitting a suspect preferring freedom at the cost of evasion against a pursuer weighing the benefits for cooperating with an international warrant and the costs of pursuit. Analysis of the equilibrium behavior yielded predictions over the probability that suspects surrender, given anticipated risks of remaining at large, as well as the risk of arrest for those suspects that choose not to surrender. Changes in the independent variables have different effects across these sub-samples, leading us to adopt an empirical strategy based on newly collected data on all ICTY suspects that provided some support for the theory.

The expected risk of apprehension increases the probability that a suspect surrenders. This means that democratic states, those with low levels of ethnic political exclusion, and those with UN peacekeepers on the ground will see the most surrenders. Put differently, the states that are most amenable and capable of cooperating with the ICTY are the ones that see the most *surrenders*, rather than actual apprehensions. Suspects strategically surrender to trial in the hopes of gaining some sure benefit rather than remain at large when they are likely to be arrested. This proclivity for surrender leads us to be curious about what benefits surrender offers beyond avoiding the process of evasion. Other tribunals can offer clues to this, as when some offer plea bargains or safety from vengeful opponents, so cross-tribunal comparisons may be the key to understanding surrender at a deeper level.

This process of self-censoring also means that estimates of the risk of apprehension in the pool of suspects that do not surrender will be biased. Our second empirical analysis shows that the risk of capture is high when states have either low or, counterintuitively, *high* levels of ethnic exclusion. States will devote meaningful effort toward finding and apprehending suspects when more groups are included in decision-making, especially those who were victims in the conflict. When exclusion is high, states devote little effort toward capturing suspects, so suspects try their luck in the pool and end up being caught. Ultimately, understanding when states will cooperate with the court is a function of a strategic interaction, and the suspect's incentives to surrender have to be considered when predicting apprehension.

Rather than flowing from a poorly designed or "weak" international tribunal, our theory allows us to understand nonlinearities and strange patterns as a symptom of *effective* pursuit and capture incentives shaping the prior decision of surrender. Boosting institutional

support or public opinion of justice efforts may not lead to more arrests, but it may still lead to more trials.

Appendix

Proof of Proposition 1. Begin in the pursuit-evasion subgame, where players solve

$$\max_s \left\{ u_S(s) = \frac{s}{s+p} - s c_S \right\} \quad \text{and} \quad \max_p \left\{ u_P(p) = \frac{p}{s+p} V - p c_P \right\}.$$

The first order conditions create the following system of equations,

$$\frac{\partial u_S(s)}{\partial s} = \frac{p}{(s+p)^2} - c_S = \frac{\partial u_P(p)}{\partial p} = \frac{s}{(s+p)^2} V - c_P = 0,$$

and solving it yields a pair of equilibrium efforts,

$$s^* = \frac{V c_P}{(c_P + V c_S)^2} \quad \text{and} \quad p^* = \frac{V^2 c_S}{(c_P + V c_S)^2}.$$

To verify that these are maxima, note that

$$\frac{\partial^2 u_S(s)}{\partial s^2} = -\frac{2p}{(s+p)^3} \quad \text{and} \quad \frac{\partial^2 u_P(p)}{\partial p^2} = -\frac{2sV}{(s+p)^3}$$

are negative at s^* and p^*, respectively. Finally, in the game's initial move S will surrender when

$$\omega \geq \frac{s^*}{s^* + p^*} - s^* c_S = \frac{c_P^2}{(c_P + V c_S)^2} \equiv \hat{\omega},$$

and evade otherwise. □

Proof of Proposition 2. To prove the claim, we show that the first partial derivative of $\hat{\omega}$ with respect to V is negative, such that

$$\frac{\partial \hat{\omega}}{\partial V} = -\frac{2c_P^2 c_S}{(c_P + V c_S)^3} < 0,$$

which is sure to be negative. The surrender threshold also decreases in c_S, or

$$\frac{\partial \hat{\omega}}{\partial c_S} = -\frac{2V c_P^2}{(c_P + V c_S)^3} < 0,$$

which is also negative. Finally, the $\hat{\omega}$ increases in c_P, since

$$\frac{\partial \hat{\omega}}{\partial c_S} = \frac{2V c_P c_S}{(c_P + V c_S)^3} > 0,$$

which is sure to be positive. □

Proof of Proposition 3. To prove the claim, we take the first derivative of the conditional

probability of apprehension defined in Equation (7) with respect to V,

$$\frac{\partial \Pr(\text{Apprehension} \mid \text{Evade})}{\partial V} = \frac{c_P^2 c_S (c_P - 2V c_S)}{\overline{\omega}(c_P + V c_S)^4}.$$

Algebra shows that the resultant derivative is positive when $V < c_P/(2c_S) \equiv V^\dagger$ and negative when $V > V^\dagger$, this proving the claim. □

Proof of Proposition 4. To prove the claim, we take the first derivative of the conditional probability of apprehension defined in Equation (7) with respect to c_S,

$$\frac{\partial \Pr(\text{Apprehension} \mid \text{Evade})}{\partial c_S} = \frac{V c_P^2 (c_P - 2V c_S)}{\overline{\omega}(c_P + V c_S)^4}.$$

Algebra shows that the resultant derivative is positive when $c_S < c_P/(2V) \equiv c_S^\dagger$ and negative when $c_S > c_S^\dagger$, this proving the claim. □

Proof of Proposition 5. To prove the claim, we take the first derivative of the conditional probability of apprehension defined in Equation (7) with respect to c_P,

$$\frac{\partial \Pr(\text{Apprehension} \mid \text{Evade})}{\partial c_P} = \frac{V c_P c_S (2V c_S - c_P)}{\overline{\omega}(c_P + V c_S)^4}.$$

Algebra shows that the resultant derivative is positive when $c_p < 2V c_S \equiv c_P^\dagger$ and negative when $c_P > c_P^\dagger$, this proving the claim. □

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