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Confessions and the Right to a Fair Trial: A Comparative Case Study

Megan Annitto*

ABSTRACT

In 2015, Amanda Knox was fully acquitted by the Italian Court of Cassation, Italy's court of last resort. The acquittal brought to a close a long ordeal that directed harsh criticism at Italy's criminal justice system. That same year, Brendan Dassey's case was just entering the public consciousness on a global scale a decade after his conviction for murder in the United States. He was convicted just six months before Knox's arrest ignited an international frenzy. But despite the current interest in Dassey's plight, unlike in Knox's case, the original attention to his case did not focus on the flaws riddling his prosecution. Rather, it focused on the gruesome details included in his confession and on the details of his uncle's story.

At first glance, the two cases have little in common other than the brutal murders at the heart of each. They occurred an ocean apart, one in a picturesque hill town in Perugia, Italy; the other in a run-down, rural area of Wisconsin. But Dassey's case encapsulates some of the very same problems that led to criticism of Italian court proceedings—a questionable interrogation coupled with troubling pretrial publicity involving extrajudicial statements related to a confession. Yet, in November of 2007, with all eyes turned abroad to Italy, teenage Dassey quietly began his life sentence after enduring the similar due process violations here in the United States.

Italy has adopted laws that in theory go further than many other countries to protect against the use of unreliable confessions. Yet, even though they were suppressed, it is widely acknowledged that Knox's incriminating statements—even though they were suppressed—and drove the entire investigation and contributed to her initial conviction. Therefore, this Article takes a fresh look at the Knox case and compares it with Dassey's. Rather than viewing the Knox case

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as a condemnation of the Italian system as a whole, this Article uses two cases to compare Italian and American confession law and examines the limits of protection provided by suppression in the confession setting. It also considers how confession law interacts with extrajudicial speech and pre-trial publicity. Ultimately, both cases demonstrate strengths and limitations of existing protections in the confession setting and can inform confession law across borders.

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INTRODUCTION

On March 1, 2006, sixteen-year-old Brendan Dassey was arrested for the murder of a young woman, Teresa Halbach, in the rural town of Mishicot, Wisconsin.¹ Halbach disappeared on October 31, 2005, and police later found her remains on the property of Steven Avery, Dassey's adult uncle. Police arrested Dassey months later on the theory that he participated in Halbach's murder and rape at the behest of Avery, who had been arrested for her murder in the days following Halbach's disappearance. On April 26, 2007, roughly a year after

1. Carrie Antlfinger, *Avery's Relative Also Arrested; Teenage Boy to Be Charged*, WIS. ST. J. (Mar. 2, 2006), http://host.madison.com/wsj/news/avery-s-relative-also-arrested-teenage-boy-to-be-charged/article_947e589d-a1cc-53d7-9d19-c58152d5e686.html.

Dassey's arrest, he was tried and convicted of the murder and rape as an adult. His conviction was based upon statements that he made to the police prior to his arrest. He received a life sentence with the possibility of parole after serving a minimum of forty-one years.²

In 2015, ten years after Halbach's disappearance, the public would be exposed to—and deeply troubled by—the circumstances surrounding the criminal prosecution of teenage Dassey. At the time of his arrest and conviction, these same circumstances were not the focus of the media's attention on the case. Rather, the focus was on Steven Avery's unusual history; he had been released from prison when he was exonerated through DNA evidence. But in late 2015, Netflix, a United States media entertainment company, released a ten-part documentary series entitled *Making a Murderer*. The series raised new questions about the convictions of both Avery and Dassey, but particularly about young Dassey's conviction. Following its airing, the nature of the police interrogation and other aspects of his conviction, along with the prosecution's theory of the case, have been the source of controversy and public dismay. The documentary series provided in-depth background on the two convictions. It revealed details about the case and the convictions that were previously unknown—or at least less exposed—to the American public. In doing so, the series spurred an outpouring of public attention and disbelief online.³ Yet for the ten years prior to its airing, Dassey sat in prison in relative anonymity, tried and convicted in adult court while still a teenager and sentenced to serve at least forty years in prison, seemingly all but forgotten.

Six months after Dassey's conviction, Amanda Knox was arrested for murder in Perugia, Italy, after her British roommate, Meredith Kercher, was murdered and sexually assaulted in their shared apartment. Knox was a twenty-year-old exchange student who had arrived in the early fall to begin her Italian studies. The murder occurred on the night of November 1, 2007, nearly two years to the day after Halbach's disappearance and murder on Halloween in 2005. Knox and her then boyfriend, Raffaele Sollecito, were convicted in 2009. After intermediate court decisions reversing and then reinstating their convictions, they were eventually acquitted in 2015 due to a lack of evidence of their guilt.

Knox's case, unfolding an ocean away from Dassey's, quickly led to a veritable ocean of criticism of the Italian criminal justice system by the American media, commentators, and scholars. The criticism was fast and furious, and it has been enduring. As one scholar summarized: "the Italian criminal justice system was indicted and put on trial in the United States."⁴ Another stated, "American

2. *Dassey Will Be Eligible for Parole*, CAP. TIMES, Aug. 2, 2007, at A6.

3. See, e.g., Bill Keveney, "Making a Murderer" Leads to Calls for Clemency, USA TODAY (Jan. 6, 2016), <https://www.usatoday.com/story/life/tv/2016/01/04/making-murderer-leads-calls-clemency/78272416/> (discussing petitions at change.org and whitehouse.gov signed by thousands of members of the public in the wake of Netflix releasing *Making a Murderer*).

4. Renata L. Mack, *The Importance of International and Comparative Law: Exploring Complex Issues in a Global Community*, 1 CREIGHTON INT'L & COMP. L.J. 3, 3 (2011).

commentators were aghast.”⁵ *The Atlantic*, a well-known news magazine in the United States, called the Italian justice system “carnavalesque;” all of this in response to the Knox case.⁶

As a whole, “[m]edia coverage of the [Knox] trial resulted in public perception of Italy as having a lower standard of due process of law in comparison to the United States”, a sentiment that endured even after the acquittal.⁷ Italy’s entire criminal justice system was suddenly at the center of discussions in the United States and the results were not positive. Italy was still adjusting to its sweeping criminal procedural reform that was initiated in 1988. Legislators enacted a new code of criminal procedure,⁸ but the reform endured a rocky beginning as conflicts between the legislature and the judiciary hindered its implementation.⁹ Some of the commentary suggested that the reforms, which implemented adversarial characteristics within its previously inquisitorial framework,¹⁰ were insufficient.¹¹ Debates and American commentary that followed this reform often discussed the Italian criminal justice system in the vacuum of Knox’s prosecution and initial conviction, characterizing it as structurally insufficient and lacking in procedural protections as a matter of law. In some ways it was; but many of the problems were caused by faulty implementation of the laws, a common problem in the United States as well. And there was little discussion of the philosophical differences undergirding the contrasts with the American adversarial model. But perhaps, most notably, the critical discussion of Knox’s case in the United States was—and generally continues to be—void of references to similar and parallel failures that occur in the United States.¹² At the heart of both cases were controversial interrogations

5. James Q. Whitman, *Presumption of Innocence or Presumption of Mercy*, 94 TEX. L. REV. 933, 940 (2016).

6. Olga Khazan, *Amanda Knox and Italy’s “Carnavalesque” Justice System*, ATLANTIC MONTHLY (Jan. 30, 2014), <https://www.theatlantic.com/international/archive/2014/01/amanda-knox-and-italys-carnavalesque-justice-system/283487/>.

7. Mar Jimeno-Bulnes, *American Criminal Procedure in a European Context*, 21 CARDOZO J. INT’L & COMP. L. 409, 415 (2013).

8. See William T. Pizzi & Mariangela Montagna, *The Battle to Establish an Adversarial Trial System in Italy*, 25 MICH. J. INT’L L. 429 (2004).

9. See *id.*

10. For a detailed description of the Italian system’s reform, which first passed into law in 1988 and was implemented in 1989, and the process of reform that followed, see *id.*; Stephen P. Freccero, *An Introduction to the New Italian Criminal Procedure*, 21 AM. J. CRIM. L. 345 (1994); Elisabetta Grande, *Italian Criminal Justice: Borrowing and Resistance*, 48 AM. J. COMP. L. 227 (2000); William T. Pizzi & Luca Marafioti, *The New Italian Code of Criminal Procedure: The Difficulties of Building an Adversarial Trial System on A Civil Law Foundation*, 17 YALE J. INT’L L. 1 (1992).

11. See Liz Robbins, *An American in the Italian Wheels of Justice*, N.Y. TIMES (Dec. 5, 2009), https://thelede.blogs.nytimes.com/2009/12/05/an-american-in-the-italian-wheels-of-justice/?_r=0 (quoting legal analysts critical of Italy’s system of criminal procedure).

12. There are notable exceptions to this phenomenon among legal scholars, particularly those who study confessions; for example, scholarship by confession experts, such as Saul Kassin, discuss Knox’s interrogation in the context of the reform that is necessary in the United States to protect against false confessions. See, e.g., Saul M. Kassin, *Why Confessions Trump Innocence*, 67 AM. PSYCH. 431 (2012) (contextualizing Knox’s interrogation within the broader discussion of

that produced statements of questionable reliability, despite the fact that both countries have confession laws that offer superior procedural protections from a comparative perspective.¹³ In both cases, the statements were insidious to the investigations.

This Article proceeds in Part II by first providing context and factual background about the Dassey and Knox cases. Part III then examines the interrogations in both cases and the relevant applicable laws under the Italian and American legal systems. It highlights the fact that some progressive proposals for reform to improve confession reliability in the United States are in place under Italian law, even if implementation has suffered. Part IV turns to the interaction between confessions and prosecutorial speech and the challenges legal regimes have addressing them. Part V argues for more nuanced protections earlier in investigations across legal regimes and apart from suppression. It suggests that research about the impact of confessions on other parts of investigations should provide incentives for law enforcement to be vigilant about the impact of confession evidence on other parts of an investigation.

Countless media accounts, books, and articles have been written about Knox's trial, the accompanying criticism, and the cultural differences between the American and Italian criminal justice systems.¹⁴ This article does not seek to rehash all of those issues nor debate the merits of an adversarial versus inquisitorial system as a whole. Rather, it examines and compares the two cases and their similar impediments to the right to a fair trial as it relates to confessions and extrajudicial speech. It uses the two cases to explore the special challenges that accompany confession law and protection of the presumption of innocence across borders. It also ultimately questions why the United States has been slow to implement reforms to address internal problems that are so readily critiqued when they appear abroad.

interrogation practices in the United States).

13. See, e.g., Stephen C. Thaman, *Contributing Authors: Miranda in Comparative Law*, 45 ST. LOUIS L.J. 581, 594 (2001) (comparing *Miranda* in an international context).

14. See generally Julia Grace Mirabella, *Scales of Justice: Assessing Italian Criminal Procedure Through the Amanda Knox Trial*, 30 B.U. INT'L L.J. 229, 251 (2012) (describing criticisms and cultural clashes that played out during the trial and afterward). For examples of opposing views in books about the death of Kercher, see NINA BURLEIGH, *THE FATAL GIFT OF BEAUTY* (2012) (presenting a critical view of the media portrayal of Knox and accompanying issues related to her interrogation); JOHN FOLLAIN, *A DEATH IN ITALY: THE DEFINITIVE ACCOUNT OF THE AMANDA KNOX CASE* (2013) (providing an account that is critical of United States media portrayal of Amanda Knox as an innocent person caught up in a witch hunt and ultimately, appearing to disagree with the acquittal of Knox and Sollecito in 2011).

I.
BACKGROUND

A. *Italian Criminal Procedural Reform*

When the Corte Suprema di Cassazione, Italy's highest court, exonerated Knox and Sollecito in 2015, its opinion was critical of the official investigation and prosecution. Many of the reasons put forth in the opinion paralleled earlier public criticism of the case. Moreover, criticism is not new to Italy's criminal justice system.¹⁵ The Italian system has frequently been held to account by the European Court of Human Rights (ECtHR), most notably for problematic delay and gridlock.¹⁶ Italy is a member of the European Convention for Human Rights and, therefore, subject to financial liability for an adverse finding.¹⁷ Both internal and external forces, such as adverse ECtHR decisions, catalyzed Italy's Criminal Procedural Reform in 1988.

The decades prior to Knox's case were a period of exceptional transition for the criminal procedural process in Italy. After two decades of study, Italy passed its new code of criminal procedure, the Nuovo Codice di Procedura Penale in 1988, which dramatically altered its process for trying criminal cases.¹⁸ The new code took effect in 1989 and required several years of additional legal groundwork, including a constitutional amendment, before its changes began to take root.¹⁹

Italy's reform adopted many aspects of an adversarial system, including some concepts familiar to American courtrooms. While the reform introduced them into Italy's inquisitorial system, Italy's system clearly remains a hybrid system and is unique in its approach—different from other European countries and also distinctly different from the United States. These unique reforms add a layer of complexity to the model and they affected the American view and understanding of the reform goals. Moreover, criticism was arguably tangled up with a long history of anti-inquisitorialism in the United States.²⁰ Still, it was curious how discussion was often void of reference to parallel problems that exist in the United States.

In the face of that criticism, Brendan Dassey's case is a useful comparative tool for a few reasons. First, although the Knox and Dassey cases were tried under different criminal procedural rubrics—one adversarial and the other a hybrid system with adversarial and inquisitorial features—they raise similar due process

15. See Pizzi & Montagna, *supra* note 8, at 437-39.

16. *Id.* (discussing a series of rulings by the European Court of Human Rights holding Italy in violation of the Convention due to lengthy delays which created embarrassment and catalyzed reform).

17. *Id.*

18. *Id.* at 430.

19. *Id.*

20. See, e.g., David Alan Sklansky, *Anti-Inquisitorialism*, 122 HARV. L. REV. 1634, 1668 (2009) (describing aversion to inquisitorial process that is common in the United States legal community).

questions about access to the right to a fair trial, particularly with respect to confessions. Moreover, both cases offer the opportunity to analyze how interrogations and the related “trial by media” threaten the right to a fair trial and influence how two different systems deal with that issue. The Knox trial was often critiqued in the United States and elsewhere for those reasons. Of course, those same flaws in interrogation practices and prejudicial pre-trial publicity are well documented in the United States; the documentary series on Dassey provides evidence of how their presence affected his case. In that way, the flaws in Dassey’s case do not withstand the criticism directed against Italy. And yet, at the very same time that the Knox case was hitting the headlines in the United States, the teenage Dassey had endured similar—and arguably worse—circumstances in an American courtroom with little attention to the deficits and pathologies in the system that convicted him.

B. Procedural History and Basic Facts of the Dassey and Knox Convictions

Before delving into the more extensive discussion of the interrogations and pre-trial publicity in these cases, this section describes the basic procedural history of the Knox and Dassey cases. Meredith Kercher’s murder was discovered on the morning of November 2, 2007 and Knox was arrested four days later.²¹ Knox’s boyfriend, whom she met the week prior, Raffaele Sollecito, was also arrested at that time.²² The media frenzy was almost immediate given the nature of the murder and crime scene, and the unlikely players involved—young foreigners in a small, picturesque Italian town who seemed like average young adults coming into their own.

Eventually, a third individual, Rudy Guede, was also arrested and convicted for the murder of Kercher.²³ Guede’s DNA was discovered at the crime scene on Meredith’s body and elsewhere in the room. His DNA was the only reliable DNA evidence that law enforcement found at the crime scene.²⁴ His conviction still stands. He received a reduction in his sentence for choosing a procedural avenue in Italy that allows for a reduced sentence in exchange for a “fast track” trial.

Knox and her co-defendant Sollecito were convicted at trial in 2009.²⁵ The court originally sentenced Knox to serve twenty-six years in prison.²⁶ In 2011, however, Knox was acquitted and released from prison, at which point she

21. BURLEIGH, *supra* note 14, at xxiv–xxv.

22. *Id.*

23. *Id.* at xxv–xxvi.

24. Cass. Pen., sez. cinque, 27 marzo 2015, n. 36080 (It.), *translated in* MARASCA-BRUNO MOTIVATIONS REPORT 7, 18 (Injustice Anywhere ed., 2015), <http://www.amandaknoxcase.com/wp-content/uploads/2015/09/Marasca-Bruno-Motivations-Report.pdf> [hereinafter MARASCA-BRUNO REPORT].

25. BURLEIGH, *supra* note 14, at xxvii.

26. *Id.*

returned to the United States.²⁷ She spent a total of four years in prison from 2007 to 2011. While she was later re-convicted in 2013, the Corte Suprema di Cassazione overturned that conviction in 2015, bringing her legal ordeal to a close.²⁸ The Court held that the DNA evidence that the prosecution used to convict Knox and Sollecito was not reliable based upon testimony of scientific experts.²⁹

Turning to Dassey's case, police arrested him in March 2006, four months after Teresa Halbach was murdered. Dassey was later convicted in April 2007 after a trial based upon his confession to police detectives. In 2007, Dassey's uncle, Steven Avery, was also convicted for the murder based on the physical evidence that police investigators found on his property. At the time of his arrest, Avery was on the verge of settling a civil lawsuit against the county investigating Halbach's murder. The civil lawsuit was based upon his prior wrongful conviction; two years before his arrest for the death of Halbach, a Wisconsin court exonerated Avery for a prior rape conviction based on DNA evidence.³⁰ He was released from prison after serving eighteen years for a crime he did not commit.³¹ Because of that, his subsequent arrest for Halbach's murder brought national media attention to the investigation.³²

Dassey's conviction was upheld on appeal by the intermediate appellate court in 2013;³³ the Wisconsin Supreme Court subsequently denied Dassey's request for an appeal.³⁴ This concluded Dassey's path for appellate relief in state court. His attorneys next sought relief in federal court by filing a petition for a writ of habeas corpus in 2014.³⁵ Nearly two years later, in 2016, in a somewhat unexpected decision, the United States Court for the District of Wisconsin granted Dassey's petition for a writ of habeas corpus and overturned his conviction.³⁶ At first, Seventh Circuit United States Court of Appeals upheld the decision but the

27. *Id.* at xxviii.

28. MARASCA-BRUNO REPORT, *supra* note 24, at 7, 18.

29. *Id.*

30. Monica Davey, *Freed by DNA, Now Charged in New Crime*, N.Y. TIMES (Nov. 23, 2005), <http://www.nytimes.com/2005/11/23/us/freed-by-dna-now-charged-in-new-crime.html>.

31. *Id.*

32. *See, e.g., Man Cleared of Rape Now to Face Murder Charge*, NBC NEWS (Nov. 11, 2005), http://www.nbcnews.com/id/10003226/ns/us_news-crime_and_courts/t/man-cleared-rape-now-face-murder-charge/#.WMYagjvvtEZ.

33. *State v. Dassey*, 827 N.W.2d 928 (Wis. Ct. App. 2013), *cert denied*, 839 N.W. 2d 866 (Wis. 2013).

34. *Id.*

35. Under federal law, after a petitioner loses his appellate claims in state court, he may then pursue an avenue for relief in Federal Court under 28 U.S.C. §2254. The federal law permits a federal court to grant relief under rare circumstances. In order to grant relief, it must find that the state court's adjudication of the petitioner's claim on the merits (1) resulted in a decision that was contrary to, or involved an unreasonable application of, clearly established federal law, as determined by the Supreme Court of the United States; or (2) resulted in a decision that was based on an unreasonable determination of the facts in light of the evidence presented in the State court proceeding. 28 U.S.C. § 2254(d) (2012).

36. *Dassey v. Dittmann*, 201 F.Supp.3d 963 (E.D. Wis. 2016) (hereinafter *Dassey I*).

Court granted the State's request to rehear argument *en banc* and vacated the decision as this Article goes to press.³⁷

C. Overarching Criticisms

There were four main areas of criticism of Knox's case: the method of questioning in the interrogation of Knox without counsel; the related prejudicial media coverage fueled in part by the prosecutor and law enforcement; the faulty collection of the physical evidence and the flawed DNA analysis used to support her conviction; and the use of character evidence during the trial.³⁸ Ten years after Dassey's conviction, similar themes emerged when the Making a Murderer documentary series informed the public about the circumstances of his conviction. The most problematic aspects of his case to viewers around the world³⁹ were the nature of the police interrogations that led to Dassey's videotaped incriminatory statements made without consulting a lawyer or adult;⁴⁰ prosecutorial pre-trial publicity and extra-judicial statements implicating the right to a fair trial;⁴¹ and the shockingly inept legal representation provided to the teenager by his first lawyer.⁴²

Two areas of criticism, the interrogations and the prejudicial pre-trial publicity surrounding the Defendants' statements are the focus of this discussion.

37. Dassey v. Dittmann, 860 F.3d 933 (7th Cir. 2017), *reh'g en banc granted, opinion vacated* (Aug. 4, 2017) (hereinafter *Dassey II*).

38. See Mirabella, *supra* note 14, at 247 (describing some of the common criticisms of Italian Criminal Procedure that erupted during the Amanda Knox trial); see also, Nick Squires, *Amanda Knox Prosecutors in Italy Hit Back at US Critics*, TELEGRAPH (Dec. 8, 2009), <http://www.telegraph.co.uk/news/worldnews/europe/italy/6759992/Amanda-Knox-prosecutors-in-Italy-hit-back-at-US-critics.html> (discussing American criticism alleging that Knox was coerced into making incriminatory statements).

39. For examples of attention outside of the United States, see Megan Willet, *Lawyers Respond to Making a Murderer: 'I almost got Physically Ill'*, BUS. INSIDER AUSTRALIA (Jan. 12, 2016) <http://www.businessinsider.com.au/lawyers-respond-to-making-a-murderer-i-almost-got-physically-ill-2016-1>; John Shammass, *Making a Murderer: Why Steven Avery and Brendan Dassey Supporters are Gathering for Massive Protest in London Today*, DAILY MIRROR (United Kingdom) (Apr. 2, 2016), <http://www.mirror.co.uk/news/uk-news/making-murderer-steven-avery-brendan-7674279> (describing protestors' plans to demonstrate on behalf of Avery and Dassey in front of the American Embassy in London in response to the documentary series outlining their convictions).

40. See Ashley Louszko, *'Making a Murderer': The Complicated Argument Over Brendan Dassey's Confession*, ABC NEWS (Mar. 8, 2016), <http://abcnews.go.com/US/making-murderer-complicated-argument-brendan-dasseys-confession/story?id=37353929> (quoting Professor Richard Ofshe's reaction to the interrogation).

41. John Ferak, *Legal Experts Blast Avery Prosecutor's Conduct*, APPLETON POST CRESCENT, (Jan. 24, 2016) <http://www.postcrescent.com/story/news/local/steven-avery/2016/01/15/kratzs-pretrial-behavior-called-unethical/78630248/>; see also, Section III B, *infra*, for applicable relevant law.

42. The lawyer, Len Kachinsky, was ultimately removed from the case when the Judge determined that his performance had fallen below the standard that is required for competent representation of a defendant and specifically found that it was deficient. Dassey v. Dittmann, 201 F.Supp.3d at 981–82. For examples of public responses, see Ryan Felton, *Controversial Making a Murderer Lawyer 'I Don't Get Netflix at Home'*, GUARDIAN, Jan. 20, 2016 (describing widespread criticism of the lawyer's performance).

First, in both cases the interrogations included tactics from the now controversial Reid technique. This interrogation approach was developed in the 1940s in the United States and it employs specific psychological tactics to induce confessions—but, unfortunately, has many signature traits that are associated with false confessions.⁴³ The Reid technique is widely used in the United States and has influenced international practice as well. At the same time, the admission into evidence of false confessions is a well-documented problem in the United States.⁴⁴ This includes cases where defendants confessed, were sentenced to death, and were later exonerated.

Next, both cases also generated a high level of pre-trial publicity that included controversial extrajudicial statements made by the prosecution specifically about the confessions—statements that implicated the right to a fair trial.⁴⁵ The interplay between media and the right to a fair trial demands a delicate balancing of the competing values of a given culture.⁴⁶ Certainly, in the United States, courts struggle with the “trial by media” phenomena and extrajudicial speech.⁴⁷ Dassey’s case and the Halbach investigation demonstrate this tension; the prosecutor held a press conference right after obtaining his confession. By the time his conviction came into the public view, Italy’s high court had fully exonerated Knox and Sollecito while Dassey remains in prison.

Because the American criticism of the Italian justice system was one catalyst for this comparison, it is worth noting an additional problem that arose in Dassey’s case but not for Knox: Dassey’s first lawyer’s performance was so sorely deficient that the court took the unusual step of removing him from the case six months into his representation.⁴⁸ Unfortunately, this was after he had inflicted damage on his client. As soon as the lawyer was assigned the case, he made statements to the news media concluding that his teenage client was “legally and morally” culpable for murder,⁴⁹ absent any investigation or client contact. Moreover, later, he allowed police detectives to question his client outside of his presence, without preparation and absent any offer of prosecutorial immunity, which the court found to be “indefensible.”⁵⁰ Post-conviction hearings also turned up evidence that he

43. For a discussion of the Reid technique, see Richard A. Leo, *Why Interrogation Contamination Occurs*, 11 OHIO STATE J. CRIM. L. 193, 205 (2013).

44. See, e.g., Richard A. Leo et al., *Bringing Reliability Back in: False Confessions and Legal Safeguards in the Twenty-First Century*, 2006 WIS. L. REV. 479, 487 (2006) (providing examples of false confessions, discussing inadequate safeguards against unreliable confessions in current United States criminal procedure jurisprudence, and suggesting new safeguards); Brandon L. Garrett, *The Substance of False Confessions*, 62 STAN. L. REV. 1051 (2010).

45. See Section IV A, *Infra* (discussing examples of extrajudicial statements in both cases).

46. For a discussion of the trial by media and its implications on due process, see generally Giorgio Resta, *Trying Cases in the Media: A Comparative Overview*, 71 L. & CONTEMP. PROBS. 31 (2008) (discussing the issues raised by pre-trial publicity from a global perspective).

47. Scott M. Matheson, Jr., *The Prosecutor, the Press, and Free Speech*, 58 FORDHAM L. REV. 865, 867 (1990) (discussing the conflicts that arise between free speech and the right to a fair trial).

48. *Dassey I*, *supra* note 36, at 981.

49. *Making a Murderer*, Season 1 Episode 3 (Netflix 2015).

50. *Dassey I*, *supra* note 36, at 981 (quoting the trial court’s conclusion).

was actively working against the interests of his teenage client in communications with the prosecutor and his investigator.⁵¹ The particular actions of Dassey's counsel were uniquely appalling. Nevertheless, research has thoroughly documented the inadequacies of the infrastructure of the indigent defense system in the United States.⁵²

II.

INTERROGATION AND CONFESSIONS IN THE UNITED STATES AND ITALY

"I was demolished in that interrogation," Amanda Knox later remarked in an interview about the evening she spent at the police station in Perugia.⁵³

"They got into my head," Brendan Dassey said moments after he incriminated himself to police despite his claims that he is innocent.⁵⁴

Both Knox and Dassey maintained their innocence prior to questioning and afterward. But both also expressed how, despite their claimed innocence, the pressure of their interrogations led to their incriminating statements. Their experiences are consistent with research about common traits of interrogations leading to false confessions. This Section considers the two defendants' interrogations, the applicable laws in both countries that dictate the rights of the accused, and the admissibility of statements derived from those interrogations as evidence of guilt.

A. *The Interrogations of Knox and Dassey*

Like Dassey, Knox's initial arrest was based for the most part upon incriminating statements that Knox made to Italian police and prosecutors during an interrogation. While not a confession, her statements were inculpatory as she indicated that she was present at the time of the murder, though she later recanted. She has described how the tactics used during the questioning eventually broke her down mentally, along with a lack of sleep and the stress associated with the

51. *Id.* at 976–77 (describing communications between Kachinsky and other parties).

52. See, e.g., Roger A. Fairfax, Jr., *Searching for Solutions to the Indigent Defense Crisis in the Broader Criminal Justice Reform Agenda*, 122 YALE L.J. 2316 (2013) (discussing the indisputable evidence and near universal agreement that the system of indigent defense in the United States is broken); AM. BAR ASS'N, GIDEON'S BROKEN PROMISE: AMERICA'S CONTINUING QUEST FOR EQUAL JUSTICE, i, iv (2004), http://www.americanbar.org/content/dam/aba/administrative/legal_aid_indigent_defendants/ls_sclai_d_def_bp_right_to_counsel_in_criminal_proceedings.authcheckdam.pdf; Robert P. Mosteller, *Failures of the American Adversarial System to Protect the Innocent and Conceptual Advantages in the Inquisitorial Design for Investigative Fairness*, 36 N.C. J. INT'L L. & COM. REG. 319 (2011) ("Without adequate assistance of counsel and supporting services, much of what the American justice system prizes in terms of rights, fairness, and accuracy simply fails to materialize.").

53. Nicki Batiste et al., *Murder Mystery: Amanda Knox Speaks*, ABC NEWS (Apr. 30, 2013), <http://abcnews.go.com/US/murder-mystery-amanda-knox-speaks/story?id=19068548>.

54. *Making a Murderer*, Season 1 Episode 3 (Netflix 2015).

murder of her new roommate.⁵⁵ Critiques of the Knox interrogation have focused on the length, method, and intensity of the questioning.⁵⁶

Although Knox and Italian law enforcement dispute some of the facts about the interrogation, it is not contested that Knox underwent several rounds of questioning in the four days between the discovery of Kercher's murder on November 2 and Knox's arrest on November 6, 2007. On the night of her arrest, Knox had voluntarily accompanied Rafael Sollecito to the police station. The two sides do not agree about the length of time that police questioned Knox, but the questioning began some time before midnight and continued late into the following morning until about 5:45 a.m.⁵⁷ Later that same morning, Knox produced a written statement with police that she had visions of being in the house and hearing Meredith scream when another person attacked her. The statement incriminated Patrick Lumumba, Knox's boss at a local bar. But the circumstances leading to Knox's discussion of Lumumba are also disputed. It appeared that police interpreted a text message that Knox exchanged with him on her phone in an incriminating manner and probed her to speak about him in relation to the murder.⁵⁸ Her statement incriminating Lumumba would later be the subject of a parallel civil case against Knox litigated before the same jury deciding her criminal case.

Knox has stated that up to twelve people or more took part in the interrogation that night and into the early morning; both sides agree that there were several people who came in and out of the room where law enforcement questioned her. Finally, Knox alleged that police hit or "cuffed" her on the back of the head, fed her ideas, threatened her, and called her a liar.⁵⁹ Both sides also dispute whether law enforcement provided Knox with a neutral interpreter during her interrogation. They agree, however, that police conducted much of the questioning in Italian and that an interpreter who was employed by the police department arrived about two hours into the questioning. According to Knox, police personnel asked her to imagine the night of Kercher's murder and what had happened. She states that she grew confused and overwhelmed when police accused her of lying.⁶⁰ After Knox's arrest and while she was in jail, law enforcement officers also falsely informed her that she was HIV positive as a means to obtain additional information about her sexual partners.⁶¹

Knox's statements were ultimately not admissible as evidence against her to prove the murder charges;⁶² however, as is often the case with false confessions,

55. AMANDA KNOX, *WAITING TO BE HEARD* 1, 103 (2013).

56. See Kassir, *supra* note 12.

57. See BURLEIGH, *supra* note 14, at 194–98.

58. See *id.*

59. Rachel Donadio, *Student on Trial in Italy Claims Police Pressure*, N.Y. TIMES (June 13, 2009), <http://www.nytimes.com/2009/06/14/world/europe/14italy.html>; Kassir, *supra* note 12, at 431.

60. KNOX, *supra* note 55, at 103.

61. BURLEIGH, *supra* note 14, at 220.

62. Mirabella, *supra* note 14, at 240–42.

they would quickly shape the basis for the prosecution's theory of the case and, in turn, the beliefs of the public.

Unlike in Kercher's case, where her body was discovered at her apartment, the investigation into Teresa Halbach's murder began as a missing person search.⁶³ The search for Halbach eventually led to the discovery of her car on the Avery property, along with burned remains that matched her DNA.⁶⁴ Thus, apart from the question of who committed the murder, her death presented other basic questions about how she was killed and what happened prior to her death. Police detectives first questioned Dassey during the initial investigation. At that time, however, he stated that he did not notice anything strange on the night of Halbach's disappearance on October 31, 2005. He said that he had assisted his uncle, Steven Avery, in building a bonfire. As they had often built bonfires together in the past, the teenager did not report anything unusual.⁶⁵

Four months later, in February, 2006, police detectives approached Dassey again. The investigation had progressed and they had more information about Halbach's murder, but holes remained. Similar to the process leading up to Knox's incriminating statements, police detectives met with and questioned Dassey four times over a forty-eight hour period between February 27 and March 1, 2006.⁶⁶ On February 27, police questioned Dassey during the day and then made arrangements for Dassey and his mother to stay in a hotel room that was guarded by police. After Dassey was released from questioning on February 28, he went to school. The next day, March 1, police returned to his school and brought him to the Manitowoc Police Station for further questioning. During the fourth round of questioning, Dassey made incriminating statements that were contrary to his previous conversations with police. He stated that, at the direction of his uncle, he raped and stabbed Halbach, making him part of the murder on the family property on October 31, 2005.⁶⁷

The police video recorded these statements.⁶⁸ The statements were later admitted at trial against Dassey after an unsuccessful motion to suppress their admission.⁶⁹ In April, 2007, based upon his statements alone, Dassey was convicted for the rape and murder of Halbach. There was no physical evidence independently corroborating his involvement with the murder.⁷⁰

63. The facts associated with Dassey's case are derived from court documents filed in the case, court decisions, and the footage of events shown in *Making a Murderer*.

64. *Dassey I*, *supra* note 36, at 967–68.

65. See Brief of Defendant-Appellant at 7–8, *Wisconsin v. Dassey*, 827 N.W.2d 928 (Wis. Ct. App. 2013).

66. *Id.* at 8–20 (describing the exchanges over this period and various parts of the transcriptions).

67. *Dassey I*, *supra* note 36, at 970.

68. *Id.*

69. *Id.*

70. *Id.*

At the post-conviction stage of Dassey's case, Dr. Richard Leo, an expert on confessions and police interrogations, testified about the interrogation. He concluded that Dassey's statements were coerced and that the method police used to question him resulted in statements that were "highly contaminated" when he incriminated himself.⁷¹ Dr. Leo noted that Dassey did not reveal any factual knowledge of the crime that was not already public, a factor that is critical to the assessment of a statement's reliability during police questioning. Rather, Dr. Leo pointed out how, at various points in the exchange, the police provided details to Dassey for his confirmation as they questioned him. In addition, testimony established that Dassey had the intellectual ability of a fourth-grade student.⁷²

Even without expert testimony on the psychology of the interrogation, it is difficult to watch the interrogation or read portions of the case materials without an acute sense of Dassey's vulnerability to suggestion and his limited comprehension about what was happening around him. Various comments and questions by Dassey demonstrate a limited grasp of the situation he faced and the words that others were using to explain it. For example, as police detectives prepared to obtain a written statement for Dassey to sign based upon his damaging statements about taking part in a murder, Dassey asked if he could be back at school soon for a presentation about which he was concerned.⁷³ At one point in his interrogation, Dassey asked how to spell the word "Detective." After Dassey was arrested and awaiting trial, he heard news reports that his statements were being characterized as inconsistent; Dassey asked his mother the meaning of the word "inconsistent."⁷⁴

Just as confession experts point to the coercive psychological tactics that led to Knox's incriminating statement,⁷⁵ Dassey's post-conviction attorneys argued that the videotaped confession reveals textbook examples of "fact feeding" and coercion.⁷⁶ They argued that as a result, Dassey gave the statement involuntarily in violation of his constitutional rights. As to the fact-feeding argument, the police had bone fragment evidence suggesting that the victim had been shot in the head on the Avery property. Dassey had not previously made any statements that included knowledge of such facts. Detectives asked Dassey repeatedly about what had happened on the evening of the victim's disappearance and murder. Dassey struggled to answer questions about "what else happened" in a way that confirmed their hypothesis. This prompted one of the detectives conducting the interrogation to ask "what else was done to her head?" In doing so, he thus revealed and introduced to Dassey a key fact about the evidence they had already collected.⁷⁷

71. See Brief of Defendant-Appellant, *supra* note 65, at 47 (describing the testimony and conclusion about the interrogations by expert Dr. Richard Leo, who testified on behalf of Brendan Dassey in his post-conviction proceedings).

72. *Id.*

73. *Making a Murderer*, Season 1 Episode 3 (Netflix 2015).

74. *Id.*

75. Kassir, *supra* note 12.

76. *Dassey I*, *supra* note 36, at 996.

77. *Id.* at 972.

As the interrogation continued, so did Dassey's struggle to find an answer that would satisfy his interrogators. As a result, during the video it looks like he was guessing. After repeated prompting, he offered that Avery had cut off her hair and that he had cut her throat at his uncle's direction. He then said that he did not remember anything else. The detective, in an apparent effort to corroborate physical evidence that Halbach was shot twice in the head, finally said at that point, "All right, I'm just gonna come out and ask you. Who shot her in the head?"⁷⁸

But Dassey had not mentioned a shooting or even a head injury until he was asked questions that suggested those two things occurred. It was only after the specific question that Dassey made any statement related to a shooting. That is a critical point of the recording and sequence of events in the interrogation: in false confession cases, suspects often have learned facts from investigators as part of the questioning process, resulting in statements that seem falsely authentic.⁷⁹ It feels more like detectives are leading Dassey down a particular path—even if unintentionally—and less like Dassey is giving a coherent sequence of events or introducing any facts of which he is uniquely aware. That is why it is not surprising that at various stages in the investigation Dassey's statements are repeatedly inconsistent.⁸⁰

Once Dassey's state court appeals were exhausted in 2013 and his conviction had been upheld, his attorneys began the next phase of his appeals. When the federal district court issued its opinion in 2016, it overturned Dassey's conviction.⁸¹ The court agreed with Dassey and held that his confession was involuntary based upon the nature of the interrogation and the lack of reliability of the statements. The court further agreed that "as a practical matter, [the confession was] the entirety of the case against him."⁸² Accordingly, his conviction was overturned.⁸³ The ultimate outcome of the case now depends on the rehearing *en banc* before the United States Court of Appeals for the Seventh Circuit.

Both interrogations demonstrate the use of the Reid technique, which puts psychological pressure on the suspect that, while inducing confessions generally, are also associated with false confessions.⁸⁴ While the details are clearer in Dassey's case because it was video taped, Knox's account is also consistent with the technique. As Professor Leo describes, "[t]he objective is to use the technique of accusatory interrogation to elicit incriminating statements that confirm the interrogators' pre-existing belief in the suspect's guilt and then build a case

78. *Id.*

79. Garrett, *supra* note 44.

80. See *Dassey I*, *supra* note 36, at 970–75.

81. *Id.* at 1006.

82. *Id.*

83. *Id.*

84. Leo, *supra* note 43, at 205.

around it.”⁸⁵ The transcript of Dassey’s interrogation reveals many examples of this tactic, and the court cited them throughout its opinion finding that his confession was involuntary ten years after his conviction.⁸⁶ Similarly, Knox has stated that the interrogators repeatedly told her they knew she was not being truthful until she provided facts that supported their theory of her involvement. They also told her that they had physical evidence that linked her to the crime scene, which was not true, and that Sollecito had retracted her alibi. Similarly, detectives at one point told Dassey that phone records disproved one of his claims that he was on the phone during a critical time period on the evening of the murder. Deception and ploys about false evidence have frequently been linked to false confessions,⁸⁷ yet the practice is regularly tolerated by American courts.

There were some clear differences in the interrogations of Knox and Dassey, but common themes were present. One notable difference between Dassey and Knox’s experiences was the tone of the interrogators. Knox contended that interrogators questioned her aggressively and yelled at her, even cuffing her on the head.⁸⁸ While in Dassey’s recordings, detectives took a different tact and used a “paternalistic approach,” sometimes patting him on the knee.⁸⁹ Instead of yelling at Dassey, the detectives provided reassurances and encouragement as a means of exploiting the absence of an adult looking after his interests.⁹⁰ Research has demonstrated that either of these approaches can produce conditions associated with false confessions because psychological risk factors are still present.

B. Comparing Applicable Confession Law in the United States and Italy

The Federal District Court’s decision overturning Dassey’s conviction was welcome news to many experts and lay people following the case. In light of the difficult legal standard required for a defendant to prove that a confession was involuntary and then succeed at the habeas stage, the decision was somewhat unexpected. The fact that the case will now be argued *en banc* highlights the rough terrain that still exists to prove involuntariness in the United States, even for children unrepresented in coercive environments. On the other hand, the legal framework that applied in the Knox case quickly led to the required suppression of her statement; the problem was that these strong protections with regard to suppression were obscured by other underlying problems in the investigation, poor implementation of applicable Italian law, and the release of her statement to the public.

85. *Id.*

86. *See Dassey I, supra* note 36, at 999–1006.

87. *See* Saul M. Kassin et. al., *Police-Induced Confessions: Risk Factors and Recommendations*, 34 L. & HUM. BEHAV. 3 (2010).

88. AMANDA KNOX, WAITING TO BE HEARD, 1, 103 (2013).

89. *Dassey I, supra* note 36, at 1000.

90. *Id.* (concluding that Brendan’s interrogators exploited his vulnerabilities during interrogation by repeatedly assuring him that everything was ok and that they were in his corner).

1. Confession Law in the United States

In the United States, historically, the Supreme Court has made statements reflecting a belief in the superiority of the American approach to protection against self-incrimination.⁹¹ The language demonstrates a prevailing domestic view that the United States reigns as an international leader of due process rights via the adversarial model of justice.⁹² Lawyers in the United States are more or less trained that the adversarial model has superior protections for defendants and is fairer than inquisitorial models, particularly when it comes to confession law.⁹³ This was especially true in the wake of *Miranda v. Arizona*.⁹⁴

While in American courts a defendant may challenge the admission of his confession on a variety of grounds, this discussion will focus on the two most relevant to the issues presented here. First, he can allege that his rights were violated by the government under *Miranda*.⁹⁵ Second, as Dassey did on appeal, he may object to its admission on the grounds that the confession itself was involuntary.⁹⁶ In *Miranda*, the Court required that police administer warnings to suspects when the defendant is subject to custodial interrogation. After *Miranda*, suspects must be informed of their Constitutional right against self-incrimination, including the right to remain silent and to have an attorney appointed and present when they are questioned. When the United States Supreme Court decided its famous *Miranda* decision in 1966, it was considered to be in the “vanguard of international criminal procedure reform.”⁹⁷ Today, it is aptly described as “one of the most praised, most maligned—and probably one of the most misunderstood—Supreme Court cases in American history.”⁹⁸

Some critics feared that *Miranda* warnings would hamper the ability of law enforcement to interrogate suspects and conduct investigations.⁹⁹ This fear has not been realized. Nor has the decision yielded the kind of protections against unreliable confessions that many of its champions envisioned. In truth, “[i]nterrogation-induced false confession has always been a leading cause of miscarriages of justice in the United States,” and that continues to be so decades after *Miranda*.¹⁰⁰

91. See CRIMINAL PROCEDURE: A WORLDWIDE STUDY xxi–xxii (Craig M. Bradley ed., 2nd ed., 2007).

92. See *id.*

93. See *id.*

94. See *id.*

95. *Miranda v. Arizona*, 384 U.S. 436 (1966).

96. See generally, Yale Kamisar, *On the Fortieth Anniversary of the Miranda Case: Why We Needed It, How We Got It—And What Happened to It?*, 5 OHIO ST. J. CRIM. L. 163 (2007).

97. Craig M. Bradley, *Interrogation and Silence: A Comparative Study*, 27 WIS. INT’L L. J. 271, 272 (2009).

98. Kamisar, *supra* note 96, at 163.

99. See *id.*

100. Steven A. Drizin & Richard A. Leo, *The Problem of False Confessions in the Post-DNA World*, 82 N.C. L. REV. 891, 920 (2004).

One of the chief reasons for this is the ease with which a court will find that a suspect has waived the rights afforded under *Miranda*. For example, no court that heard Dassey's case ever found that there had been a violation of *Miranda*,¹⁰¹ though it is clear that he did not understand his rights. Like Dassey, most suspects waive the rights associated with *Miranda*, thereby rendering *Miranda* warnings a hollow protection in practice.¹⁰² Studies have found that about eighty percent of suspects waive their *Miranda* rights, often because they wish to seem cooperative.¹⁰³

At first, it appeared that the Supreme Court's standard for waivers would set a relatively high bar. *Miranda* states that the government bears a "heavy burden" to prove that a suspect "knowingly and intelligently waived his privilege" against self-incrimination and the right to counsel.¹⁰⁴ However, courts generally find that suspects' *Miranda* waivers meet the legal standard. This is also true for decisions involving interrogations of children, even when conditions seem contrary to Supreme Court decisions that recognize their vulnerabilities.¹⁰⁵ For example, consider a California Court of Appeals case, which held that a twelve-year-old child was "worldly" and, therefore, capable of providing a valid waiver of his *Miranda* rights without any assistance from a parent or counsel.¹⁰⁶ That decision is not atypical under current American confession law.¹⁰⁷

The Court has cut back *Miranda*'s protections in other ways that have further contributed to its diminution on the international stage. The Court has given a narrow interpretation to the meaning of "custodial interrogation", the circumstances that necessitate police to provide *Miranda* warnings.¹⁰⁸ Thus, a defendant who voluntarily arrives at the police station or speaks with the police elsewhere may be questioned without warnings, so long as that person is not considered to be in custody.¹⁰⁹ It also does not bar the admission of physical evidence that is obtained in violation of *Miranda*.¹¹⁰

101. *Dassey I*, *supra* note 36, at 967–85 (describing procedural history in Dassey's case which does not include a present or previous finding of a *Miranda* violation).

102. Saul M. Kassin et al., *Police Interviewing and Interrogation: A Self-Report Survey of Police Practices and Beliefs*, 31 L. & HUM. BEHAV. 381, 383 (2007).

103. *See, e.g.*, Richard A. Leo, *Inside the Interrogation Room*, 86 J. CRIM. L. & CRIMINOLOGY 266, 276 (1996).

104. *Miranda*, *supra* note 95, at 475.

105. Barry C. Feld, *Real Interrogation: What Actually Happens When Cops Question Kids*, 47 L. & SOC'Y REV. 1, 3 (2013).

106. *See, e.g.*, *In re Charles P.*, 184 Cal. Rptr. 707 (Cal. Ct. App. 1982).

107. *See, e.g.*, Martin Guggenheim & Randy Hertz, *J.D.B. and the Maturing of Juvenile Confession Suppression Law*, 38 WASH. U. J. L. & POL'Y 109, 160–61 (2012) (discussing the challenges and inadequacies of current confession law as applied to minors).

108. *See, e.g.*, *Illinois v. Perkins*, 496 U.S. 292, 297 (1990) (holding that the Defendant was not entitled to receive *Miranda* warnings because he was not subject to a custodial interrogation when an undercover agent was placed in his cell block to ask him questions).

109. *Oregon v. Mathiason*, 429 U.S. 492 (1977).

110. Scholars criticize this decision, most notably, Yale Kamisar, *Dickerson v. United States: The Case That Disappointed Miranda's Critics - and Then Its Supporters*, in *THE REHNQUIST LEGACY*

Another avenue for challenging the admission of a confession exists when the defendant can prove that the confession was involuntary.¹¹¹ The legal conditions of Dassey's *Miranda* waiver are troubling, but courts uphold waivers like his. Thus, voluntariness was the legal issue that led to the Court to suppress his statement and overturn his conviction. In order to satisfy the voluntariness test, the United States Supreme Court has established that it will depend upon the totality of the circumstances: "the totality approach permits—indeed, it mandates—inquiry into all the circumstances surrounding the interrogation."¹¹² As the doctrine has evolved, absent overt serious threats or physical coercion, statements given under circumstances such as Dassey's are routinely held to be voluntary in American courtrooms.¹¹³ The threshold for proving involuntariness is so high that the Supreme Court has not suppressed a single "station house" confession for involuntariness since 1972.¹¹⁴ Moreover, just as courts often deem young children capable of waiving their *Miranda* rights, they routinely find that they have given "voluntary" statements despite questioning that occurs absent a parent, guardian, or attorney.¹¹⁵ The Supreme Court requires only that a confession must be voluntary under the totality of the circumstances with age among the relevant factors. The law considering age in this and other criminal contexts is applied in a haphazard and perfunctory manner.¹¹⁶ Finally, even when an involuntary confession was erroneously admitted, a conviction will not be set aside if the court finds that it was a harmless error and that the other evidence was sufficient to result in a conviction.¹¹⁷

Thus, it is well established that American courts generally labor under a standard that has been unfriendly to compelling claims like Dassey's. Courts routinely admit confessions into evidence under similar conditions despite claims of involuntariness, for adults and children.¹¹⁸ The admission of Dassey's statements at trial and the affirmation on direct appeal is not atypical. Like many aspects of criminal procedural law that are generally accepted by courts, voluntariness in the eye of the courts is much different from that of the public.

106 (Craig M. Bradley ed., 2006).

111. See, e.g., *Ashcraft v. Tennessee*, 322 U.S. 143 (1944) (finding involuntariness under the totality of the circumstances where suspect was questioned for thirty-six consecutive hours); *Brown v. Mississippi*, 297 U.S. 278 (1936) (finding involuntariness based on brutal physical force).

112. *Fare v. Michael C.*, 442 U.S. 707, 725 (1979).

113. For a discussion of the difficult threshold typically required for suppression, see generally Mark A. Godsey, *Rethinking the Involuntary Confession Rule: Toward a Workable Test for Identifying Compelled Self-Incrimination*, 93 CALIF. L. REV. 465, 470 (2005).

114. Bradley, *supra* note 97, at 272; but see *Arizona v. Fulminante*, 499 U.S. 279 (1991) (upholding a lower court decision which found involuntariness based upon questioning of defendant by informant in prison and applying the harmless error doctrine).

115. *Guggenheim & Hertz*, *supra* note 107.

116. *Id.* at 160–61 (describing how courts reject involuntariness claims "in all but the most extreme set of circumstances").

117. *Arizona v. Fulminante*, 499 U.S. at 302.

118. See generally, Godsey, *supra* note 113. For a discussion specific to juveniles, see also, *Guggenheim & Hertz*, *supra* note 107; Feld, *supra* note 105.

This may explain why the Italian system faced so much criticism despite the common reality of analogous domestic cases like Dassey's.

The general public, along with legal experts, were troubled—even stunned, sickened, and “ashamed”¹¹⁹—watching the clips of a naïve teen with a below average intellect struggling through police questioning without a lawyer or adult protecting his interests. Dr. Richard Ofshe, a professor and confession expert, reflecting on the videotaped confessions given by Dassey, stated, “I see something that almost makes one ashamed to be an American.”¹²⁰ And yet, the Wisconsin state court system permitted the conviction to stand uninterrupted based upon the admission of that statement, and Dassey faces a significant hurdle to have the decision overturned in federal court. Nevertheless, the Federal District Court saw grounds to suppress Dassey's confession. The opinion used the recording of Dassey's interrogation to explain the finding that Dassey's confession lacked indicia of reliability and voluntariness. Given the high standard for involuntariness and the standard of review the court must use in *habeas corpus* petitions, it remains difficult to predict the ultimate outcome of Dassey's plight in federal court.¹²¹ On the other hand, the United States Supreme Court has been consistent in its recent reminders to lower courts about the constitutional import of age and the special considerations that should be afforded to the vulnerabilities of youth.¹²² But lower courts are often loathe to offer additional protections in the confession setting.

2. Confession Law in Italy

First, the Italian Code of Criminal Procedure requires that an accused only be interrogated with an attorney present.¹²³ Unlike *Miranda's* right to counsel, this requirement is not waivable in Italy. So, despite the criticism or perception about lesser due process protections afforded by Italy's system of Criminal Procedure, in Italy Dassey's questionable statements could not have been admitted against him as evidence of guilt, just as Knox's were not. In Italy, if a person is questioned without the opportunity to consult a lawyer, the statement is

119. Willet, *supra* note 39; Louszko, *supra* note 40 (quoting Professor Richard Ofshe of the University of California, Berkeley).

120. See Louszko *supra*, note 40 (quoting legal experts).

121. Under Section 2254(d)(2) of the Antiterrorism and Effective Death Penalty Act, which dictates the standard for Dassey's petition, the petitioner must show that the state court decision involved an unreasonable determination of the facts. That standard is met if it rests on fact-finding that ignores the clear and convincing weight of the evidence.” *Bailey v. Lemke*, 735 F.3d 945, 949-50 (7th Cir. 2013).

122. See, e.g., *Roper v. Simmons*, 543 U.S. 551 (2005) (banning the execution of juvenile offenders); *Graham v. Florida*, 130 S. Ct. 2011 (2010) (banning life without parole for non-homicide juvenile offenders); *J.D.B. v. North Carolina*, 131 S. Ct. 2394 (2011) (requiring age consideration in the *Miranda* custody analysis).

123. COD. PROC. PEN. ART. 350 (It.).

not admissible as evidence of guilt,¹²⁴ whereas in the United States it is routine police practice to encourage suspects to waive their *Miranda* rights.¹²⁵

Furthermore, under Italian law, there is no additional requirement to show that the subject was undergoing a “custodial interrogation” in order to invoke a right to counsel. Rather, under Italian law, all suspects have this right, so even spontaneous statements cannot be used against the accused if counsel were absent.¹²⁶ In Italy, as in the United States, the accused also has an absolute right to silence.¹²⁷ Additionally, confessions must be recorded in writing or audio for their use against the defendant, under penalty of exclusion.¹²⁸

Finally, Italian law requires an interpreter during questioning for non-native speakers. Fidelity to this principle is not clear. Knox’s lawyers have argued that the police did not provide a neutral interpreter during her interrogation and that the interrogation began without an interpreter of any kind. This was another frequent source of American criticism since Knox’s Italian language skills were limited. But in the United States, there is no constitutional right to a neutral or certified interpreter during interrogation.¹²⁹ The government must only prove that the suspect properly waived his or her *Miranda* rights.¹³⁰ Generally speaking, if it is proven that the rights were explained in a language the person understood, courts will uphold the waiver without requiring a neutral or official interpreter.¹³¹

In Knox’s case, there was no need to litigate questions about coercion and proper waiver of counsel to determine the admissibility of the confession, both of which pose a high bar for defendants in the United States. If a suspect does not have counsel and the statement is not recorded, as was the case for Knox, the statements could not be and were not actually admitted to prove her guilt.¹³²

An additional provision of Italian law was relevant to Knox’s statement and, in her case, it worked against other protections in place. There was a civil case against Knox pursued by a third party, Patrick Lumumba. The civil case was based upon her initial statements during police questioning that her boss, Lumumba, had

124. *Id.*

125. *Id.*

126. COD. PROC. PEN. ART. 350(7) (It.).

127. *See* Mirabella, *supra* note 14, at 251.

128. COD. PROC. PEN. ART. 357, 134 (It.).

129. *See* United States v. Silva-Arzeta, 602 F.3d 1208, 1217 (10th Cir. 2010) (“We can agree with Mr. Silva-Arzeta that the use of certified interpreters and recording devices during interrogation could improve the accuracy of evidence at trial. We cannot, however, hold that their use is constitutionally required.”); *see also*, Floralyne Einesma, *Confessions and Culture: The Interaction of Miranda and Diversity*, 90 J. CRIM. L. & CRIMINOLOGY 1, 27 (1999) (explaining that it is not unconstitutional for a police officer to serve as an interpreter during custodial interrogation).

130. *Id.*

131. *See, e.g., id.*

132. Giulio Iluminati & Michele Caianiello, *The Investigative Stage of the Criminal Process in Italy*, in SUSPECTS IN EUROPE: PROCEDURAL RIGHTS AT THE INVESTIGATIVE STAGE OF THE CRIMINAL PROCESS IN THE EUROPEAN UNION (Ed Cape et. al. eds., 2007) (discussing the right to counsel in Italy).

been present at the home when Kercher was murdered.¹³³ The statement was later proven false. Under Italian law, the fact finders in murder cases like Kercher's include a mixed jury of laypersons and members of the judiciary. If there are accompanying civil claims, as here, they proceed in tandem with the criminal charges before the same jury.¹³⁴ The practice of admitting evidence in the parallel civil case before the same jury finds its rationale under the theory that the fact finder is able to separate the evidence in the civil and criminal cases, particularly under the direction of the judicial jury members.

Next, Italian law requires a written record of the jury's decision which must articulate the specific evidence that justifies a finding of guilt.¹³⁵ In a case like Knox's, the jury had to articulate the basis for a conviction in a written decision using only evidence admissible as to the criminal matters. Therefore, the decision could not overtly refer to the evidence that was admissible in the civil case to support a guilty finding. Regardless, its potential to influence jurors and their view of other evidence suggests that the requirement of a written decision does not cure the potential for bias.¹³⁶

There appear to be three main reasons why the protections offered under Italian law failed to protect Knox when she was originally convicted. First, the procedural law was clearly flouted during the interrogation itself. The officials did not provide counsel, they failed to record the interrogation, and there were questions about proper access to an interpreter. Yet because of these violations, Knox gained suppression. Second, the admissibility of Knox's statement into evidence in the parallel civil case resulted in its exposure to the jury deciding her guilt.¹³⁷ Finally, the rampant pre-trial publicity about her statement likely influenced many aspects of the investigation and impacted the case against her.¹³⁸

When Knox's incriminatory statements were admitted in the parallel civil case against her, this practice spurred a great deal of criticism in the United States. Nevertheless, the practice is consistent with the inquisitorial model's philosophy, which allows the fact finder to weigh all existing evidence and then credit the most persuasive. Confirmation bias research, however, demonstrates that it is difficult for fact finders to disregard knowledge about confessions when weighing other evidence.¹³⁹ Given the research, even if the written jury decision required in

133. BURLEIGH, *supra* note 14, at 194–98, 267.

134. Mirabella, *supra* note 14, at 251.

135. Pizzi & Marafioti, *supra* note 10, at 15 (“Following trial, the court must explain its decision in an opinion that reviews the evidence and explains in detail the grounds (‘motivazione’) for the decision.”).

136. See Kassin, *Why Confessions Trump Innocence*, *supra* note 12, at 433–434.

137. Mirabella, *supra* note 14, at 251.

138. Cf. Kassin, *supra* note 12 (discussing the ways in which the existence of an incriminating statement can contaminate many areas of an investigation and suggesting ways to mitigate its potential influence).

139. See generally, *id.* (discussing the confirmation biases that are associated with confessions and the rippling effects of their contamination throughout a case).

Italy articulates that a conviction was based upon admissible evidence, it is still likely tainted by knowledge of the confession.¹⁴⁰

The unique influence of confessions on confirmation bias makes it difficult to defend the merits of exposure of confession evidence to the same jury, even across different philosophical models of criminal and evidentiary procedure. Dr. Kassir's research supports the argument that the criminal procedural process and investigation should consider the special potential for confession contamination bias on decision makers at all points of an investigation. This is true whether it is under an adversarial model or quasi-inquisitorial model.

The critique of a practice that exposed the fact finder to inadmissible evidence during the Knox trial also illuminates a similar practice permitted in American jurisdictions. Throughout the United States, an analogous procedure is permitted in two distinct instances. First, when a defendant forgoes a jury trial and opts to have her case heard by a judicial fact finder, the same judge is permitted to decide both questions of law and fact. As such, the judge is exposed to evidence that she can later rule inadmissible for her consideration at trial. Therefore, just as Knox's fact finder was exposed to otherwise inadmissible evidence, so are judges in these bench trials; admittedly, this occurs in the United States only if the defendant chooses to forgo her jury trial.

Second, judges in juvenile delinquency courts across the United States are permitted to hear the same potentially inadmissible evidence despite their dual role as fact finders. Indeed, in juvenile courts, judges regularly decide suppression issues and then serve as finders-of-fact at trial.¹⁴¹ In these cases, judges are routinely exposed to evidence—confessions and other tangible evidence—which they must later disregard when they decide whether or not the juvenile defendant is guilty.¹⁴² Courts have upheld this practice in juvenile courts and in bench trials where Defendants elect to forgo a jury trial.¹⁴³ Research casts doubt on the rationale used to support this practice.¹⁴⁴ The criticism of this practice directed abroad in light of the Knox case may be a worthy catalyst for its reexamination in domestic contexts, particularly as it applies to confession evidence. In the United States, the contradiction could be at least partially resolved by having a different judge decide the suppression issues prior to trial, even if only as to the admission of incriminating statements. Therefore, both countries would benefit from reexamination of rules that allow a fact finder to be exposed to potentially inadmissible confessions.

140. *Id.*

141. Martin Guggenheim & Randy Hertz, *Reflections on Judges, Juries, and Justice: Ensuring the Fairness of Juvenile Delinquency Trials*, 33 WAKE FOREST L. REV. 553, 571–73 (1998).

142. *Id.*

143. *Id.*

144. *Id.* at 568-571.

III.

CONFESSIONS AND PRE-TRIAL PUBLICITY

As Knox's case demonstrates, suppression does not fully resolve the damaging effect of statements, particularly in high profile cases aired in the media. In an age of "the twenty-four media cycle," people are accustomed to "saturation coverage,"¹⁴⁵ whether in the United States or abroad. The particular details of the deaths of Halbach and Kercher, both involving the murders of young women in communities unaccustomed to such violent and disturbing allegations, contributed to the intense media interest and coverage. In the case of Knox, the international element of the case added to the media fervor. In the Halbach investigation, the fact that Steven Avery was exonerated for another crime only two years prior to his arrest for murder after serving eighteen years in prison in error positioned the case for national attention. Intense interest in the details unfolding in criminal investigations of high profile murders leads to a familiar "trial by media" phenomenon. Its accompanying tension with the rights of the accused extends across borders.¹⁴⁶

This section addresses extra-judicial statements by the prosecution related to confessions and their unique place in regulations associated with the pre-trial publicity. The two carry conflicting rights with which modern societies grapple across cultures. In reality, whether or not a confession is entered into evidence at trial is only part of the analysis of its impact on a case. The potential for a flawed confession to negatively influence an investigation, the collection of other evidence, and the jury pool, all begins the moment it is uttered. The Kercher and Halbach investigations are powerful cross-cultural examples of this. The elicitation of confessions tends to set in motion a "hypothesis-confirming investigation, prosecution, and conviction."¹⁴⁷ The confession is aired to the press and a trial-by-media quickly follows.¹⁴⁸ This discussion focuses on the relationship between prosecutorial speech and confessions because of the way that pre-trial publicity can tend to perpetuate the harm of unreliable confessions, even if a statement is later suppressed at trial.

A. *Extra-Judicial Speech in the Knox and Dassey Investigations*

No more than two weeks after her arrest, the statements that Knox made to the police were reported verbatim in the press after their release by law enforcement.¹⁴⁹ The statements were quickly accessible to the public in the

145. See Resta, *supra* note 46.

146. *Id.*

147. See, e.g., Kassir, *supra* note 12, at 431 (describing the sequence of events in the Knox case).

148. *Id.*

149. See, e.g., Malcolm Moore, *Transcript of Amanda Knox's Note*, TELEGRAPH (Nov. 27, 2007), <http://www.telegraph.co.uk/news/worldnews/1570225/Transcript-of-Amanda-Knox-note.html> (relaying a complete transcript of a statement Knox wrote in a note to police on the night of her arrest).

newspaper without information about the circumstances of the questioning that were later revealed. Moreover, Italian Prosecutor, Giuliano Mignini, quickly shared his theories about Knox's motive with the press.¹⁵⁰ Swiftly, Mignini's theories created a media narrative about the crime that was not rooted in the evidence.¹⁵¹ Specifically, according to the media, the police and prosecution leaked theories that Kercher's murder involved an erotic sex game fueled by drugs and that Knox was a promiscuous and satanic deviant.¹⁵² Mignini openly posited that the two other accused suspects, Raffaele Sollecito and Rudy Guede, had participated in the murder to please Knox after an argument regarding Knox's sexual practices. As just one example of many, Newsweek reported that "prosecutors believe [Kercher] died during an extreme sex session gone wrong."¹⁵³ Although there was no evidence to support it, the theory advanced by the prosecution to the media quickly took hold. Its power endured during the two years leading up to the trial of Knox and Sollecito, and beyond.

As the Knox trial wore on, one writer covering the trial noted, "it was almost impossible to find a person who would consider the possibility that the narrative of the crime [as crafted by the prosecution], which they had been reading about . . . might not be the truth."¹⁵⁴ And yet there was no reliable physical evidence connecting Knox or Raffaele to the room where Kercher's violent murder occurred. There was simply her statement, placing her at the home at the time of the murder. Mignini was also a controversial figure because, at the time of Knox's prosecution, he was under investigation for allegations that he abused his powers through his use of wire-tapping.

Back in Wisconsin, Kenneth Kratz, the District Attorney who pursued Dassey's conviction, delivered comprehensive details about the existence and contents of Dassey's statements to police detectives shortly after Dassey was arrested. First, he called a press conference, along with the Calumet County Sheriff, on March 1, 2006. In that press conference, he prepared the media for a subsequent press conference he would hold the following day. Kratz declared that he and law enforcement officers now "know" details about the crime. On March 2, he then made detailed statements of fact without any qualifying language using all the details in Dassey's statement. Indeed, he began by stating: "We have now determined what occurred sometime between 3:45 and 10 or 11 p.m. on the 31st of October." He paired this introductory statement with a preliminary warning

150. David Harrison & Philip Sherwell, *Amanda Knox: 'Foxy Knoxy' Was an Innocent Abroad, Say US Supporters*, TELEGRAPH (Dec. 5, 2009), <http://www.telegraph.co.uk/news/6736512/Amanda-Knox-Foxy-Knoxy-was-an-innocent-abroad-say-US-supporters.html> (stating that "[l]eaks from the police and prosecution teams suggested lurid motivations for Knox's role in the brutal killing ranging from satanic sex games that went wrong to frictions over housework"); Barbie Nadeau, *Sex Murder Prison Diaries*, NEWSWEEK (Jan. 16, 2008), <http://www.newsweek.com/sex-murder-prison-diaries-87481>.

151. See Harrison & Sherwell, *supra* note 150.

152. See *id.*

153. Nadeau, *supra* note 150.

154. BURLEIGH, *supra* note 14, at 13.

that children under age fifteen and acquaintances of Teresa Halbach should not watch the press conference because of the grisly details that would follow. At that point, he provided a detailed narration using the statement that Dassey eventually made to the detectives, knowing that it would be televised and covered in the media.

As in Knox's case, Kratz's delivery of the information fueled a new narrative of Halbach's murder. The prosecution now alleged that the murder involved two perpetrators, with sixteen-year-old Dassey participating at the direction of Avery. In his press conference, Kratz described in vivid detail a violent murder and rape scene that included, as he put it, physical "torture" and a victim pleading for her life. He delivered details that came exclusively from Dassey's statement as facts. Importantly, there was no physical evidence supporting that theory other than the bone fragments indicating that the victim had been shot in her head.

The prosecution in both cases aired the salacious theories they had developed in part based upon the confessions and both did so even when presented with contrary physical evidence. In Kercher's murder, for example, the investigators did have physical evidence that Kercher was stabbed to death and sexually assaulted by her assailant because they found her body at the crime scene. But the physical evidence did not support the theory of the case aired to the press that that were multiple killers. It pointed to one perpetrator, Rudy Guede, whose DNA was present at the crime scene and on Kercher's body, which led to his conviction for the murder.¹⁵⁵ But with Knox's incriminating statement placing her in the house at the time of the murder, the prosecution appeared to have crafted a story to corroborate it.¹⁵⁶

In Dassey's case, Kratz's narrative came directly from Dassey's inconsistent statements. As in the Kercher investigation, the narrative was not born out in the physical evidence. There was no physical evidence, DNA or otherwise, supporting a theory of the case that Dassey had raped and stabbed Halbach in Avery's trailer. Moreover, there was also no physical evidence that the victim herself was ever in the trailer.

Nevertheless, the Kratz narration bolstered the credibility of the confession. He announced the information with no qualifying statement as to its truthfulness, as required under the applicable ethical rules.¹⁵⁷ As one reporter stated in reference to the press conference on March 2, 2006, "We had no idea that Ken Kratz was going to sit there and basically, in graphic detail, give his version of the way this went down. The degree of detail that he gave there was honestly a shock to me."¹⁵⁸

155. *Id.*

156. *Id.*

157. *See infra* Section IV. B (discussing applicable ethical rules).

158. Tessa Stuart, 'Making a Murderer Trial' Inspired Reporter to Go Into Law, ROLLING STONE MAGAZINE (Jan. 26, 2016), <http://www.rollingstone.com/tv/news/making-a-murderer-trial-inspired-reporter-to-go-into-law-20160126>.

Because of Kratz's public statements, Avery's defense lawyers sought an order limiting public comment by Kratz and the Sheriff's department.¹⁵⁹ At first, the judge denied counsel's motion for an order limiting speech. Eventually, however, based upon the prejudicial effect of extrajudicial statements, the court took the unusual step of issuing an order requiring the Sheriff's Department to cease comment on the investigation of Teresa Halbach's death.¹⁶⁰ At that point, however, much of the damage had been done. Moreover, the enforcement of the order terminated with the conviction of Avery, prior to the commencement of Dassey's case.

Dassey's post-conviction attorney, Steven Drizin, concluded that viewing the March 2nd press conference on video underscored the deleterious effects of the prosecutor's extrajudicial statements in the case. In his words, "the release of these gory details coupled with [Kratz's] confidence in their truth all but sewed shut any chance that Dassey or Steven could get a fair trial."¹⁶¹ In that way, like the trials of Knox and Sollecito in Italy, Dassey's trial appeared to be an exercise of confirmation of guilt despite rules in both countries protecting the presumption of innocence. And both prosecutions show the current limits of the court's ability to regulate the impact of prejudicial pretrial statements.

B. Law Regulating Extra-Judicial Speech and Implications on the Right to a Fair Trial

Whether they employ an inquisitorial, adversarial, or a hybrid system, the United States and continental jurisdictions all have regulations addressing extrajudicial speech and its interaction with the rights of the accused.¹⁶² In the age of the twenty-four hour news cycle, it is increasingly difficult to find the appropriate balance between a free press and the rights of the accused, particularly with respect to the presumption of innocence.¹⁶³ As a whole, the approaches in the United States and European countries vary according to jurisdiction and are tempered by the values of each culture.¹⁶⁴

In the United States, the law balances the First Amendment right to free speech and the constitutional right to a fair trial under the Sixth Amendment. By comparison, in Europe, Professor Resta writes that while similar fundamental concerns exist, the regulatory schemes of continental jurisdictions focus on "the need for safeguarding the privacy, personal dignity, and presumption of innocence

159. Defendant's Motion for an Order Limiting Public Disclosure, March 8, 2016. *See also*, Defendant's Memorandum on Examples of Pretrial Publicity, (July 13, 2006) (on file with journal).

160. Order Limiting Public Disclosure, (September 11, 2006) (on file with journal).

161. Steven Drizin, *Theft by Press Conference: Stealing a Defendant's Presumption of Innocence With Prejudicial Pre-Trial Publicity*, HUFFINGTON POST BLOG (Jan. 29, 2017), http://www.huffingtonpost.com/steve-drizin/theft-by-press-conference_b_9108060.html.

162. *See generally*, Resta, *supra* note 46.

163. *Id.*

164. *Id.*

of trial participants against interference by the media.”¹⁶⁵ Nevertheless, across cultures, regulations are in place to address extrajudicial speech. Literature on extrajudicial speech focuses primarily on the regulation of prosecutor speech. That is because in most jurisdictions prosecutors and law enforcement are the source of much of the information the media receives and disperses about criminal proceedings.¹⁶⁶

In Italy, there are three applicable sources of regulations or guiding principles regulating prosecutorial speech; one is domestic law and two others originate from international agreements. First, Italy’s Code of Criminal Procedure restricts certain kinds of pre-trial publicity by the judiciary and law enforcement.¹⁶⁷ The Italian Code of Criminal Procedure (Code) prohibits the disclosure of evidence until it is provided to the accused.¹⁶⁸ The Code also forbids the partial or total publication of documents covered by the rules, such as witness statements and wiretapping transcripts.¹⁶⁹ It imposes specific penalties if the rules are violated and information is leaked.¹⁷⁰

Next, Italy is subject to the European Convention for Human Rights (The Convention). The Convention curtails pre-trial publicity that will violate the suspect’s presumption of innocence.¹⁷¹ The provision applies to statements that are deemed the equivalent of premature declarations of guilt by the state. In short, if prosecutorial speech suggests unequivocal guilt of a defendant as Kratz’s did, it is a violation of the Convention.¹⁷² Under the Convention, citizens have the opportunity to apply for monetary relief if their rights are violated, but it does not control their adjudication of guilt.

Finally, the Committee of Ministers of the Council of Europe issued a universal recommendation to provide guidance to member countries, which includes Italy. The Council’s recommendations contain language similar to that found in the American Bar Association Model Rules of Professional Conduct. Specifically, the Council’s Principle 10 states that “in the context of criminal proceedings, particularly those involving juries or lay judges, judicial authorities and police services should abstain from publicly providing information which bears a risk of substantial prejudice to the fairness of the proceedings.”¹⁷³

165. *Id.* at 40.

166. *Id.* at 49–50 (citing studies and research from a variety of global jurisdictions, including the United States and Italy).

167. *Id.* at 45–56.

168. COD. PROC. PEN. ART. 329 (It.).

169. *Id.* at 114, 339.

170. *Id.* at 684.

171. European Convention on Human Rights, §§ 6.2, 6.1; *Alenet de Ribemont v. France*, §§ 39–41.

172. European Convention on Human Rights, §§ 6.2, 6.1.

173. COUNCIL OF EUROPE, RECOMMENDATION REC (2003) 13 OF THE COMMITTEE OF MINISTERS TO MEMBER STATES ON THE PROVISION OF INFORMATION THROUGH THE MEDIA IN RELATION TO CRIMINAL PROCEEDINGS, PRINCIPLE 10 (adopted July 10, 2003).

Despite the domestic law and Convention regulations that would have prohibited or curtailed much of the information stated to the press about Knox, enforcement is difficult and disconnected from the litigation itself. As a result, the regulations in Italy are routinely flouted.¹⁷⁴ For example, in Italy, witness statements and wiretapping transcripts are frequently published in the media without consequence, even though it is illegal to do so.¹⁷⁵

In its final decision acquitting Knox and Sollecito in 2015, the Corte Suprema di Cassazione was ultimately highly critical of the evidence used by the prosecution.¹⁷⁶ The court concluded that the “media clamor” contributed to the problems in the investigation.¹⁷⁷ It also noted the “stunning” flaws in the investigation and evidence used to convict them.¹⁷⁸ The opinion did not formally discuss the airing of salacious theories to the media but it recognized the lack of evidence to support the theories of conviction in the case and was critical of the prosecution as a whole.¹⁷⁹ In 2015, the Italian Council of Magistrates formally reprimanded Mignini for procedural violations related to the Kercher investigation.

Turning to the United States, a defendant’s right to a fair trial exists under the Sixth and Fourteenth Amendments of the United States Constitution.¹⁸⁰ Any attempt to limit speech related to a criminal trial balances the First Amendment rights of the attorneys and the right of the accused to a fair trial.¹⁸¹ Specific to extrajudicial speech by the attorneys, each state has an ethical code of conduct that attorneys must follow. The state codes are modeled after the American Bar Association’s Model Rules of Professional Conduct (MRPC).

MRPC Rules 3.6 and 3.8 generally govern the rules relevant to the extrajudicial statements made in Dassey’s case. They are similar to the Council recommendations that exist as persuasive authority in Italy: a lawyer may not make public statements that the lawyer “knows or reasonably should know will be disseminated by means of public communication and will have substantial likelihood of materially prejudicing an adjudicative proceeding in the matter.”¹⁸² Moreover, the rule provides specific examples, one being that the attorney should not discuss the contents of a confession, admission, or statement by the defendant or suspect.¹⁸³

174. Resta, *supra* note 46, at 47.

175. *Id.*

176. Elisabetta Povoledo, *Italy’s High Court Explains Decision to Clear Amanda Knox*, N.Y. TIMES, Sept. 7, 2015, at A9.

177. MARASCA-BRUNO REPORT, *supra* note 24, at 25 (2015).

178. *Id.*

179. *Id.*

180. *Gentile v. State Bar of Nevada*, 501 U.S. 1030 (1991).

181. *Id.* For the view opposing any curtailment of the First Amendment, *cf.* Erwin Chemerinsky, *Silence Is Not Golden: Protecting Lawyer Speech Under the First Amendment*, 47 EMORY L.J. 859, 862–67 (1998).

182. MODEL RULES OF PROF’L CONDUCT r. 3.6(a) (2009).

183. *Id.* at 3.6(2)(b).

MRPC Rule 3.8 addresses prosecutor speech specifically and states that prosecutors should refrain from making public statements which have a “substantial likelihood of heightening public condemnation of the accused. . .”.¹⁸⁴ The reasoning supporting the rule is straightforward: the public knows that prosecutors have “special access to information [such that] any statements made by a prosecutor may be regarded as especially accurate.”¹⁸⁵ The Supreme Court has recognized that prejudice from media accounts of evidence “may indeed be greater than when it is part of the prosecution’s evidence [at trial] for it is not then tempered by protective procedures.”¹⁸⁶

Within the limitations above, the ethical rules recognize that prosecutors may comment upon information in the public record.¹⁸⁷ The ethical rules also recognize that prosecutors may inform the public about a criminal investigation,¹⁸⁸ and in some cases, there may be compelling reasons why they must. Under the rules, they must refrain from expressing a definitive opinion about guilt or innocence of the defendant. That limitation recognizes the danger of contaminating the potential juror pool, witnesses, or alibis who may be influenced by prosecutorial opinion.

As in Italy, similar enforcement problems exist for limiting extrajudicial speech in the pretrial context and with prosecutorial misconduct as a whole. Despite ethical rules addressing extrajudicial discussion of confessions, discipline and enforcement in the United States is “extraordinarily rare.”¹⁸⁹ This is true for many reasons, but two are most prominent. First, courts are loath to infringe upon attorney speech pursuant to the First Amendment.¹⁹⁰ The Supreme Court is vigilant about the application of rules and policies that curtail speech. The Court, however, has upheld the language in the model rules so long as the rule is applied properly within the confines of the First Amendment.¹⁹¹ Secondly, the United States system of justice operates largely on an assumption that prosecutors can self-regulate and will act in accordance with the pursuit of justice and within the applicable ethical boundaries. In general, prosecutors are rarely held accountable for misconduct even beyond the admittedly more nuanced issue presented by extrajudicial speech.¹⁹²

184. *Id.* at 3.8 cmt f.

185. Margaret Tarkington, *Lost in Compromise: Free Speech, Criminal Justice, and Attorney Pretrial Publicity*, 66 FL. L. REV. 1873, 1902–03 (2014).

186. *Marshall v. United States*, 360 U.S. 310 (1959) (setting conviction aside where jurors received extraneous case information through news accounts).

187. MODEL RULES OF PROF’L CONDUCT r. 3.6(b)(2).

188. *Id.* at cmt 1. (noting that the public has “a right to know about threats to its safety and measures aimed at assuring its security.”).

189. Laurie L. Levenson, *Prosecutorial Sound Bites: When Do They Cross the Line?*, 44 GA. L. REV. 1021, 1024 (2010) (Professor Levenson notes “it is extraordinarily rare for prosecutors to be disciplined for violating those rules.”).

190. *Id.*

191. *Gentile v. State Bar of Nevada*, 501 U.S. 1030, 1076 (1991).

192. See Fred C. Zacharias, *The Professional Discipline of Prosecutors*, 79 N.C. L. REV. 721,

As to Dassey's case, Kratz was never sanctioned for his behavior, in contrast to Mignini. But there is case law strongly supporting the conclusion that Kratz violated ethical rules.¹⁹³ In *Maryland v. Gansler*, the Supreme Court agreed that there was prosecutorial misconduct where the prosecutor not only "announce[d] the existence of [defendant] Cook's confession, but also furnished specific information of the surrounding circumstances, including that Cook provided 'incredible details that only the murderer would have known.'"¹⁹⁴ The *Gansler* court also noted that the prosecutor "magnified the prejudicial effect of his statements by bolstering the believability of the confession."¹⁹⁵

The substance of confessions are especially sensitive prior to trial because suppression issues have yet to be litigated, as was true in the Halbach and Kercher investigations; moreover, confessions influence public perception about the facts of a case and in turn, jurors' opinions, about guilt or innocence.¹⁹⁶ False confessions, or knowledge of confessions in general, can also contaminate other evidence in the case.¹⁹⁷ In many cases, evidence of a confession is almost impossible to overcome even in the face of powerful contradictory evidence that disconfirms the confession.¹⁹⁸ "Part of the reason confessions stick like glue is that once people form a strong opinion of guilt, they tend to interpret contradictory facts in ways that reinforce that perception."¹⁹⁹ For the most part, people do not believe that anyone would confess to a crime that he or she did not commit, despite the evidence proving otherwise. This is one of the critical reasons for limiting pre-trial discussion of confessions. They may prove to be untrue or inadmissible, but once they are in the public domain *and* bolstered by the prosecutor's view of their veracity, people are unlikely to accept an alternative possibility about the crime.²⁰⁰

The documentary series about Dassey's case provides objective evidence, specifically footage of the press conference, which allows any viewer to make his or her own assessment about whether Kratz's statements parallel the description

723 (2001) (noting the lack of disciplinary action against prosecutors). Recent examples of prosecutorial misconduct recently led the New York Times Editorial Board to call for the federal government to "step in and monitor some of the worst actors." Editorial Board, *To Stop Bad Prosecutors, Call the Feds*, N.Y. TIMES (June 6, 2016), <https://www.nytimes.com/2016/06/06/opinion/to-stop-bad-prosecutors-call-the-feds.html>.

193. See Att'y Grievance Comm'n of Maryland v. Gansler, 835 A.2d 548, 570 (Md. 2003).

194. *Id.*

195. *Id.*

196. Drizin & Leo, *supra* note 100, at 922–23.

197. Stéphanie B. Marion et al., *Lost Proof of Innocence: Impact of Confessions on Alibi Witnesses*, 40 L. & HUM. BEHAV. 65 (2016).

198. Drizin & Leo, *supra* note 100, at 922–23 ("Confession evidence (regardless of how it was obtained) is so biasing that juries will convict on the basis of confession alone, even when no significant or credible evidence confirms the disputed confession and considerable significant and credible evidence disconfirms it."); Kassin, *supra* note 12, at 433 (explaining that studies show that confessions have more impact than any form of evidence and "people do not adequately discount confessions—even when they are retracted and judged to be the result of coercion").

199. Saul M. Kassin, *Inside Interrogation: Why Innocent People Confess*, 32 AM. J. TRIAL ADVOC. 525, 538 (2009).

200. *Id.*

in *Gansler*. In sum, it is difficult to argue that his delivery at the press conference did not bolster the believability of the confession when he relayed the details of the statements as a recitation of facts.²⁰¹ Moreover, it was clear that he included statements that were likely to increase condemnation of the accused and were unrelated to an assessment of probable cause.²⁰² For example, statements about the victim allegedly screaming for mercy did not relate to probable cause and were not supported by other evidence in the case.

But even if Kratz had been sanctioned for his behavior during the case or after the conviction, as in *Gansler*, an ethical sanction alone does nothing to cure the prejudicial effect of the statement. As for trial remedies, the trial judge is required to protect the judicial process from “prejudicial outside interferences.”²⁰³ Available remedies to limit the effect of prejudicial pre-trial publicity include change of venue, jury sequestration, or granting a new trial.²⁰⁴ The Supreme Court views this function seriously, but the remedies are growing less effective and less pragmatic given the pervasive availability of information in print and online media. Moreover, courts rarely administer the most drastic sanction available for potentially prejudicial pretrial publicity, which is to grant a new trial to a defendant for a violation of his right to a fair trial.²⁰⁵

Kratz’s extrajudicial speech in Dassey’s case is not necessarily common in the United States but neither is it an anomaly. Consider the infamous prosecution of five teenagers who came to be known as “The Central Park Five” in 1989—nearly twenty years before Dassey’s case. It is best known because the five teenagers falsely confessed to attacking a female jogger. Police interrogated them without lawyers and several of them without even a parent present. The brutality of the attack on the jogger brought pressure to solve the case; this led to intense questioning of the juvenile suspects. Years later, all five were exonerated when the real perpetrator confessed and his DNA then matched the DNA found on the jogger after she was raped.

There, too, extrajudicial statements to the media by prosecutors and law enforcement compounded the harm of the false confessions. In fact, on the day of the assault, a senior police investigator expressed his disapproval of law enforcement statements to the media, stating that they “went over the line” and

201. See *Making a Murderer*, Season 1 Episode 4 (Netflix 2015).

202. *Id.* (For example, Kratz’s narration was spoken using the present tense with phrases like, “As Brendan approaches the trailer and hears louder screams for help, he recognizes it to be of a female individual and he knocks on Steven Avery’s trailer door False [until] a person he knows to be his uncle, who is partially dressed and full of sweat, opens the door and greets his sixteen-year-old nephew.”).

203. *Sheppard v. Maxwell*, 384 U.S. 333 (1966).

204. *Id.*

205. See Joanne Armstrong Branwood, *You Say “Fair Trial” and I Say “Free Press”: British and American Approaches to Protecting Defendants’ Rights in High Profile Trials*, 75 N.Y.U.L. REV. 1412, 1424 (2000); see also, *Murphy v. Florida*, 421 U.S. 794 (1975) (creating a high standard of proof for defendants attempting to prove prejudice via pretrial publicity).

could tarnish the ongoing investigation.²⁰⁶ Law enforcement and prosecutors had provided conclusory statements to the media about the guilt of five teenagers arrested shortly after the assault. They also commented on the demeanor of the juveniles to the newspaper, which directly contradicts the ethical rules prohibiting statements that could heighten condemnation against the accused: “police and prosecutors said [the suspects] laughed and joked while in police custody and that only one expressed any sorrow.”²⁰⁷ As in Dassey’s case, there was no disciplinary action addressing the propriety of the extrajudicial statements and its effect on the investigation or the presumption of innocence on future jurors.

It is well documented that once a confession is released, it is nearly impossible to remedy its effects, even long after it is proven false.²⁰⁸ The existence of a confession leads prosecutors to disregard other flaws or leads in the case.²⁰⁹ Instead of pursuing alternative facts, the statements tend to create tunnel vision on the part of the investigators. There is a discernible pattern that repeats itself across jurisdictions. The Knox case resembled that same pattern, like the Central Park Jogger case that occurred so many years before it in New York City: the prosecution releases incriminating statements to the press, thereby “setting the story in stone” before any alternative view can take hold.²¹⁰

In sum, courts and disciplinary bodies rarely impose the remedies that are available for sanctioning or curtailing prosecutorial statements when they come up against ethical boundaries. Examples of prosecutorial misconduct, including improper forensic practices,²¹¹ particularly in light of proven false convictions, has led to calls for reform to create better remedies.²¹² The current approaches to governing prosecutorial conduct are not sufficient²¹³ and regulating speech is one of the most difficult areas to address.

206. David E. Pitt, *2 Are Indicted in Brutal Rape in Central Park*, N.Y. TIMES (Apr. 27, 1989), <http://www.nytimes.com/1989/04/27/nyregion/2-are-indicted-in-brutal-rape-in-central-park.html>.

207. David E. Pitt, *Gang Attack: Unusual for its Viciousness*, N.Y. TIMES, Apr. 25, 1989, at B11.

208. See, e.g., Kassir, *supra* note 12, at 433–34.

209. *Id.*

210. Timothy Egan, *Good Cops, Bad Cops*, N.Y. TIMES (Apr. 25, 2013), <https://opinionator.blogs.nytimes.com/2013/04/25/good-cops-bad-cops/> (characterizing the actions by Perugian police in the Amanda Knox case and the New York Police Department in the Central Park Five cases).

211. COMMITTEE ON IDENTIFYING THE NEEDS OF THE FORENSIC SCIENCE COMMUNITY, NATIONAL ACADEMY OF SCIENCES, *STRENGTHENING FORENSIC SCIENCE IN THE UNITED STATES: A PATH FORWARD*, (2009) (concluding that methods of forensic investigation in many United States laboratories were flawed and lacked adequate oversight). Although it is beyond the scope of this Article, many pointed out that the DNA results used to convict Knox and Raffaele would not have been admitted in the United States. In light of the study by the National Academy of Sciences critical of American practices, it is another area worthy of comparison in future work.

212. See, e.g., Peter A. Joy, *The Relationship Between Prosecutorial Misconduct and Wrongful Convictions: Shaping Remedies for A Broken System*, 2006 WIS. L. REV. 399 (2006); Levenson, *supra* note 189.

213. Joy, *supra* note 212; see also, Editorial Board, *To Stop Bad Prosecutors, Call the Feds*, *supra* note 192. (discussing the case of David Brown where the prosecutor withheld the transcript of an interview with another prisoner implicating two other men exclusively in the murder).

The criticisms about the extrajudicial speech by the Italian prosecution team in the Knox case were well founded. But, as Dassey's case exemplifies, prejudicial prosecutorial speech is also a problem for domestic defendants. Prosecutorial violations of rules related to constitutional rights of defendants recently led a federal judge to conclude that they are an "epidemic."²¹⁴ Rather than proving that domestic adjudication is far superior, comparison of the two cases and the problems they represent highlights parallel shortcomings and challenges in the United States.²¹⁵

IV.

REFORM ACROSS BORDERS: DASSEY AND KNOX

Despite commentary that was highly critical of the Italian criminal justice system in its totality, Italy has interrogation laws with features that, when correctly implemented, are even more protective than those existing in the United States. Italy's interrogation protections have—at least on paper—been characterized as "the most radical" among jurisdictions when compared to the United States and other European jurisdictions.²¹⁶ This includes the non-waivable right to counsel during interrogation and the requirement that law enforcement record interrogations; the absence of either triggers automatic suppression.

These protections initially failed Knox, however, and she suffered consequences of the illegal interrogation even after suppression. Her case in Italy, along with Dassey's in the United States, demonstrates flaws in confession protections in both systems that lawmakers and courts must address and monitor. Moreover, reform measures around confessions in either country must be considered in tandem with the challenges presented by trial by media.

First, confession experts Professors Richard Leo and Steven Drizin have written that "[t]he risk of harm caused by false confessions could be greatly reduced if police were required to electronically record the entirety of all custodial interrogation of suspects."²¹⁷ Recorded interrogations are required in Italy but the law does not specify that they must be electronic recordings.²¹⁸ Failure to record Knox's interrogation whether by audio or written transcription left endless

214. *United States v. Olsen*, 737 F. 3d 625, 631 (9th Cir. 2013) (Kozinski, C.J., dissenting) (concluding that *Brady v. Maryland* violations had reached an epidemic in the United States); see e.g., Daniel S. Medwed, *Brady's Bunch of Flaws*, 67 WASH. & LEE L. REV. 1533 (2010); David Keenan et al., *The Myth of Prosecutorial Accountability After Connick v. Thompson: Why Existing Professional Responsibility Measures Cannot Protect Against Prosecutorial Misconduct*, 121 YALE L. J. 203 (2011).

215. See, e.g., Joy, *supra* note 212, at 400 (Joy argues that three of the principle reasons for prosecutorial misconduct are "vague ethics rules that provide ambiguous guidance to prosecutors; vast discretionary authority with little or no transparency; and inadequate remedies for prosecutorial misconduct, which create perverse incentives for prosecutors to engage in, rather than refrain from, prosecutorial misconduct.").

216. Thaman, *supra* note 13, at 594 (comparing *Miranda* in an international context).

217. *Id.*

218. Codice di Procedura Penale, Articles 357, 134.

disputes about what occurred on the evening of her questioning. In most American jurisdictions, the law does not yet require recorded interrogations. In Dassey's case, it was videotaped only because of a new state law that had passed in Wisconsin shortly before his interrogation and, even then, only because he was a juvenile.²¹⁹ More than half of the states and the federal government do not require recorded confessions.²²⁰ Both of these cases are rich examples of why video recordings are a critical tool in litigating confession issues and policy makers in both countries should consider their increased use.

Just as recordings bring an enormous benefit to courts and fact finders who consider the weight or admissibility of the evidence, access to them must be carefully regulated to prevent release pre-trial. In Italy, the transcript of Knox's written statement was released to the media almost immediately, suggesting that a recording may have suffered the same fate. Similarly, Attorney Kratz gave practically a verbatim iteration of Dassey's statement to the media and the public before the trial. These examples do not counter against recording statements, rather, they expose some potential harms that can be actively counteracted. The emerging research about the potential contamination that confession evidence can have on the integrity of an investigation presents new incentives for law enforcement and prosecutors to adhere to restrictions set forth in ethical standards and to implement other protections.

If a statement is widely exposed prior to trial, it can impact the integrity of investigations and convictions even if the statement is suppressed at trial, suggesting that strong suppression laws alone, as exist in Italy, are only part of improving access to a fair trial.²²¹ The immediate public airing and bolstering of Knox and Dassey's statements by the prosecution also illustrate this point. The effects of the statement can still permeate the case. Efforts to curtail and control prosecutor speech have been ineffectual in both countries, even when they seek to address confessions very specifically.²²² But emerging research about the way that confessions can contaminate other evidence demonstrates that the prosecution itself also benefits from better protection of statements before trial. For example, there is evidence that knowledge of statements influences witness testimony,²²³ potentially corrupts evaluation of DNA evidence,²²⁴ and creates tunnel vision on the part of investigators.²²⁵ The scientific research about the ways that confessions

219. WIS. STAT. § 938.195 *et seq.*

220. Brandon L. Garrett, *Contaminated Confessions Revisited*, 101 VA. L. REV. 395, 417-418 n. 96-98 (2015). Although the federal government recently changed course and created a presumption for recordings, there is not a law requiring them to do so.

221. See, e.g., Marion, *supra* note 197; Sara C. Appleby & Saul M. Kassin, *When Self-Report Trumps Science: Effects of Confessions, DNA, and Prosecutorial Theories on Perceptions of Guilt*, 22 PSYCHOL., PUB. POL'Y & L. 127 (2016); Richard A. Leo et. al., *Bringing Reliability Back in: False Confessions and Legal Safeguards in the Twenty-First Century*, 2006 WIS. L. REV. 479, 487 (2006).

222. See Sections IV. A. & B, *supra* (discussing applicable ethical rules).

223. See Marion, *supra* note 197, at 68.

224. Appleby, *supra* note 221, at 137.

225. Kassin, *Why Confessions Trump Innocence*, *supra* note 12, at 433-434.

can contaminate other forms of evidence²²⁶ provides new incentives for prosecutors to minimize extra-judicial speech about confessions to minimize their own vulnerabilities to future challenges. Moreover, the research supports the creation of internal procedures by law enforcement to protect the evaluation of other evidence in investigations, such as DNA testing. If the personnel conducting the tests are screened from the statements in the case, it will reduce the possibility of faulty analysis at various points of the investigation.²²⁷ Thus, law enforcement evidence will be less vulnerable to future challenges on the basis of contamination at trial. This potential benefit to law enforcement, not just defendants, should motivate improvements in policy and practice. The conflation of interests could create a path to reform across borders. Both the Knox and Dassey cases are lessons in the deficits of the laws that currently exist in both countries.

One essential purpose of comparative law is to enhance awareness of one system of justice and its systemic successes and failures,²²⁸ allowing us to escape the “conceptual cage of our own tradition.”²²⁹ In Justice O’Connor’s view, “[o]ur society has a high degree of confidence in its criminal trials, in no small part because the Constitution offers unparalleled protections against convicting the innocent.”²³⁰ This confidence is not always warranted and a willingness to recognize domestic deficiencies can promote a willingness to learn from other systems.

Scholars have amassed ample documentation of innocent defendants convicted and later exonerated who had, nevertheless, made false confessions.²³¹ This leaves no question that the problem goes well beyond the two cases at hand. There is scientific evidence supporting the need to implement better domestic protections against false confessions.²³² Proposed protections include requiring the recording of interrogations;²³³ requiring a separate judicial finding of reliability before the admission of statements at trial;²³⁴ reinvigorating the standard for voluntariness in a way that recognizes the relationship between coercive questioning and unreliable confessions; prohibiting the use of deception during questioning; and creating investigatory norms that protect case evidence from being contaminated by the existence of a confession.²³⁵ In addition, there is

226. See Marion, *supra* note 197, at 68.

227. *Id.* at 69-70; see also Appleby, *supra* note 221.

228. Mack, *supra* note 4, at 3. Cf. James Q. Whitman, *Presumption of Innocence or Presumption of Mercy: Weighing Two Western Modes of Justice*, TEXAS L. REV. 933 (2016).

229. Whitman, *supra* note 228, at 984.

230. *Herrera v. Collins*, 506 U.S. 390, 420 (1993) (O’Connor, J. concurring).

231. See generally, Leo, et al, *Bringing Reliability Back In*, *supra* note 27 (documenting false confessions).

232. *Id.*; Drizin & Leo, *supra* note 49, *The Problem of False Confessions*.

233. See Leo, et al, *Bringing Reliability Back In*, *supra* note 44; Drizin & Leo, *The Problem of False Confessions*, *supra* note 100.

234. See Leo, et al, *Reliability*, *supra* note 44.

235. Kassin, *supra* note 12, at 441.

a need for improved use and regulation of interpreters during police questioning.²³⁶

Advocates for reform also argue that the Reid technique creates unacceptable risk of producing unreliable statements and should be replaced with other interrogation approaches.²³⁷ Research about false and unreliable confessions, confession contamination bias in general, and its potential to damage the integrity of investigations provide new incentives to reform interrogation methods. The data are an impetus across borders for removing the use of deception and other psychological pressures that were employed in cases like Dassey's and Knox's, thus reducing the production of potentially unreliable statements in the first place.

CONCLUSION

For Dassey, the public attention to the disquieting characteristics of his conviction has come a decade after the case was tried and it came just as Knox's ordeal had finally come to a close. In the Knox case, criticism was fast and furious, implicating the entire Italian system of justice. The reaction to the convictions for the two murders, occurring almost exactly two years apart, provides a compelling irony: at a time when American commentary fixated on an international spectacle overseas, a teenager whose conviction raises serious questions about due process and his right to a fair trial in the United States quietly began his life sentence in a state prison in Wisconsin. It is only through highly skilled representation and special considerations in juvenile law that his conviction has the potential to be overturned depending on the outcome of his *en banc* hearing.

The ultimate result in Dassey's case is unclear as the protections against unreliable confessions in the United States have large gaps. This is particularly true in cases like Dassey's, where the defendant is young, lacks sophistication about the law, and receives "only" psychological pressure from his interrogators. The original admission of his confession, the unwillingness of the state courts to exclude such statements, and the current uncertain posture of his case are emblematic of American law. Already he has served nearly half of the twenty-six year sentence that Amanda Knox originally received. Knox, on the other hand, served four years in prison before her release in 2011 after her first acquittal. In 2016, she received her final acquittal. Her conviction deserved criticism and revealed important flaws in the implementation of Italian laws. But a closer inspection of Italian law presents an opportunity to understand what went wrong despite the existence of strong confession laws.

I do not argue that because of imperfections at home, commentary should turn a blind eye to potential injustices or flaws in systems of justice around the

236. See, e.g., Alison R. Perez, *Understanding Miranda: Interpreter Rights During Interrogation for Spanish-Speaking Suspects in Iowa*, 12 J. GENDER RACE & JUST. 603 (2009) (discussing deficiencies in the constitutional and statutory regulation of interpreter use during the pre-trial criminal phase and arguing that stricter requirements would benefit both the state and defendants).

237. Richard A. Leo, *Why Interrogation Contamination Occurs*, 11 OHIO STATE J. OF CRIM. L. 193, 205 (2013).

globe. To the contrary, it was necessary to highlight the failings in judicial process in Knox's case, even though those were later noted and corrected by Italy's own high court. Rather, the purpose here is to argue that while domestic criticism was heaped upon the Italian system based upon the failings of the Knox and Sollecito prosecutions, we are often loathe to apply the same level of scrutiny in domestic cases, even when evidence supports the conclusion that the problems are widespread. The circumstances of the Dassey conviction should be an incentive to interrogate systemic domestic flaws with the same rigor directed toward other countries. In the meantime, the due process afforded to defendants like Brendan Dassey feels more tragic than "carnavalesque."

International Underwater Cultural Heritage Governance: Past Doubts and Current Challenges

Eden Sarid*

ABSTRACT

The international legal regime aimed at the protection and governance of underwater cultural heritage is facing substantial strife. Unauthorized salvage and looting are a continuing threat. Additional challenges include disputes between post-colonies and post-colonial powers over title to sunken vessels, lack of a global policy for the protection of underwater gravesites, and the exploitation of underwater cultural heritage as a means to claim disputed territory. Considerable time has passed since the signing (2001) and entry into force (2009) of the UNESCO Convention on the Protection of the Underwater Cultural Heritage. Notable maritime powers refused to sign the Convention because they were concerned that it would erode international law principles, particularly marine jurisdiction and state-owned vessels' immunity. The article revisits the maritime powers' reservations and maintains that in practice these concerns did not materialize. It then demonstrates that the Convention is well suited to facing the current challenges to international underwater cultural heritage governance.

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INTRODUCTION

In 2014, as tensions around maritime borders in the South China Sea were growing, China launched the *Kaogu-01*, a shiny new ship that local media described as “armed to the teeth.”¹ The *Kaogu-01* was indeed fully armed, but

1. Andrew S. Erickson & Kevin Bond, *Archaeology and the South China Sea*, DIPLOMAT (July 20, 2015), <http://thediplomat.com/2015/07/archaeology-and-the-south-china-sea/>.

with unlikely armaments—state of the art marine archaeological tools.² The *Kaogu-01*'s mission was a rather curious one: finding underwater archaeological evidence that China was the sovereign to the disputed waters of the South China Sea.³ A year later, on the other side of the globe, Spain and Colombia were engaged in a diplomatic dispute concerning “the holy grail of shipwrecks”—the *San Jose*, a Spanish galleon that sank in 1708 with eleven million gold and silver coins, and which Colombia declared it had just discovered.⁴ These two stories reflect two of the new challenges facing the global governance of underwater cultural heritage—exploitation of underwater cultural heritage as a means of claiming disputed territory and tensions between former colonies and former colonial powers over title to sunken vessels. Alongside these challenges, international underwater cultural heritage governance faces another pressing matter: devising a global policy for the protection of underwater gravesites. Meanwhile, the familiar threats of unauthorized salvage and looting continue to be a real concern.

Up until about thirty years ago, these challenges and concerns did not exist. For generations underwater cultural heritage—ships and airplanes that were lost at sea, sunken treasures and statues, and submerged cities and ports—was protected from human interference. However, the advance of marine technological capabilities in the last decade of the Twentieth Century made them accessible for the first time in history.⁵ It also put them at jeopardy, mainly due to unauthorized treasure-hunting.

The realization of the threat that unauthorized salvaging poses to underwater cultural heritage led to the establishment of an international framework aimed at its protection: The UNESCO Convention on the Protection of the Underwater Cultural Heritage, 2001 (“the Convention”).⁶ The Convention’s main goal is to ensure that any interference with underwater cultural heritage meets internationally accepted archaeological standards.⁷ The Convention engages with

2. *Id.*

3. *Id.*; see also Jeremy Page, *Chinese Territorial Strife Hits Archaeology*, WALL ST. J. (Dec. 2, 2013), <http://www.wsj.com/articles/SB10001424052702304470504579164873258159410>.

4. Jonathan Watts & Stephen Burgen, *Holy Grail of Shipwrecks Caught in Three-Way Court Battle*, GUARDIAN (Dec. 6, 2015), <http://www.theguardian.com/world/2015/dec/06/holy-grail-of-shipwrecks-in-three-way-court-battle>; Willie Drye, *Treasure on Sunken Spanish Galleon Could Be Biggest Ever*, NAT'L GEOGRAPHIC (Dec. 9, 2015), <http://news.nationalgeographic.com/2015/12/151209-spanish-shipwreck-billion-treasure-archaeology/>; Corey Charlton, *Hands off our treasure! Spain says it holds the rights to galleon the San Jose - and its \$1bn worth of gold coins - found in Colombian waters 300 years after it sank*, DAILY MAIL (Dec. 8, 2015), <http://www.dailymail.co.uk/news/article-3351250/Hands-treasure-Spain-says-holds-rights-galleon-San-Jose-1bn-worth-gold-coins-Colombian-waters-300-years-sank.html#ixzz4Hd6PFg9h>.

5. SARAH DROMGOOLE, UNDERWATER CULTURAL HERITAGE AND INTERNATIONAL LAW 2–7 (2013); CRAIG FORREST, INTERNATIONAL LAW AND THE PROTECTION OF CULTURAL HERITAGE 289–92 (2010).

6. The UNESCO Convention on the Protection of the Underwater Cultural Heritage, Nov. 6, 2001, 2562 U.N.T.S. 3 [hereinafter The UNESCO Convention].

7. See Sarah Dromgoole, *Reflections on the Position of the Major Maritime Powers with*

two very different legal arenas: laws regarding the protection of cultural heritage and laws regarding the governance of the seas. This means that the considerations at play extend far beyond the mere regulation of activities aimed at underwater cultural heritage. The drafting of the Convention was a long and arduous process involving a considerable degree of political compromise. Rigorous negotiations were held about its form and scope.⁸ The negotiating parties attempted to balance between the interests of coastal states, namely the states in whose waters cultural heritage was found (often former colonies belonging to the Global South), and those of flag states, namely the sovereigns under whose laws the submerged vessels were registered or licensed (often maritime powers belonging to the Global North).⁹

Despite the negotiating parties' best efforts, two notable unsolved issues remained after the final drafting of the Convention. The first is the relationship between the Convention and the United Nations Convention on the Law of the Sea, 1982 ("UNCLOS"),¹⁰ specifically, whether the Convention erodes UNCLOS's provisions by bestowing jurisdiction where UNCLOS does not. The second is the treatment of sunken state vessels under the Convention;¹¹ particularly, whether sunken state vessels enjoy full immunity from any action affecting them without the flag state's prior consent. These disagreements resulted in a substantial majority of the negotiating parties supporting the final text, but with a notable, yet politically significant, minority refusing to support it. The latter included France, Germany, the Netherlands, Norway, Russia, the U.K., and the U.S. ("the maritime powers").¹²

While unauthorized salvaging remains a continuing threat to underwater cultural heritage, the latter part of this decade has also seen the emergence of new challenges to the governance of underwater cultural heritage. These include, as mentioned above, claims of former colonies to ownership of former empires'

Respect to the UNESCO Convention on the Protection of the Underwater Cultural Heritage, 38 MARINE POL'Y. 116 (2013).

8. Sarah Dromgoole, *Why the UK Should Reconsider the UNESCO Convention 2001*, in PROTECTION OF UNDERWATER CULTURAL HERITAGE IN INTERNATIONAL WATERS ADJACENT TO THE UK 23 (Robert Yorke ed., 2010).

9. See Dromgoole, *supra* note 7, at 118; FORREST, *supra* note 5, at 347. For a detailed account of the negotiations see Roberta Garabello, *The Negotiating History of the Provisions of the Convention on the Protection of Underwater Cultural Heritage*, in THE PROTECTION OF THE UNDERWATER CULTURAL HERITAGE 89 (Roberta Garabello & Tullio Scovazzi eds., 2003).

10. United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 397 [hereinafter UNCLOS]. UNCLOS is the main international law framework for ocean governance. It defines states' rights and obligations with regard to most aspects of marine governance, for example, borders, resources, and the environment.

11. Sunken state vessels are any submerged vessel (ship, aircraft, or any other vehicle) owned or operated by a state and used only on governmental non-commercial service at the time of sinking.

12. In the final vote, fifteen countries abstained, among which were France, Germany, the Netherlands, and the U.K. Russia and Norway voted against (along with Turkey and Venezuela). Eighty-seven countries voted in favor. The U.S. was not then a member of UNESCO and thus had no voting rights, though it joined the maritime powers in voicing its concerns about these issues. See Dromgoole, *supra* note 7, at 118 n. 8.

underwater cultural heritage; issues arising amid the centennial of World War I such as the handling of underwater gravesites; and the use and abuse of underwater cultural heritage as a means to claim disputed territorial waters. As a considerable amount of time has passed since the Convention's signing (2001) and its entry into force (2009), now is an opportune moment to consider the Convention's ability to face current and future challenges and to inquire whether the maritime powers' concerns, expressed over fifteen years ago, indeed materialized in practice. These are the two main issues that this article explores.

This article will show that the maritime powers' concerns were overblown. It will demonstrate that the Convention is duly equipped to confront most current challenges facing the governance of underwater cultural heritage. It will then discuss gaps in the Convention's regime that still need to be addressed and lay out possible solutions. Finally, it will suggest that a cost-benefit analysis leads to the conclusion that despite its several drawbacks, the Convention is an essential tool for the protection and preservation of underwater cultural heritage.

The article progresses as follows: Part I gives a short overview and analysis of the Convention's main features and objectives. Part II outlines the maritime powers' objections to the Convention. Part III evaluates the maritime powers' objections in light of reality on the ground, and maintains that despite the maritime powers' concerns, international law principles of marine jurisdiction and state immunity are strongly upheld in practice. Part IV discusses current challenges to international underwater cultural heritage governance and illustrates how the Convention can meet them. Part V discusses limitations and gaps in the Convention, proposes some suggestions as to how those can be overcome, and shows that despite some drawbacks, the Convention's benefits outweigh its shortcomings. This article concludes by suggesting that joining and strengthening the Convention is the way forward.

I.

THE CONVENTION'S MAIN FEATURES

Prior to the 1980's, the seas protected underwater cultural heritage from human intervention. Accessibility, or lack thereof, meant that little attention was paid to underwater cultural heritage. Hence, legislation regulating underwater cultural heritage was scarce and was almost exclusively domestic, usually as a negligible part of the laws of general (terrestrial) cultural heritage.¹³ However, by the 1980's technological developments allowed, for the first time, widespread access to deep seawaters.¹⁴ It was not very long until the wreck of RMS *Titanic*

13. David Parham & Michael Williams, *An outline of the nature of the threat to Underwater Cultural Heritage in International Waters*, in PROTECTION OF UNDERWATER CULTURAL HERITAGE IN INTERNATIONAL WATERS *supra* note 8, at 5, 9; *see also* Ole Varmer, *Closing the Gap in the Law Protecting Underwater Cultural Heritage on the Outer Continental Shelf*, 33 STAN. ENV'T'L L. J. 215, 255 (2014) (contending that while several U.S. laws were primarily enacted to protect terrestrial heritage, some have been applied to marine heritage).

14. DROMGOOLE, *supra* note 5, at 2-7.

was discovered in 1985. This discovery ignited an ever-growing interest in underwater cultural heritage and highlighted its commercial potential. Widespread shipwreck “hunting” expeditions became commonplace. This new reality of easy access resulted in new threats to underwater cultural heritage. The natural, relatively negligible dangers of environmental threats such as erosion were now joined by the direct and substantial man-made threats of looting and salvage.¹⁵

UNCLOS, the main international law apparatus regarding the governance of the world’s oceans, only sporadically and somewhat incoherently addresses the management of underwater cultural heritage. This is probably because at the time UNCLOS was negotiated and drafted (between 1973 and 1982) underwater cultural heritage was mostly out of human reach.¹⁶ Notwithstanding, UNCLOS does address underwater cultural management.

A short description of maritime boundaries can be helpful before turning our attention to the relevant UNCLOS’ provisions: *Territorial Waters* are the belt of coastal waters extending (at most) twelve nautical miles from the baseline, which is generally the low-water line along the coast.¹⁷ The *Contiguous Zone* is the next twelve nautical miles after the Territorial Waters.¹⁸ The *Exclusive Economic Zone* is the waters extending two hundred nautical miles from the baseline.¹⁹ The *Continental Shelf* is, geologically, an underwater landmass that extends from the continent until the deep sea bed. Legally, it extends two hundred nautical miles from the baseline; however, where the Continental Shelf physically exceeds two hundred nautical miles it follows the geological boundary (up to a certain limit).²⁰ The *Area* is the seabed and ocean floor beyond the limits of national jurisdiction.²¹

UNCLOS handles the issue of protection of underwater cultural heritage in articles 149 and 303. Article 303(1) imposes a duty to protect “objects of an archaeological and historical nature found at sea” and states that the parties “shall” cooperate for this purpose.²² However, article 303(2) limits the parties’ jurisdiction regarding underwater cultural heritage to the relatively near-shore

15. Due to low levels of oxygen and light, ships submerged in water remain relatively unharmed. FORREST, *supra* note 5, at 301. Indeed, in almost all cases materials are better preserved underwater than on land. See UNDERWATER ARCHEOLOGY: THE NAS GUIDE TO PRINCIPLES AND PRACTICE 15–33 (Amanda Bowens ed., 2009) (specifically, see chart comparing perseverance of materials underwater and on land, at 17) [hereinafter NAS GUIDE].

16. See DROMGOOLE, *supra* note 5, at 2–7.

17. UNCLOS, *supra* note 10 art. 3.

18. *Id.* art. 33.

19. *Id.* art. 57.

20. *Id.* art. 76. Note that the legal definition of the Continental Shelf differs from the geological definition. For example, if a country’s actual Continental Shelf is only 100 nautical miles in length, it is nevertheless legally 200 nautical miles long. However if it is longer than 200 nautical miles then the legal definition follows the geological boundary (up to a certain point).

21. *Id.* art. 1(1).

22. *Id.* art. 303(1).

waters of the Contiguous Zone.²³ Article 149 deals with underwater cultural heritage found in the Area. It states that underwater cultural heritage found there “shall be preserved or disposed of for the benefit of mankind as a whole.”²⁴ This leaves two notable lacunas in UNCLOS. The first is the lack of a practical provision regarding underwater cultural heritage found in the waters between the outer-edge of the Contiguous Zone until the start of the Area, and the second is the vagueness of the definition of underwater cultural heritage.²⁵ With the advent of new technologies, it became clear that the existing framework for the protection of underwater cultural heritage was inadequate. This led the International Law Association in 1988, and following that, UNESCO in 1993, to initiate negotiations of such a framework, which resulted in the Convention’s establishment in 2001.²⁶

The breadth of the Convention is wide. It defines underwater cultural heritage and regulates activities that are not only directed at underwater cultural heritage but also those that incidentally affect it. Further, it regulates *all* maritime zones including those unaccounted for in UNCLOS. Additionally, the Convention creates a framework for international cooperation between member states regarding the protection of underwater cultural heritage.

The Convention features five fundamental principles, which are all outlined in article 2. The first is that state parties have an obligation to protect underwater cultural heritage for the benefit of humanity.²⁷ In practice this means that any activity directed at or influencing underwater cultural heritage must meet international archeological standards.²⁸ These standards are outlined in the Annex to the Convention.²⁹ Second, priority is always given to *in situ* preservation of underwater cultural heritage, namely, in its original location on the ocean floor.³⁰ This is in keeping with archaeological principles, which prescribe that excavation should occur only when the underwater cultural heritage is at risk or for research

23. *Id.* art. 303(2).

24. *Id.* art. 149.

25. The space left uncovered by UNCLOS is at least 176 nautical miles in length, and in some cases, it is even larger. Dromgoole maintains that UNCLOS does not cover the waters between the outer-edge of the Contiguous Zone until the start of the Area due to pressure from several countries that were concerned that jurisdiction over anything that is not strictly natural resources might pave the way for other exceptions, that, in turn, would ultimately lead to a regime of full coastal state sovereignty over the continental shelf. Dromgoole, *supra* note 7, at 117–18.

26. Sarah Dromgoole, *2001 UNESCO Convention on the Protection of Underwater Cultural Heritage*, 18 INT’L J. MAR. COASTALL. 58, 60 (2003) (noting, *inter alia*, that the Convention is indeed the first comprehensive international legal framework that regulates the protection of underwater cultural heritage, but that there were previous attempts to reach similar agreements at the regional level); see also FORREST, *supra* note 5, at 329–31. One of the earliest frameworks that acknowledges underwater cultural heritage (even if only somewhat casually) is the European Convention on the Protection of the Archaeological Heritage, Jan. 16, 1992, C.E.T.S. No.143.

27. The UNESCO Convention, *supra* note 6, art. 2(3).

28. Dromgoole, *supra* note 7, at 118.

29. The UNESCO Convention, *supra* note 6, Annex.

30. *Id.* art. 2(5).

purposes.³¹ Third, commercial exploitation of underwater cultural heritage is prohibited.³² Fourth, state parties are required to cooperate with each other and promote awareness of the importance of underwater cultural heritage.³³ Fifth, the principles of international law and state sovereignty are to be secured.³⁴ The premise of the Convention, it seems, is based on an assumption of wide participation and collaboration between member states. The Convention delineates different cooperation mechanisms such as sharing information and collaborating in the investigation and conservation of underwater cultural heritage sites.³⁵ It also encourages member states to enter into bilateral, regional or other multilateral agreements for the protection of underwater cultural heritage.³⁶ The Convention provides that “[n]othing in this Convention shall prejudice the rights, jurisdiction and duties of States under international law, including the United Nations Convention on the Law of the Sea.”³⁷ This was meant to appease the maritime powers that were concerned that the Convention might “alter the delicate balance of rights and interests set up under UNCLOS.”³⁸

The Convention also states that any activity relating to underwater cultural heritage shall not be subject to the law of salvage or law of finds, unless it is authorized, is in full conformity with the Convention, and ensures that any recovery enjoys “maximum protection.”³⁹ These requirements make the use of the laws of finds and salvage almost impossible.⁴⁰

31. See DROMGOOLE, *supra* note 5, at 167.

32. The UNESCO Convention, *supra* note 6, art. 2(7).

33. *Id.* arts. 2(1), 2(10).

34. *Id.* art. 2(8).

35. *Id.* art. 19.

36. *Id.* art. 6.

37. *Id.* art. 3.

38. STATEMENT BY ROBERT BLUMBERG, U.S. OBSERVER DELEGATE TO THE 31ST UNESCO GENERAL CONFERENCE TO COMMISSION IV OF THE GENERAL CONFERENCE, REGARDING THE U.S. VIEWS ON THE UNESCO CONVENTION ON THE PROTECTION OF UNDERWATER CULTURAL HERITAGE, (Oct. 29, 2001) http://www.gc.noaa.gov/documents/gcil_heritage2_blumberg.pdf [hereinafter U.S. STATEMENT].

39. The UNESCO Convention, *supra* note 6, art. 4.

40. During the negotiations, a complete ban on the application of salvage laws and law of finds was suggested. However, several countries were opposed to such a ban. This resulted in the current provision (making the application of salvage laws and laws of find extremely difficult in commercial contexts). See Tullio Scovazzi, *The 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage*, in CULTURAL HERITAGE ISSUES: THE LEGACY OF CONQUEST, COLONIZATION, AND COMMERCE 295 (James Nafziger & Ann Nicgorski eds., 2009). See also DROMGOOLE, *supra* note 5, at 167–209 (discussing the application of salvage law and law of finds, holding that it is almost impossible to apply these in commercial contexts). There are four principal contradictions between salvage laws and underwater cultural heritage protection laws. First, salvage is inherently aimed at economic exploitation of underwater cultural heritage; second, salvage laws result in private ownership of underwater cultural heritage; third, salvagers end up selling and splitting up collections; and fourth, recovery operations carried out by commercial salvagers often cause irreparable damage to shipwrecks and their archeologically or historically valuable artifacts. FORREST, *supra* note 5, at 313–19. Indeed, salvage laws are aimed at incentivizing voluntary actions to help save vessels in peril whose cargo is at risk by rewarding those who help a sinking ship (it should be noted that preservation

Articles 9 and 10 of the Convention regulate underwater cultural heritage found in the areas not covered by UNCLOS.⁴¹ In these zones, under article 56 of UNCLOS, the coastal state enjoys sovereign rights only for the purposes of exploring and exploiting natural resources, excluding underwater cultural heritage. The Convention, on the other hand, creates a mechanism under which coastal states do practice a measure of authority. The coastal state, for example, has the right to prohibit or authorize any activity directed at underwater cultural heritage in these zones.⁴² The Convention sets a mechanism of cooperation and consultation among coastal states and interested parties.⁴³ However, in order “to prevent immediate danger” to underwater cultural heritage sites, it allows the coastal state to act “if necessary prior to consultations.”⁴⁴

Despite the wide acknowledgment of the need for an international framework that regulates activities involving underwater cultural heritage, not all the parties to the negotiations were able to support the final text. In the end, eighty-seven voted in favor of the final text, fifteen parties abstained, and four voted against it.⁴⁵ The Convention entered into force on 2 January 2009, after twenty states ratified it; as of September 2017, there are fifty-eight member states.⁴⁶

II.

THE MARITIME POWERS’ MAIN OBJECTIONS TO THE CONVENTION

Many of the parties that abstained or voted against the final text explained that while they viewed most provisions of the Convention favorably, they could not support it because it did not adequately address some of their main concerns. The U.S. observer delegate, for example, stated that: “The United States believes the draft Convention reflects substantial progress in certain important areas . . .

of the archeological value of wrecks is not a requirement of salvage laws). Cultural heritage laws have a very different goal—preservation of the submerged artifacts that are the heritage of humankind. Forrest notes that in the case of sunken vessels protected by cultural heritage laws, “peril,” a critical component in salvage law, has seemingly long passed and their cargo faces no immediate danger. *Id.* at 300, 304. On the contrary, it can be argued that the cargo typically faces more peril from salvagers than from the marine environment. U.S. courts and other national courts have not been consistent in their interpretation of “marine peril” offering at times a wide interpretation that includes “actions of the elements” after the ship has already sunk and at times a restricted approach that even acknowledges that the salvagers themselves are the source of “peril.” *Id.* at 301–02; *but cf.* Liza J. Bowman, *Oceans Apart Over Sunken Ships: Is the Underwater Cultural Heritage Convention Really Wrecking Admiralty Law?* 42 *OSGOODE HALL L. J.* 1 (2004) (suggesting that, salvage companies and underwater cultural heritage protection institutions and countries should cooperate to the interest of both).

41. Namely those found between the outer-edge of the Contiguous Zone until the start of the Area (i.e. the Exclusive Economic Zone and the Continental Shelf).

42. The UNESCO Convention, *supra* note 6, art. 10(2).

43. *Id.* art. 10(3).

44. *Id.* art. 10(4). Similar mechanisms are established for the Area in article 11.

45. Dromgoole, *supra* note 7, at 188 n.8.

46. For the current status of ratifications, see *Convention on the Protection of the Underwater Cultural Heritage*. Paris, 2 November 2001, UNESCO.ORG

<http://www.unesco.org/eri/la/convention.asp?KO=13520&language=E&order=alpha>.

At the same time, the United States wishes to register our serious concern that there is no consensus on other key provisions, and therefore, the convention is not ready for adoption.”⁴⁷ Delegates from other maritime powers delivered similar statements.

The maritime powers expressed three objections, two of which were more substantial. The maritime powers held that the Convention does not conform to UNCLOS, and in particular that it expands coastal states’ jurisdiction in the waters not covered by UNCLOS. They further maintained that the Convention disrupts or qualifies rules regarding the immunity of state vessels. The third (and conceivably least consequential) objection regarded the definition of underwater cultural heritage, which some viewed as too wide.

A. *The Definition of Underwater Cultural Heritage*

The Convention defines underwater cultural heritage as “all traces of human existence having a cultural, historical or archaeological character which have been partially or totally underwater, periodically or continuously, for at least 100 years.”⁴⁸ The hundred-year criterion was established to avoid ownership-related problems and conflict with ordinary salvage law.⁴⁹ The inclusion of “cultural, historical, or archaeological character” as a qualifying criterion was an attempted compromise between states that advocated for a wide definition and those that preferred that only “significant” underwater cultural heritage would enjoy protection.⁵⁰ However, some viewed this as redundant because, after all, one could argue that almost all artifacts over a hundred years old carry a cultural, historical or archaeological character.⁵¹

The U.K. was probably the most notable objector to a wide definition of underwater cultural heritage. In its “Explanation of Vote,” the U.K. stated that protection should be based on significance rather than being “blanket,” and that “it is better to focus . . . efforts and resources on protecting the most important and unique examples of underwater cultural heritage.”⁵² It seems that the U.K.

47. U.S. STATEMENT, *supra* note 38, at 1.

48. The UNESCO Convention, *supra* note 6, art. 1(1).

49. Jeanne-Marie Panayotopoulos, *The 2001 UNESCO Convention on Underwater Cultural Heritage: Main Controversies*, in *THE ILLICIT TRAFFIC OF CULTURAL OBJECTS IN THE MEDITERRANEAN* 29, 33 (Ana Filipa Vrdoljak & Francesco Franioni eds., 2009).

50. Craig Forrest, *Defining ‘Underwater Cultural Heritage’*, 31 *INT’L. J. L. NAUTICAL ARCHEOLOGY* 3, 8–9 (2002); DROMGOOLE, *supra* note 5, at 86–95.

51. See DROMGOOLE, *supra* note 5, at 93.

52. U.K. FOREIGN AND COMMONWEALTH OFFICE, EXPLANATION OF VOTE TO UNESCO ON THE 2001 UNESCO CONVENTION ON THE PROTECTION OF THE UNDERWATER CULTURAL HERITAGE (2001) [U.K.] [hereinafter U.K. EXPLANATION]. This very much reflects the U.K.’s domestic legislation that traditionally focused on selective protection of underwater cultural heritage and extended it only to underwater cultural heritage with special significance. See, e.g., The Merchant Shipping Act 1995, c. 21 (U.K.); The Protection of Wrecks Act 1973, c. 33 (U.K.); The Ancient Monuments and Archaeological Areas Act 1979, c. 46 (U.K.); The Protection of Military Remains Act 1986, c. 35 (U.K.). The U.S. takes a similar approach. See NAS GUIDE, *supra* note 15; see also Antiquities Act, 16 U.S.C. §§ 431–33 (2012); Archaeological Resources Protection Act, 16 U.S.C. §§

was concerned that member states would be required to invest substantial resources to protect underwater cultural heritage to comply with the Convention.⁵³

*B. The Relationship with UNCLOS—Expansion of Coastal States’
Jurisdiction*

UNCLOS maintains a delicate jurisdictional balance in the Exclusive Economic Zone and Continental Shelf. It grants coastal states jurisdiction over natural resources only and does not deal with underwater cultural heritage found in those waters. The Convention, however, does.

The Convention creates a requirement that a vessel or national of another state notify the coastal state about discoveries of underwater cultural heritage in the coastal state’s Exclusive Economic Zone or Continental Shelf.⁵⁴ This may be understood as conferring on the coastal state the right to demand a report from the flag state’s vessel master.⁵⁵ Moreover, the Convention grants “Coordinating State” status to coastal states, meaning that once an underwater cultural heritage artifact is discovered in its Exclusive Economic Zone or Continental Shelf (even by another state’s national or commercial vessel), the coastal state becomes the administrator in charge of managing activities affecting the find.⁵⁶ Even though the Convention provides that “the Coordinating State shall act on behalf of the State Parties as a whole and not in its own interest,” and despite its declaration that “[a]ny such action shall not in itself constitute a basis for the assertion of any preferential or jurisdictional rights not provided for in international law, including the United Nations Convention on the Law of the Sea,” the concern was that the coastal states might practice *de facto* veto power by preventing activities carried

470aa–470mm (2012); National Marine Sanctuaries Act, 16 U.S.C. §§ 1431–445c (2012); Abandoned Shipwreck Act 43 U.S.C. §§ 2101–06 (2012); Sunken Military Craft Act, 10 U.S.C. § 113 (2004). Some of the legislation is case specific (e.g. the Abandoned Shipwreck Act applies only to abandoned ships). See Varmer, *supra* note 13, at 263–78. In several other countries, legislation applies to *all* underwater cultural heritage, including, for example, historic submerged landscapes. With regards to sunken ships, different countries have different age thresholds such as fifty years in South Africa, seventy-five years in Australia, and one hundred years in the Republic of Ireland. NAS GUIDE, *supra* note 15, at 48.

53. Some maintain that even UNCLOS itself possibly imposes some positive duties on the state. O’Keefe and Nafziger, for example, suggest the article 303(1) of UNCLOS, which provides that “[s]tates have the duty to protect objects of an archaeological and historical nature found at sea” seems to include duties such as maintenance of known sites, excavation of underwater archaeological sites, conservation and display of excavated material, and dissemination of information obtained. Patrick O’Keefe & James Nafziger, *The Draft Convention on the Protection of the Underwater Cultural Heritage*, 25 OCEAN DEV. & INT’L L. 391, 393 (1994).

54. The UNESCO Convention, *supra* note 6, art. 9.

55. The U.S. was particularly concerned that vessels conducting military surveys would be required to provide prior notifications to coastal states, thus undermining its national security interests. See Ole Varmer, Jefferson Gray, & David Alberg, *United States: Responses to the 2001 UNESCO Convention on the Protection of Underwater Cultural Heritage*, 5 J. MAR. ARCHEOLOGY 129, 132 (2010).

56. The UNESCO Convention, *supra* note 6, art. 10. Article 10 does state that the coordinating state must coordinate and cooperate with any other state that declared an interest in the discovery. It nevertheless confers this status on the coastal state and not on the flag state.

out by flag states.⁵⁷ Additionally, the Convention allows Coordinating States to “take all practicable measures” prior to consultations with flag states in cases of “immediate danger to the underwater cultural heritage, including looting.”⁵⁸ The nature of these practicable measures is unclear and strengthens the concern of creeping jurisdiction. Lastly, article 3, which provides that “[n]othing in this Convention shall prejudice the rights, jurisdiction and duties of States under international law, including the United Nations Convention on the Law of the Sea,” also caused some concern as the word “including” might imply that UNCLOS does not *necessarily* reflect international law’s legal regime.⁵⁹

Thus, the maritime powers deemed the Convention as affording creeping jurisdiction to coastal states, therefore upsetting the jurisdictional balance achieved in UNCLOS.⁶⁰

C. Treatment of Sunken State Vessels

The maritime powers’ objection regarding treatment of state vessels is similar to their objections regarding the jurisdiction of coastal states in the Exclusive Economic Zone and Continental Shelf. They were concerned that the Convention potentially qualifies international law principles. Here, the principle is that a state vessel (sunken or in use) is the exclusive preserve of the flag state, and that the coastal state does not enjoy any jurisdiction over it.⁶¹ The U.K. for example declared that it considers “that the current text *erodes the fundamental principle* of customary international law, codified in UNCLOS, of Sovereign

57. *Id.* art. 10(6).

58. *Id.* art. 10(4). Addressing the UNESCO delegations in 2000 the U.K. stated that: “The need for full conformity with UNCLOS is particularly important in respect of the [. . .] jurisdiction of the coastal State[s].” It said that introducing a new scheme of coastal state jurisdiction over underwater cultural heritage in international waters will not “be in full conformity with UNCLOS.” COMMENTS OF THE UNITED KINGDOM, FORWARDED TO UNESCO ON 28TH FEBRUARY 2000, *cited in* Michael Williams, *UNESCO Convention on the Protection of the Underwater Cultural Heritage An Analysis of the United Kingdom’s Standpoint*, in THE UNESCO CONVENTION FOR THE PROTECTION OF THE UNDERWATER CULTURAL HERITAGE PROCEEDINGS OF THE BURLINGTON HOUSE SEMINAR OCTOBER 2005, 3 (2006). The U.S. delegation voiced similar concerns. *See* Varmer et al., *supra* note 55, at 131.

59. Dromgoole, *supra* note 7, at 119.

60. *Id.*; *see also* Williams, *supra* note 58, at 3. In the context of our discussion, “creeping jurisdiction” means the subtle and gradual expansion in coastal states’ marine jurisdiction over time. Consider, for example, that prior to the 1950s coastal states practiced sovereignty over only a very narrow strip of the sea surrounding them. The 1958 Conventions (Convention on the Territorial Sea and the Contiguous Zone, Apr. 29, 1958, 516 U.N.T.S. 205; The Convention on the Continental Shelf, Apr. 29, 1958, 499 U.N.T.S. 311.) expanded that jurisdiction slightly (for example, article 2 of the Convention on the Continental Shelf confers jurisdiction in the Continental Shelf, yet article 1 defines it narrowly in accordance with geological conditions. *See*: The Convention on the Continental Shelf, Apr. 29, 1958, 499 U.N.T.S. 311). Six decades later, we have a juridical Continental Shelf that extends at least two hundred miles offshore and an Exclusive Economic Zone of 200 miles as well; namely, maritime jurisdiction that extends far from where it once was.

61. Forrest notes that a significant number, if not the majority, of ‘important shipwrecks’ are sunken state vessels, particular, warships. Craig Forrest, *Culturally and Environmentally Sensitive Sunken Warships*, 26 AUSTL. & N. Z. MAR. L. J. 80 (2012).

Immunity” and that the text “purports to alter” the fine balance achieved in UNCLOS.⁶²

UNCLOS states that on the high seas warships or ships owned or operated by a state (and that are used only for governmental non-commercial service), have complete immunity from the jurisdiction of any state other than the flag state.⁶³ The Convention, however, grants coastal states the exclusive right to regulate any activity directed at underwater cultural heritage sites found in that country’s internal and territorial waters (this includes sunken state vessels).⁶⁴ When discovering or authorizing an activity directed at an identifiable state vessel, the Convention dictates that the coastal state *should* inform the flag state of the discovery.⁶⁵ The maritime powers perceived that the term “should” rather than “shall” would undermine the absolute sovereignty of the flag state.⁶⁶ They argued for a duty of reporting, not a mere encouragement thereof. Further, they took the position that while the coastal state should control the access to the sunken state vessel, it cannot authorize any interference, removal or investigation of it without the flag state’s consent, save for specific operations permitted by international law.⁶⁷ Similarly, the maritime powers were concerned that the provisions found in article 10, which in certain cases allow coastal states to take measures without the flag state’s prior consent, could allow these measures to be carried out even on sunken state vessels.

III.

THE MARITIME POWERS’ OBJECTIONS IN LIGHT OF REALITY ON THE GROUND

As of this writing, the Convention has been in force for eight years, giving us the opportunity to assess whether the maritime powers’ concerns materialized in practice. Accordingly, we will be able to evaluate whether the maritime powers should uphold their current policy of not joining the Convention, or whether they should revisit it.

A. A Critical Analysis of the Maritime Powers’ Objections to the Convention

The maritime powers’ objections revolved around the concern that the Convention erodes or qualifies international law principles of ocean governance, as reflected in UNCLOS, specifically with regards to coastal states’ jurisdiction and the immunity of sunken state vessels. However, a close reading of the

62. U.K. EXPLANATION, *supra* note 52 (emphasis added).

63. UNCLOS, *supra* note 10, arts. 95–96.

64. The UNESCO Convention, *supra* note 6, art. 7.

65. *Id.* art. 7(3).

66. See Dromgoole, *supra* note 7, at 119; Valentina Vadi, *War, Memory, and Culture: The Uncertain Legal Status of Historic Sunken Warships Under International Law*, 37 TUL. MAR. L. J. 333, 365–66 (2013).

67. Williams, *supra* note 58, at 5.

Convention, and contextualising it within international law frameworks, suggests that there is a strong contention that the Convention actually upholds international law principles, and perhaps even reinforces them. In this regard, it is also illuminating to reflect on Spain's and Portugal's interpretation of the Convention, especially given that both are powerful maritime states that joined it.

The Convention in fact ensures the title to, and immunity of, sunken state vessels. Article 2(8) expressly states that the Convention does not modify or alter the rules and practices pertaining to sovereign immunity over state vessels.⁶⁸ Spain holds that this article—read together with the provisions requiring the flag state's consent to carrying out activities affecting its sunken state vessels in the Exclusive Economic Zone, Continental Shelf or Area—not only ensures that the Convention does not affect its legal title to its sunken vessels, but also reinforces its sovereign immunity.⁶⁹

Portugal holds that the Convention's mechanism of international cooperation actually entitles it, as a flag state, to demand coastal states to protect its sunken state vessels from any interference, including interference caused by the coastal states themselves or by third parties, thus enhancing the idea of immunity through methods of cooperation rather than possession.⁷⁰

Spain also maintains that salvagers, not states, are the main threat to sunken state vessels. The Convention, it holds, imposes a duty on the coastal state to act against salvagers, thus securing, rather than weakening, flag states' sovereignty over their sunken vessels.⁷¹

The principle of sovereign immunity is a well-established and widely recognized principle of customary international law. In article 2(8) the Convention states:

68. Moreover, the Vienna Convention on the Law of Treaties explicitly states that "A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose." It seems clear that the Convention did not mean to alter the rules and practices pertaining to sovereign immunity over state vessels. Vienna Convention on the Law of Treaties, May 23, 1969, 1155 U.N.T.S. 331, art. 31(a).

69. The UNESCO Convention, *supra* note 6, arts. 10(7), 12(7); *see also* Mariano Aznar-Gomez, *Spain's position having ratified the UNESCO Convention*, in PROTECTION OF UNDERWATER CULTURAL HERITAGE, *supra* note 8, at 38, 41.

70. Francisco Alves, *Portugal's position having ratified the UNESCO Convention*, in PROTECTION OF UNDERWATER CULTURAL HERITAGE, *supra* note 8, at 46, 48–49.

71. Similarly, Portugal stated that it "does not consider the compliance to [the] ethical and cultural principle [of sovereignty over sunken state vessels] fundamental for the safeguarding of its interests," but rather stated its belief that underwater cultural heritage should be "protected, researched, studied and valorized in the exclusive behalf of Science, Culture and Mankind", regardless of the sovereign. *See* Francisco Alves, *Portugal's Declaration During the Negotiation of the 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage: International Protection and Cooperation versus Possession*, 5 J. MAR. ARCHEOLOGY, 159, 160–61 (2010).

Consistent with State practice and international law, including the United Nations Convention on the Law of the Sea, nothing in this Convention shall be interpreted as modifying the rules of international law and State practice pertaining to sovereign immunities, nor any State's rights with respect to its State vessels and aircraft.⁷²

The word “including” created a concern that the Convention suggests that UNCLOS does not necessarily reflect international law's legal regime.⁷³ However, the interpretation of article 2(8) can lead to a counter-argument that the Convention actually reinforces UNCLOS as necessarily reflecting the international law of the sea, given that it explicitly mentions UNCLOS. But even if we were to assume that other international law frameworks and state practices are to be taken into account (rather than just UNCLOS), the latter still reinforce the principle of unqualified sovereign immunity.

The principle of sovereign immunity is recognized in numerous international frameworks and conventions.⁷⁴ Specific regard to state vessels can be found *inter alia* in articles 8-9 of the Convention on the High Seas, 1958; articles 4 and 25 of the International Convention on Salvage, 1989; article 4(2) of the Nairobi International Convention on the Removal of Wrecks, 2007; and, as mentioned above, in articles 95-96 of UNCLOS.⁷⁵ This indicates that the sovereign immunity principle is strongly upheld in UNCLOS as well as in other international law frameworks.

Moreover, many countries around the globe, including many maritime powers, have signed several bilateral and multilateral agreements regarding sunken state vessels. These agreements strongly reflect international practice and customary law regarding sunken state vessels' immunity (recall that article 6 of the Convention explicitly encourages such agreements).⁷⁶ Examples of such

72. The UNESCO Convention, *supra* note 6 art. 2(8).

73. See DROMGOOLE, *supra* note 5, at 280–81; Dromgoole, *supra* note 7, at 119.

74. See, e.g., The United Nations Convention on Jurisdictional Immunities of States and Their Property Dec. 2, 2004 https://treaties.un.org/doc/source/recenttexts/english_3_13.pdf (reaffirming that sovereign immunity is unequivocal and that immunity cannot be balanced). Though the case does not deal with cultural heritage (but rather with Italian courts ignoring Germany's immunity in cases brought by victims of the Nazi regime) the ICJ's decision regarding the absoluteness of immunity sheds important light on this discussion. International Court of Justice, Jurisdictional Immunities of the State (Ger. v. It.: Greece intervening), Judgment, I.C.J. reports 2012, p. 99 (Feb. 3). For a discussion of state immunity in the cultural heritage context, see Riccardo Pavoni, Sovereign Immunity and the Enforcement of International Cultural Property Law, in *Enforcing International Cultural Heritage Law*, 79 (Francesco Francioni & James Gordley eds., 2013) (holding, *inter alia*, that there is an ambivalent relationship between the laws of state immunity and the enforcement of international cultural heritage law).

75. Convention on the High Seas, Apr. 29, 1958, 450 U.N.T.S. 6465; International Convention On Salvage, Apr. 28, 1989, 1953 U.N.T.S. 33479; Nairobi International Convention on the Removal of Wrecks, May 18, 2007, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/228988/8243.pdf; UNCLOS, *supra* note 10.

76. John Gribble, *The UNESCO Convention on the Protection of the Underwater Cultural Heritage 2001: An Impact Review for the United Kingdom: Project Design*, 6 J. MAR. ARCHAEOLOGY

agreements include: the British-Canadian agreement regarding HMS *Erebus* and HMS *Terror*;⁷⁷ the American-Japanese agreement regarding the *Kohyoteki* midget submarines;⁷⁸ the Dutch-Australian agreement concerning Dutch shipwrecks found off the western Australian coast;⁷⁹ and the French-American agreements regarding *CSS Alabama* and *La-belle*.⁸⁰

National legislation and state proclamations also reflect international practice and international customary law while reinforcing the principle of unqualified sovereignty in sunken state vessels.⁸¹ Legislation regarding the immunity of state vessels exists in almost all jurisdictions. Many states have also made special proclamations stating that they uphold the immunity of their sunken state vessels. Perhaps the most famous example of this is the U.S. presidential statement made in 2001, maintaining U.S. ownership of its sunken statecraft wherever located unless expressly abandoned.⁸²

The Spanish-Portuguese interpretation of the Convention as well as contextualizing the Convention within customary international law present a sound case that the immunity of sunken state vessels was not qualified in the Convention. This point is important to acknowledge, as it illuminates our discussion as to what happened in practice after the Convention's establishment and ratification, to which we now turn.

77, 83 (2011).

77. Memorandum of Understanding Pertaining to the Shipwrecks *HMS Erebus* and *HMS Terror*, U.K.-Can., Aug. 5-8, 1997, reprinted in THE PROTECTION OF THE UNDERWATER CULTURAL HERITAGE *supra* note 9, at 263; see also Sarah Dromgoole, *United Kingdom*, in THE PROTECTION OF THE UNDERWATER CULTURAL HERITAGE: NATIONAL PERSPECTIVES IN LIGHT OF THE UNESCO CONVENTION 2001, 344 (Sarah Dromgoole ed., 2nd ed. 2006).

78. Varmer et. Al., *supra* note 55, at 131.

79. Agreement Concerning Old Dutch Shipwrecks, Austl.-Neth., Nov. 6, 1972, A.T.S. No. 18 (1972). The agreement was a schedule to the *Historic Shipwrecks Act 1976* (Austl.). See also Constance Johnson, *The Agreement Between Australia and the Netherlands Concerning Old Dutch shipwrecks*, in THE PROTECTION OF THE UNDERWATER CULTURAL HERITAGE LEGAL ASPECTS 21 (Guido Camarda & Tullio Scovazzi eds., 2002).

80. Agreement Regarding the Wreck of *La Belle*, U.S.-Fr., Mar. 31, 2003 T.I.A.S. no. 03-331; Agreement Regarding the Wreck of *CSS Alabama*, U.S.-Fr., (Oct. 3, 1989) T.I.A.S. no. 11,687.

81. I do not discuss the question of whether immunity *should* exist in the case of sunken state vessels that have been submerged for over a hundred years nor whether such immunity meets the objectives thought to be at the foundation of this principle (such as preventing risk to national security). I merely reflect the legal situation as is. For a discussion of these issues see Patrizia Vigni, *The Enforcement of Underwater Cultural Heritage by Courts*, in ENFORCING INTERNATIONAL CULTURAL HERITAGE LAW, *supra* note 74, at 125 (holding that immunity rules might harm underwater cultural heritage in certain cases and noting that these rules do not consider the importance of underwater cultural heritage to humanity as a whole rather than just the particular flag state); see also Pavoni, *supra* note 74 at 12-13 (demonstrating that absolute immunity might, in some cases, harm preservation and protection of cultural heritage).

82. ADMINISTRATION OF WILLIAM J. CLINTON, STATEMENT ON UNITED STATES POLICY FOR THE PROTECTION OF SUNKEN WARSHIPS, Jan. 19, 2001, <http://www.gpo.gov/fdsys/pkg/WCPD-2001-01-22/pdf/WCPD-2001-01-22-Pg195.pdf>.

B. *The Reality after the Establishment of the Convention*

As a substantial amount of time has passed since the Convention was signed and entered into force, we can inquire into whether or not the maritime powers' concerns materialized in practice. U.S. court decisions, multilateral and regional initiatives, the acceding of powerful maritime states to the Convention, and consultations regarding other states' ratifications suggest the maritime powers' concerns did not materialize.

1. *United States' Courts Decisions*

On October 5, 1804, the British sunk the *Nuestra Señora de las Mercedes*, a Spanish frigate, off the south coast of Portugal. On its board was cargo of silver, gold and other artifacts that originated from the Spanish Viceroyalties in South America. In 2007 *Odyssey*, an American treasure-hunting company, discovered the wrecks of a vessel believed to be the *Mercedes* on the Portuguese Continental Shelf.⁸³ *Odyssey* recovered 594,000 coins and various other artifacts, and in April 2007 filed an *in rem* action against the vessel in the District Court for the Middle District of Florida. *Odyssey* claimed that there was insufficient evidence to determine the identity of the *res*, and demanded either possessory and ownership rights or salvage award as salvor-in-possession.⁸⁴ In response, Spain claimed that the *res* was undoubtedly the *Mercedes*, that the *Mercedes* was a Royal Spanish Navy frigate, and that it never abandoned its sovereign right over it—accordingly, the U.S. court lacked jurisdiction due to sovereign immunity.⁸⁵

In June 2009, the magistrate judge issued a “Report and Recommendations” regarding the *res*, finding it was indeed the *Mercedes*.⁸⁶ The judge concluded that the court lacked jurisdiction as the *Mercedes* was an immune sunken state vessel.⁸⁷ The report went on to say, quoting the case of *Saudi Arabia v. Nelson*,⁸⁸ that the property of a foreign state is:

83. *Odyssey Marine Exploration, Inc. v. Unidentified, Shipwrecked Vessel*, 675 F. Supp. 2d 1126 (M.D. Fla. 2009).

84. *Odyssey Marine Exploration, Inc. v. The Unidentified Shipwrecked Vessel Amended Verified Compl. in Admiralty*, Aug. 6, 2007. The documents submitted by the parties as well as those delivered by the courts in the different proceedings can be found in a special online database: <http://dockets.justia.com/docket/florida/flmdce/8:2007cv00614/197978/> [hereinafter *The Mercedes Database*] (the Complaint is Document 25 in *The Mercedes Database*).

85. *Odyssey Marine Exploration, Inc. v. The Unidentified Shipwrecked Vessel Mot. to Dismiss Amended Compl. or for Summ. J.*, Sep. 22, 2008, (Document 131 in *The Mercedes Database*). In addition, Peru filed a claim contending it was an equal sovereign to the *Mercedes*, or at least had sovereign rights to the property aboard the *Mercedes* as it originated in its territory or its people had produced. The Peruvian claim is discussed in part IV of this paper. Additionally, twenty-five of the descendants of the *Mercedes*'s cargo owners (who were argued to be civilians that rented storage room on the ship from the Spanish government) also claimed ownership of the cargo. Their claim was rejected *inter alia* on the grounds that the cargo and wreck are linked for the sake of immunity.

86. *Mercedes District R&R*, Jun. 3, 2009; emphasis added (Document 209 in *The Mercedes Database*).

87. *Odyssey Marine Exploration*, 675 F. Supp. 2d at 1126.

88. *Saudi Arabia v. Nelson* 507 U.S. 349 (1993).

Presumptively immune from the jurisdiction of United States courts; unless a specified [statutory] exception applies, a federal court lacks subject-matter jurisdiction over claims against it or its property.⁸⁹

The court concluded that “the comity of interests and mutual respect among nations, whether expressed as the *jus gentium* . . . or as sovereign immunity” warrants the dismissal of *Odyssey*’s claim. The District Court adopted the report in full, dismissed *Odyssey*’s claim, vacated an *in rem* arrest, and ordered *Odyssey* to surrender the *res* to Spain.

Odyssey appealed to the Eleventh Circuit, stressing that the *res* was not the *Mercedes*, that it should not enjoy immunity either as it was used for commercial functions or because immunity applies only when the sovereign property is in the sovereign’s possession, and that even if the ship was a sovereign vessel, the private cargo on its board should not enjoy immunity. In September 2011 the Court of Appeals affirmed the dismissal of *Odyssey*’s claims.⁹⁰ The court concluded that the evidence clearly demonstrate that the *res* is the *Mercedes*; and that at the time it sank, the *Mercedes* was a Spanish Navy vessel not acting under private commercial capacity, and that therefore it is immune even though it did transport private cargo, as the transport was of a sovereign nature.⁹¹ The court stated that an examination of the Foreign Sovereign Immunities Act reveals no possession requirement and that the immunity is granted to state *owned* vessels, not state *possessed* ones. Lastly, it asserted that in the context of a sunken state vessel the cargo and the shipwreck are interlinked for immunity purposes. The court emphasized that “*heightened protection*” is granted to sovereigns “when there is a potential of injury to the sovereign’s interest.”⁹² In November 2011 the court denied *Odyssey*’s motion for rehearing *en banc*. In February 2012 *Odyssey* filed a petition for writ of *certiorari* to the U.S. Supreme Court, which was denied.⁹³

89. *Odyssey Marine Exploration*, 675 F. Supp. 2d at 1138.

90. *Odyssey Marine Exploration, Inc. v. Unidentified Shipwrecked Vessel*, 657 F.3d 1159 (11th Cir. 2011) (*Odyssey Marine Exploration II*). The U.S. filed an *amicus curiae* brief in support of many of Spain’s claims. Parenthetically, it is interesting to note that according to leaked documents that were published on WikiLeaks, the U.S. allegedly assisted Spain in return for Spain’s assistance in recovering art looted by Nazi Germany. For the *amicus curiae* see *Odyssey Marine Exploration, Inc. v. Spain*, Brief of The United States as Amicus Curiae in Partial Support of Spain, Aug., 2010, <http://www.state.gov/documents/organization/179335.pdf>; For the WikiLeaks documents see Ambassador’s Meeting with Minister of Culture, 2008 July 2, 09:21, WIKILEAKS, https://wikileaks.org/plusd/cables/08MADRID724_a.html.

91. *Odyssey Marine Exploration II*, 657 F.3d at 1159.

92. *Id.* (emphasis added).

93. *Odyssey Marine Exploration II*, *cert. denied*, 132 S. Ct. 2739 (2012). Another interesting case involves The *Lisippo Bronze* (the Victorious Youth), a statute found by an Italian fisherman in the Adriatic Sea adjacent to the Italian coast in 1964. In breach of Italian criminal law, the fisherman sold it, and the statute found its way to the collections of the Getty Museum in Malibu, California. In a series of decisions in the 2000’s-2010’s, Italian courts considered the statute to be Italian underwater cultural heritage and ordered its seizure. The curators of the Getty Museum were accused of criminal wrongdoing as Italy claimed that they have acquired the statute despite knowing it was illicitly

Prior to the *Mercedes* case, the Eastern District of Virginia heard a case involving treasure hunters and Spain. It involved two lost Spanish warships: *La-Galga* and *Juno* (both sank off the shores of Virginia, in 1750 and in 1802, respectively). *Sea Hunt*, an American salvage company that found the vessels, submitted an *in rem* claim against them with the Eastern District Court of Virginia in 1998.⁹⁴ *Sea Hunt* sought a declaratory judgment that the shipwrecks were not subject to Spain's sovereign prerogative as Spain abandoned its sovereign rights over them. Spain argued that any transfer or abandonment of sovereign vessels requires express, formal authorization by the government of Spain. It is worth noting that the U.S. submitted two statements of interest and an *amicus curiae* brief in support of the Spanish stand.⁹⁵ The District Court found that an express abandonment standard applies to the shipwrecks, but that Spain has indeed abandoned *La-Galga* under article XX of the 1763 Definitive Treaty of Peace between France, Great Britain, and Spain.

However, in 2000 the Fourth Circuit reversed this decision, fully supporting Spain's position.⁹⁶ The appeals court emphasized that the Abandoned Shipwreck Act, international agreements between the U.S. and other countries, the U.S. Executive's stand,⁹⁷ and—perhaps most importantly—customary international law all unequivocally support full immunity of sunken state vessels unless explicitly waived by the flag state. It continued that the fact that Spain stepped forward to claim *La-Galga* and *Juno* in court was in itself sufficient proof that it did not abandon its sovereignty over them. The U.S. Supreme Court denied *certiorari* in 2001.⁹⁸

The *La-Galga and Juno* case dealt with sunken state vessels in U.S. territorial waters, and the *Mercedes* dealt with international waters, thus creating a comprehensive and robust contention of complete immunity in all marine jurisdictions in U.S. case law.

At present, U.S. courts have been the only courts to directly address the issue of sovereign immunity of sunken state vessels that are underwater cultural

exported. Given the specific circumstances of the case, it does not raise the question of sovereign immunity over sunken state vessels *per se* but focuses more on the question of enforcing foreign states' court decisions regarding underwater cultural heritage in domestic courts. Parenthetically, it should be noted that the Italian courts completely disregarded the question that the Getty Museum raised, that the underwater cultural heritage artifact in question originated in Greece. For an account of the case see Alessandra Lanciotti, *The Dilemma of the Right to Ownership of Underwater Cultural Heritage: The Case of the "Getty Bronze"*, in CULTURAL HERITAGE, CULTURAL RIGHTS, CULTURAL DIVERSITY 301 (Silvia Borelli & Federico Lenzerini eds., 2012); Patrizia Vigni, *The Enforcement of Underwater Cultural Heritage by Courts*, in ENFORCING INTERNATIONAL CULTURAL HERITAGE LAW, *supra* note 74, at 125.

94. *Sea Hunt, Inc. v. Unidentified, Shipwrecked Vessel or Vessels*, 47 F. Supp. 2d 678 (E.D. Va. 1999).

95. *Id.*

96. *Sea Hunt, Inc. v. Unidentified Shipwrecked Vessel or Vessels*, 221 F.3d 634 (4th Cir. 2000) (*Sea Hunt II*).

97. The U.K. also issued a diplomatic note in support of the Spanish stand, *Id.* at ¶ 19.

98. *Sea Hunt II, cert. denied*, 121 S.Ct. 1079 (2001).

heritage, and only in two cases. Nevertheless, the insights that the U.S. courts provide as to the legal reality on the ground is illuminating. The courts were unequivocal about the absoluteness of the immunity of the sunken state vessels, thus providing a clear account of the U.S. judiciary's approach to the interpretation of the sovereign immunity principle.⁹⁹

2. *Multi-State and Regional Initiatives and National Legislation by Member States*

International and regional cooperation regarding underwater cultural heritage, as well as national legislation, existed before the establishment of the Convention.¹⁰⁰ However the Convention's establishment and its subsequent entry into force marked a new era of increased international awareness and greater international cooperation.¹⁰¹ Moreover, it seems that the vast majority of international and regional initiatives aimed at the protection of underwater cultural heritage correspond directly with, and are inspired by, the Convention and its principles, even in cases where the parties involved are not parties to the Convention. In addition, states acceding to the Convention often created or modified national laws regarding underwater cultural heritage regulation so that they may follow the Convention's provisions. Importantly, these national laws seemingly adhere to the principles of sovereign immunity and maritime jurisdiction.¹⁰²

As part of the implementation of the Convention, UNESCO established several initiatives aimed at protecting underwater cultural heritage.¹⁰³ Representatives from the member states meet every two years to discuss state reports and coordinate new ways to cooperate.¹⁰⁴ Yet more interesting are the

99. I acknowledge that the U.S. courts' decisions have relatively little authority in international law. Notwithstanding, they still are landmark decisions. The courts set a jurisdictional standard for immunity of sunken state vessels, which will, presumably, at the very least be a reference point for future courts and litigants.

100. A notable example is the agreement for the protection of the Titanic: Agreement Concerning the Shipwrecked Vessel RMS Titanic, Can.-Fr.-U.K.-U.S., Nov. 6, 2003, <http://www.gc.noaa.gov/documents/titanic-agreement.pdf>.

101. *Cf.* ALESSANDRO CHECHI, THE SETTLEMENT OF INTERNATIONAL CULTURAL HERITAGE DISPUTES 36 (2014) (observing that with regard to the protection of cultural heritage, we are witnessing a growing global consensus).

102. *See, e.g.*, UNESCO's Database of National Heritage Laws, http://www.unesco.org/new/en/culture/themes/dynamic-content-single-view/news/unesco_database_of_national_cultural_heritage_laws_update/#.VnScUhrLIU; *see also* THE PROTECTION OF THE UNDERWATER CULTURAL HERITAGE: NATIONAL PERSPECTIVES IN LIGHT OF THE UNESCO CONVENTION 2001, *supra* note 77 (listing different countries and their underwater cultural heritage laws).

103. *See, e.g.*, UNESCO's Work and Achievements in the Protection of the Underwater Cultural Heritage, <http://www.unesco.org/new/en/culture/themes/underwater-cultural-heritage/protection/unescos-work/> (detailing UNESCO's cooperation mechanisms, scientific and technical advisory body, the support it provides to member and non-member states, its educational initiatives, capacity-building efforts, and its outreach and awareness initiatives).

104. The minutes of the bi-annual meetings can be found here: Meeting of States Parties,

initiatives that are non-UNESCO created but Convention-inspired. Take for example Spain, an influential actor in the creation of multilateral conventions aimed at protecting underwater cultural heritage. In 2009, it published a “green paper” on its national plan for the protection of underwater cultural heritage.¹⁰⁵ The green paper is a detailed document that puts Spain at the forefront of underwater cultural heritage protection. Following that, Spain initiated a cooperation scheme with Latin American and Caribbean states, and signed a first-of-its-kind Memorandum of Understanding on cooperation for the protection of underwater cultural heritage with Mexico in 2014.¹⁰⁶ The Netherlands, though not a party to the Convention, has also long been active in the protection of its sunken state vessels. The Convention has seemingly paved the way for wider cooperation between the Netherlands and Asian countries.¹⁰⁷ This cooperation focuses on shared responsibility, capacity-building, and information sharing between partners.¹⁰⁸

States have established cooperation frameworks on the regional level as well. Notable examples include the 2013 Latin American and Caribbean States’ action plan for regional cooperation, known as the Lima Declaration,¹⁰⁹ and the 2006 European Union MACHU project (Managing Cultural Heritage Underwater), which aimed to support new and better ways to effectively manage underwater cultural heritage, educate people about its importance, and make it accessible to researchers, policymakers and the general public.¹¹⁰ There is also clear evidence

<http://www.unesco.org/new/en/culture/themes/underwater-cultural-heritage/2001-convention/meeting-of-states-parties/>. State reports can be found here: Country Reports, <http://www.unesco.org/new/en/culture/themes/underwater-cultural-heritage/publications-resources/country-reports/>.

105. GOVERNMENT OF SPAIN, GREEN PAPER—NATIONAL PLAN FOR THE PROTECTION OF UNDERWATER CULTURAL HERITAGE (OFFICIAL ENGLISH TRANSLATION, 2009), <http://en.calameo.com/read/000075335015cc9543e0f>.

106. Elisa de Cabo de la Vega, *Cooperation between Spain and Latin America in the Caribbean*, 13 *CULTURE & DEVELOPMENT*, 26 (2015).

107. Martijn Manders, *Dutch Involvement in Asian Underwater Cultural Heritage Management: Building upon Old Connections*, 5 *J. MARITIME ARCHAEOLOGY*, 117 (2010).

108. *Id.* at 121.

109. REPUBLIC OF PERU AND UNESCO, RESULTS OF THE MINISTERIAL MEETING ON THE PROTECTION OF THE UNDERWATER CULTURAL HERITAGE IN LATIN-AMERICA AND THE CARIBBEAN, Oct. 16–17, 2013. This publication includes the “Latin-American Sub-Region Action Plan” and the “Caribbean Sub-Region Action Plan.”

110. While funding stopped in 2009, two of its initiatives, a web-based GIS application for management and research, and an interactive website, are still in operation. See Machu GIS, http://www.machuproject.eu/machu_gis_00.htm; Machu, <http://www.machuproject.eu/index.html>. Another E.U. project was Development of Tools and Techniques to Survey Assess Stabilise Monitor and Preserve Underwater Archaeological Sites (SASMAP). The project ran from 2012 until 2015 and was a project funded by the European Commission under the EU’s Cooperation Directive. The European Union and the Council of Europe were involved in different regional initiatives even before the Convention was established; these, however, were of limited scope. See ANASTSIA STRATI, THE PROTECTION OF THE UNDERWATER CULTURAL HERITAGE: AN EMERGING OBJECTIVE OF THE CONTEMPORARY LAW OF THE SEA 76 (1995). Other European regional initiatives include, for example, The Code of Good Practice for the Management of the Underwater Cultural Heritage in the Baltic Sea Region. BALTIC SEA STATES HERITAGE COOPERATION, THE CODE OF GOOD PRACTICE FOR

of increasing involvement of NGO's and grassroots initiatives, many of which follow the Convention's principles and guidelines.¹¹¹ Examples include the International Committee on the Underwater Cultural Heritage and the Deep Sea Conservation Coalition.¹¹² These are but a few examples of an extensive range of initiatives, cooperation schemes, and bilateral and multilateral agreements that follow the Convention's principles.¹¹³

Prior to the Convention, several countries had some domestic legislation regarding underwater cultural heritage.¹¹⁴ While domestic laws naturally exhibited certain commonalities, in general the global legal regime regarding underwater cultural heritage was heterogeneous. One of the notable outcomes of the Convention was a proliferation of national legislation on underwater cultural heritage and greater uniformity in that legislation.¹¹⁵

3. *Italy's 2010 and France's 2013 ratification of the Convention, and the Findings of the British and the Dutch Enquiry Committees*

Before the establishment of the Convention, both France and Italy had domestic legislation protecting underwater cultural heritage in their territorial waters, but limited international cooperation schemes or treaties.¹¹⁶ During negotiations on the Convention, Italy's greatest concern was ensuring the

THE MANAGEMENT OF THE UNDERWATER CULTURAL HERITAGE IN THE BALTIC SEA REGION (COPUCH), available at <http://mg.kpd.lt/LT/7/UNDERWATER-HERITAGE.htm>.

111. See, e.g., *Accredited Non-Governmental Organizations*, UNESCO, <http://www.unesco.org/new/en/culture/themes/underwater-cultural-heritage/partners/partners-ngos/accredited-ngos/>.

112. International Committee on the Underwater Cultural Heritage, *Vision, Mission, and Strategy*, <http://icuch.icomos.org/vision-mission-and-strategy/>; The Deep Sea Conservation Coalition, <http://www.savethehighseas.org/>; see also Margaret E. Leshikar-Denton, *Cooperation is the Key: We Can Protect the Underwater Cultural Heritage*, 5 J. MAR. ARCHEOLOGY 85 (2010).

113. See, e.g., DROMGOOLE *supra* note 5, at 140–43. Many interest groups are involved in cultural heritage (underwater, terrestrial, or intangible). These include the international community, international organizations, states, non-state actors, NGO's, museums, and many different private actors. Chechi, *supra* note 101, at 36–60, provides a detailed account thereof. See also Varmer, *supra* note 13, at 257.

114. Parham & Williams, *supra* note 13, at 9.

115. UNESCO published a model law, which, it seems, inspired the domestic legislation of several state parties. UNESCO, MODEL FOR A NATIONAL ACT ON THE PROTECTION OF CULTURAL HERITAGE, http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CLT/pdf/UNESCO_MODEL_UNDERWATER_ACT_2013.pdf. The homogeneity in national laws regulating underwater cultural heritage across the globe is reflected, *inter alia*, in the state parties' "state reports" to UNESCO. See UNESCO, COUNTRY REPORTS, <http://www.unesco.org/new/en/culture/themes/underwater-cultural-heritage/publications-resources/country-reports/>.

116. Gwenaelle Le Gurun, *France*, in THE PROTECTION OF THE UNDERWATER CULTURAL HERITAGE, *supra* note 77, at 59; Maria Clelia Ciciriello, *Italy*, in LEGAL PROTECTION OF THE UNDERWATER CULTURAL HERITAGE: NATIONAL AND INTERNATIONAL PERSPECTIVES 101 (Sarah Dromgoole ed., 1999); Tullio Scovazzi, *The Protection of Underwater Cultural Heritage: An Italian Perspective*, in THE ILLICIT TRAFFIC OF CULTURAL OBJECTS IN THE MEDITERRANEAN, *supra* note 49, at 75.

prohibition of unauthorized removal of artifacts from territorial waters.¹¹⁷ Italy held that the Convention adequately addressed the maritime powers' concerns. In its statement on the draft convention, distributed to all negotiating parties in 2000, Italy maintained that it was "within the spirit of UNCLOS" that a new convention for the regulation of underwater cultural heritage be established, and that the provisions in the draft did not compromise UNCLOS or state sovereignty, and that leaving things as they are would lead to the "unacceptable consequence" of leaving a great part of the underwater cultural heritage without protection.¹¹⁸ With that, Italy voted in favor.¹¹⁹ France, on the other hand, joined in the objections to the Convention. The French representative stated that "France disagrees with the project on two precise points: the status of state vessels and jurisdiction rights, which we consider are incompatible with [UNCLOS]."¹²⁰ France ultimately abstained in the final vote.

In the first years following the signing of the Convention, the only notable maritime states that ratified it were Spain and Portugal (in 2005 and 2006, respectively).¹²¹ Although other countries joined, the Convention was nevertheless viewed as an instrument with limited power and authority. This changed with Italy's and especially with France's ratification (in 2010 and in 2013, respectively).¹²² Once four notable maritime powers were parties, the power balance changed significantly. France's admission that its initial concerns never materialized challenge other countries to revisit their position towards the Convention.¹²³

The Convention's growing popularity, along with increasing international consensus around its principles, has not escaped the attention of not-party maritime powers.¹²⁴ As the United Kingdom's "UNESCO 2001 Convention Review Group" put it:

117. Scovazzi, *supra* note 116, at 82.

118. Scovazzi, *supra* note 116, at 83.

119. *Id.* at 85.

120. *Reprinted in* THE PROTECTION OF THE UNDERWATER CULTURAL HERITAGE *supra* note 9, at 246 (My translation from the original French).

121. Convention on the Protection of the Underwater Cultural Heritage, *supra* note 46.

122. See DROMGOOLE, *supra* note 5, at 366–68.

123. Indeed, several countries are currently considering ratification, such as Australia. See Craig Forrset, *Australia*, in HANDBOOK ON THE LAW OF CULTURAL HERITAGE AND INTERNATIONAL TRADE 71 (James Nafziger & Robert Kirkwood Paterson eds., 2014).

124. The Convention's growing popularity is reflected also in the UN General Assembly Resolution 66/231 on "Oceans and the Law of the Sea", which "Urges all States to cooperate, directly or through competent international bodies, in taking measures to protect and preserve objects of an archaeological and historical nature found at sea. . ." and "calls upon States that have not yet done so to consider becoming parties to" the Convention. G.A. Res. 66/231, ¶¶ 7, 8 (Dec. 24, 2011).

The Convention itself - to some surprise - has not only entered into force but has been ratified by an increasing number of states who shared concerns similar to the U.K. in 2001. [. . .] there is now a global convention on the protection of underwater cultural heritage that has widespread support and is a feature of the framework of international law with which the U.K. must deal.¹²⁵

The influence of the Convention led two influential maritime powers, the Netherlands and the U.K., to commission national committees to reassess the question of ratification in 2011 and 2014, respectively.¹²⁶ Both committees strongly and overwhelmingly concluded that their governments should join the Convention.¹²⁷

Regarding the Convention's compatibility with UNCLOS and maritime jurisdiction, the British committee maintained that there were no signs that state practice will result in creeping jurisdiction.¹²⁸ Moreover, the committee stressed that if the U.K. were to ratify the Convention, it would be able to reaffirm the primacy of UNCLOS and assert its own interpretation of specific clauses of the Convention.¹²⁹ The Dutch committee reached similar conclusions.¹³⁰

The British committee found that the Convention's cooperative framework, its affirmation of sovereign immunity, and the provision that a country with verifiable links to a wreck is to be consulted, are "likely to strengthen, rather than weaken, the position of the U.K. with respect to wrecks of British origin all over the world".¹³¹ The Dutch committee stressed that, because the Netherlands abandoned its former policy of salvaging the Dutch East India Company's

125. UK UNESCO 2001 Convention Review Group, 2014, *The UNESCO Convention on the Protection of the Underwater Cultural Heritage 2001: An Impact Review for the United Kingdom* (Feb. 2014) [hereinafter *U.K. Report*]. Following the U.K. Report, the U.K. National Commission for UNESCO published a policy brief in which it encouraged the U.K. to reevaluate its position on the Convention: United Kingdom National Commission for UNESCO, U.K. National Commission for UNESCO, *UNESCO Convention on the Protection of Underwater Cultural Heritage: Next steps for the UK government*, at 17 (2015) [hereinafter *U.K. Policy Brief*]. See also British Academy & Honor Foundation, *2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage - The Case for UK Ratification* (Mar. 2014).

126. Regarding the U.K. committee see *U.K. Report*, *supra* note 125. Regarding the Netherlands see Advisory Committee On Issues of Public International Law, *Advisory Report No. 21 On the UNESCO Convention On the Protection of the Underwater Cultural Heritage - Translation* (Dec. 2011), [http://cms.webbeat.net/ContentSuite/upload/cav/doc/Report_nr_21_-_UNESCO_Convention_on_the_Protection_of_Under_Water_Cultural_Heritage\(2\).pdf](http://cms.webbeat.net/ContentSuite/upload/cav/doc/Report_nr_21_-_UNESCO_Convention_on_the_Protection_of_Under_Water_Cultural_Heritage(2).pdf) [hereinafter *Dutch Report*]. Apparently Germany is also considering ratification. See *UK Policy Brief*, *supra* note 125, at 11. See also Gonzalo Rodríguez Prado, *Germany Prepares for the Ratification of the UNESCO Convention on the Protection of the Underwater Cultural Heritage*, UNITED NATIONS NIPPON FOUNDATION FELLOWSHIP ALUMNI (Nov. 13, 2014), <http://www.unfalumni.org/germany-prepares-for-the-ratification-of-the-unesco-convention-on-the-protection-of-the-underwater-cultural-heritage-paris-2nd-november-2001/>.

127. *U.K. Report*, *supra* note 125; *Dutch Report*, *supra* note 126.

128. *U.K. Report*, *supra* note 125, at 8, 35.

129. *Id.* at 8.

130. *Dutch Report*, *supra* note 126, at 10.

131. *U.K. Report*, *supra* note 125, at 9.

shipwrecks, joining the Convention would essentially be a useful measure to protect Dutch sovereignty in those wrecks, and that it would actually be an “instrument for blocking unilateral claims of coastal States (possibly based on national laws).”¹³²

The British committee also maintained that concerns regarding a presumed duty to actively attend to all underwater cultural heritage were overstated.¹³³ This is because the actual numbers of sunken vessels in British waters are considerably lower than was estimated in 2001, and that “it is not the number of wrecks within a State Party’s Territorial Sea that is critical for implementing the 2001 Convention, but the number of activities directed at such sites.”¹³⁴

The discussion above suggests that, overall, concerns over creeping jurisdiction and qualifications to the immunity of sunken state vessels have not materialized. Moreover, post-Convention reality is seemingly even more favorable to the maritime powers’ approach than pre-Convention reality. This, in my view, presents a strong case for the non-ratifying maritime powers to revisit their opposition, especially given what is at stake, as the next part illustrates.

IV.

CURRENT CHALLENGES TO UNDERWATER CULTURAL HERITAGE GOVERNANCE AND HOW THE CONVENTION CAN SOLVE THEM

Recent years have brought about new challenges to the governance of underwater cultural heritage. The three most notable challenges are: (a) claims by former colonies for rights in sunken state vessels flying the colonial power’s flag, (b) a lack of global policy regarding underwater gravesites, and (c) the exploitation of underwater cultural heritage as a means to claim control in disputed waters. This part discusses these challenges and contends that the Convention is well equipped, and arguably the most fitting international law instrument, to meet them successfully.

A. *Former Colonies’ Claims to Rights in Sunken State Vessels Flying the Colonial Power’s Flag*

When it was lost at sea, the *Mercedes* was carrying a cargo of 17 tons of precious metals that originated from the Spanish Viceroyalties in South America, which included what is today Peru and Bolivia. Two hundred years later, when the *Mercedes* was recovered, Peru and Bolivia were two sovereign countries. Peru filed a claim with the District Court for the Middle District of Florida, which decided the *Mercedes* case, and subsequently with the Court of Appeals for the 11th Circuit which heard the appeal. Peru argued that it was an equal sovereign to the *Mercedes*, along with Spain. Thus, Peru claimed, it owned the ship and the

132. *Dutch Report*, *supra* note 126, at 13.

133. *U.K. Report*, *supra* note 125, at 10.

134. *Id.* at 10.

treasure onboard or, at the very least, an equitable portion of it. It further argued that Spain could not claim immunity against an equal sovereign, and that, in particular, it could not assert immunity over property claimed to be owned by another sovereign.¹³⁵ The District and subsequently the Court of Appeals, rejected Peru's claims, holding that the ship was an immune *Spanish* vessel, that the cargo and the shipwreck were interlinked for immunity purposes, and that this interlinkage precluded Peru's attempt to institute an action in U.S. courts against any part of the *Mercedes* or its cargo.¹³⁶ This applied whether or not Peru had a "patrimonial interest in the cargo."¹³⁷

Bolivia supported the Peruvian stance, though it did not join the legal proceedings. Its minister of culture explained, "[w]e have no interest in litigating with Spain, which could very well consider the discovery a shared cultural patrimony."¹³⁸ This attitude, it seems, later resulted in a Memorandum of Understanding in which the Spanish government "expresse[d] its willingness to . . . exhibit some of the goods recovered from the shipwreck *Nuestra Señora de Las Mercedes* in Bolivia, so that local citizens can appreciate [these] heritage objects."¹³⁹

The *San Jose* is another example of tensions arising between a former colony and a post-colonial power over title to a sunken state vessel.¹⁴⁰ After Colombia declared in November 2015 that it found the lost Spanish galleon, Spain was quick to ask for more information. Later, the Spanish foreign minister expressed Spain's stance that the *San Jose* was a Spanish ship, as well as an underwater gravesite for the 570 Spanish soldiers that died when it sank, and, thus, it enjoyed immunity from Colombian interference.¹⁴¹ The Spanish foreign minister noted that Spanish and Colombian domestic legislation, along with international treaties, supported the Spanish stance (even though Colombia is not a party to either UNCLOS or the

135. *Odyssey Marine Exploration, Inc. v. The Unidentified Shipwrecked Vessel*, Claim to Contents, Artifacts and Cargo by Republic of Peru, Aug. 1, 2008, (Document 120 in *The Mercedes Database*, *supra* note 84).

136. *Odyssey Marine Exploration*, 675 F. Supp. 2d at 1138; *Odyssey Marine Exploration II*, 657 F.3d at 1159.

137. *Odyssey Marine Exploration II*, 657 F.3d at 1182. The U.S. Supreme Court denied writ of certiorari: *Republic of Peru v. The Unidentified Shipwrecked Vessel*, 657 F.3d 1159 (11th Cir. 2011), Cert. Den., Feb. 29, 2012, <http://www.supremecourt.gov/Search.aspx?FileName=/docketfiles/11-1068.htm>.

138. *Peru and Bolivia Also Want Their Share of the Gold Found in Spanish Galleon*, MERCOPRESS (Dec. 29, 2009), <http://en.mercopress.com/2009/12/28/peru-and-bolivia-also-want-their-share-of-the-gold-found-in-spanish-galleon>.

139. De Cabo de la Vega, *supra* note 106, at 27.

140. Watts & Burgen, *supra* note 4.

141. Michael Martinez & Alba Prifti, *Colombia Says It Found Spanish Galleon; U.S. Firm Claims Half of Treasure*, CNN (Dec. 5, 2015), <http://www.cnn.com/2015/12/05/americas/colombia-spanish-galleon-san-jose-found/>; *Spain Says It Has Rights to Colombian Treasure Ship*, BBC NEWS (Dec. 8, 2015), <http://www.bbc.com/news/world-latin-america-35036121>; *Spain, Colombia Still at Odds Over Shipwreck but Agree on One Thing: To Protect It*, FOX NEWS (Dec. 14, 2015), <http://latino.foxnews.com/latino/politics/2015/12/13/spain-colombia-disagree-on-galleon-wreck-but-will-look-to-protect/> [hereinafter FOX NEWS].

Convention). It should be noted, however, that unlike the Peruvian-Spanish dispute in the *Mercedes* case, which was settled in court, both Spain and Colombia, despite their disagreement over ownership, declared that they would work together toward a diplomatic settlement.¹⁴²

The issue of former colonies' claims to rights in sunken state vessels flying the colonial power's flag was not directly addressed by the parties negotiating the Convention. Some former colonies, it seems, definitely agree to the principle of state immunity but nonetheless dispute its beneficiary. Namely, they contest the *identity* of the state that is immune.

This issue involves profound moral and political dilemmas in a post-colonial era. For example, we might ask ourselves whether Peru's patrimony as the country of origin of the goods and some of the deceased personnel bestows, or should bestow, upon it ownership or joint-ownership in the *Mercedes*.¹⁴³ If we answer this positively, it could create impossible legal complexities, such as, how to divide ownership between Peru, Spain, and Bolivia? While these questions are worthy of academic attention, they are beyond the confines of this article. With regards to our inquiry, I argue that the mechanisms within the Convention render the answers to these questions of moderate practical importance. The Convention's underlying principles emphasize cooperation and adherence to international archaeological norms, and they prohibit commercial exploitation of underwater cultural heritage.¹⁴⁴ This means that it is less important who owns the shipwreck and more important what is done with it. This point is clear when one considers the fate of a sunken state vessel under the Convention's regime.

First, the Convention urges cooperation and preservation of sunken state vessels for the benefit of humankind. This means that, regardless of the identity of the sovereign of the sunken state vessel, the sovereign is required to cooperate with all the state parties that have interests in the vessel.¹⁴⁵ Additionally, preservation for the benefit of humankind means that, in practice, the wreck should be treated in accordance with international archaeological principles. In other words, the identity of the sovereign should not affect the outcomes of the activities directed at, or affecting, the wreck. It seems that a model of this would be the Bolivian-Spanish "Memorandum of Understanding" over the *Mercedes*. Here, despite Bolivia's dissention to Spain's sovereignty, cooperation prevailed and (Spanish-owned) recovered artifacts were to be presented in heritage

142. FOX NEWS, *supra* note 141.

143. Typically, the remains of a shipwreck contain artifacts (and deceased) from many different nations. However, it can be suggested that, regardless, its heritage and cultural value is always international. See FORREST, *supra* note 5, at 288. Moreover, as Appiah notes (not necessarily in the underwater context), "a great deal of what people wish to protect as 'cultural patrimony' was made before the modern systems of nations came into being, by members of societies that no longer exist." Kawame Appiah, *Whose Culture is it Anyway?*, in CULTURAL HERITAGE ISSUES: THE LEGACY OF CONQUEST, COLONIZATION AND COMMERCE, 213 (James Nafziger & Ann Nicgorski eds., 2009).

144. See *supra* Part I.

145. *Id.*

institutions in Bolivia. This was a result that *in practice* would have probably occurred had Bolivia been awarded the sovereign title.

Second, according to the Convention, *in situ* preservation is always the first option.¹⁴⁶ This may not be relevant for the *Mercedes*, as *Odyssey* already salvaged the ship's cargo at the time of litigation, yet, fundamentally, this means that – in accordance with archaeological principles – excavation would not occur unless the wreck was at risk or there was a research purpose for excavating. Thus, no matter which state is sovereign, the shipwreck would ordinarily stay on the ocean floor.

Third, any commercial exploitation of a sunken state vessel is fundamentally incompatible with the Convention's principles. Title to a sunken state vessel should essentially be viewed as a means to ensure its preservation. This idea is reflected, for example, in the Dutch committee's statement that,

[e]mphasis is now on the public interest in conserving these wrecks or their contents rather than on the economic value of salvaging them. Ownership is currently therefore important not so much in order to exercise title to the [Dutch East India Company's] wrecks as to ensure their protection through international frameworks. . .¹⁴⁷

If both claimants to title are parties to the Convention (or at least agree on adherence to international archaeological standards and abstention from commercial exploitation), ownership of the vessel is indeed not so important in practice.

I do not contest that there might be some political significance to the question of ownership in a sunken state vessel. Yet, the Convention, even if unintentionally, settles many of the tensions around ownership in a post-colonial context with a win-win outcome: former colonial powers can ensure that the immunity principle holds strong, while former colonies can have their patrimony and historical and moral ties to sunken vessels respected.¹⁴⁸

146. The UNESCO Convention, *supra* note 6, art. 2(5).

147. *Dutch Report*, *supra* note 126, at 13 (emphasis added).

148. In this regard Portugal's stand is illuminating. Already at the negotiation stage it declared that it: "does not consider the compliance to [the sovereignty principle] fundamental for the safeguarding of its interests. . . Portugal considers. . . that its best contribution to the protection and valorization of its nautical heritage located in the seabed of all continents is not to claim for itself its historic and cultural heritage – that historically and culturally Portugal shares with the countries that have jurisdiction over those areas – because Portugal's basic claim and affirmation in any relationship with those countries is just based upon the principles and the ethics underlined in the project of this draft Convention. Therefore, Portugal Claims above all, that those remains must be protected, researched, studied and valorized in the exclusive behalf of Science, Culture and Mankind (which by inheritance requires the primordial respect of the interests of the site, whether flag or cultural origin countries)". Alves, *supra* note 71, at 160–61.

B. World War I Centenary and Underwater Gravesites

There are an estimated 10,000 wrecks from World War I, many of which are sunken state vessels.¹⁴⁹ These wrecks are valuable sources of historical information that cannot be found in written accounts of the war.¹⁵⁰ However, their most lasting significance is that they are the final resting place for the thousands of servicepersons who perished on board. Currently, legislation protecting these underwater gravesites is rare and inadequate, and there seems to be no specific international law apparatus that satisfactorily protects them.¹⁵¹ As we mark the centenary of their sinking, the wrecks will legally become underwater cultural heritage. This presents a unique opportunity to use the Convention to preserve these wrecks and adequately respect the last resting place of those who died on

149. Michel L'Hour, *Underwater Cultural Heritage from World War I: A Vast, Neglected and Threatened Heritage*, in *THE UNDERWATER CULTURAL HERITAGE FROM WORLD WAR I*, 97, 99 (Ulrike Guérin, Arturo Rey da Silva & Lucas Simonds eds., 2015).

150. Ulrike Guérin, *World War I Underwater Cultural Heritage and the Protection provided by the UNESCO 2001 Convention*, in *THE UNDERWATER CULTURAL HERITAGE FROM WORLD WAR I*, *supra* note 149, at 117, 120. And not only wars: A shipwreck that was recently found off the Dutch coast is said to shed light on a plot to pawn English crown jewels: Gordon Darroch, *400-Year-Old Dress Found in Shipwreck Sheds Light on Plot to Pawn Crown Jewels*, *GUARDIAN* (Apr. 21, 2016), <https://www.theguardian.com/world/2016/apr/21/400-year-old-dress-found-in-shipwreck-sheds-light-on-plot-to-pawn-crown-jewels>.

151. Craig Forrest, *Towards the Recognition of Maritime War Graves in International Law*, in *THE UNDERWATER CULTURAL HERITAGE FROM WORLD WAR I*, *supra* note 149, at 128–32 [hereinafter *Recognition of War Graves*]; Guérin, *supra* note 149, at 118. It should be noted that the Convention does state in article 2(9) that “States Parties shall ensure that proper respect is given to all human remains located in maritime waters”. The UNESCO Convention, *supra* note 6. It also goes on to mention in rule 5 of the Annex that “Activities directed at underwater cultural heritage shall avoid the unnecessary disturbance of human remains or venerated sites”. *Id.* However, this did not result in the establishment of any rules regarding protection of underwater gravesites. Furthermore, while the Convention, along with the increasing attention to underwater cultural heritage, indeed yielded many different international agreements and cooperation, there seem to be no initiatives directed at the protection of underwater gravesites. Forrest mentions only three cases in which foreign wrecks are protected by national legislation: in Chuuk State (one of the four states of the Federated States of Micronesia), in Solomon Islands and in the U.K., Forrest, *supra* note 61, at 80. It should be noted, however, that underwater military graves seemingly enjoy a different status than other underwater gravesites, since they are protected by legislation pertaining military remains. See Vadi, *supra* note 66, at 367–70. See also Michael Williams, *War Graves and Salvage: Murky Waters?* 7 *J. INT'L MAR. L.* 151 (2000). With regard to war graves on land, the situation seems to be substantially different, and there actually exists an international practice for proper treatment. Governments practice high sensitivity to both, their and the enemy's deceased soldiers' last resting place. Many countries around the world have established special commissions entrusted with the protection and proper upkeep of these gravesites and battlefields (notable examples include The Commonwealth War Graves Commission, The American Battle Monuments Commission, and The German War Graves Commission). Moreover, states seem to take considerable care to protect gravesites – military and civilian – from any unauthorized interference. It is almost unthinkable to interfere with the last resting place of people who perished and were buried on land. The issue of ethical handling of human remains in terrestrial archeological activity is often addressed in domestic law and international practice: There seems to be an international standard as to how to approach gravesites of archeological significance and how to treat the human remains found there. See *THE ROUTLEDGE HANDBOOK OF ARCHAEOLOGICAL HUMAN REMAINS AND LEGISLATION – AN INTERNATIONAL GUIDE TO LAWS AND PRACTICE IN THE EXCAVATION AND TREATMENT OF ARCHAEOLOGICAL HUMAN REMAINS* (Nicholas Marquez-Grant & Linda Fibiger eds., 2011) (detailing the practice and standards in over 60 countries).

board. Furthermore, the Convention can be used as a tool for reconciliation and peaceful cooperation between past enemies.

The lost World War I vessels that lie on the seabed face natural and manmade threats, some of which are unique to them. The first threat is the deterioration of the vessels' metal hulls through corrosion. Unlike older wrecks that were usually made of wood and thus less prone to deterioration, the vessels that sank in World War I were made of metal, which corrodes at a rapid rate.¹⁵² As time passes, these vessels become more and more vulnerable.

The second threat is commercial salvage. Although not unique to World War I wrecks, it does have a unique dimension: Specialist salvage companies specifically target World War I wrecks (for scrap) because the metal that they are made from does not contain radioactive traces that can sometimes be found in metals produced afterwards.¹⁵³ In addition, due to their historical significance, companies and individuals target the wrecks so that they can sell salvaged artifacts as memorabilia.¹⁵⁴

World War I's centenary is an opportunity to change this reality, as these sunken vessels legally become underwater cultural heritage. Member states now have a duty to protect these wrecks against any activity directed at them or indirectly affecting them. This makes current time an extraordinary opportunity to establish a clear international regime for underwater gravesites.

An additional two factors demonstrate why World War I's centenary is a rare juncture and challenge. First, in World War I a considerable number of vessels were lost within a very short period of four years. Unlike older sunken vessels whose location and identity are typically unknown, World War I losses are well documented and their exact location is usually known, as is the identity of those lost on board. We are faced with hundreds of documented underwater gravesites that cannot be dealt with *ad hoc*, but that must to be dealt with as a matter of global policy. Second, World War I is relatively recent. It could be argued that while the moral obligation to respect underwater gravesites is equal regardless of their age, the motivation to act is (presumably) stronger with regard to World War I gravesites as many of the descendants of those lost are still alive and remember their lost loved ones, and the memory of the war is still vivid.

A significant portion of World War I's (and later conflicts) lost vessels are maritime powers' state vessels. Moreover, many of the lost vessels lie in maritime powers' waters. For example, out of the estimated 7,000 ships that were sunk by submarines during World War I, almost 2,000 foundered in French waters.¹⁵⁵ This means that the maritime powers have a specific interest in shaping the global

152. FORREST, *supra* note 5, at 301. The rate of corrosion is rarely less than 0.1. mm per year, often, much faster, as noted by L'Hour. L'Hour, *supra* note 149, at 101. Changing sea temperatures and weather conditions exacerbate the pace of deterioration. FORREST, *supra* note 5, at 127. On the deterioration of wood, see NAS GUIDE, *supra* note 15, at 30–31.

153. *Recognition of War Graves*, *supra* note 151, at 127.

154. See L'Hour, *supra* note 149, at 122.

155. *Id.* at 99.

regime for the treatment of the World Wars' sunken vessels and underwater gravesites. Their participation and leadership is also important given that the management of World War I's underwater gravesites will set a clear benchmark for the treatment of other underwater gravesites. Once a clear international standard for treatment of underwater gravesites is established, it is likely to apply to *all* underwater gravesites regardless of their age. It should be kept in mind that several governments around the world license companies to salvage wrecks' metals for scrap, often without the flag state's consent.¹⁵⁶ While these states might have to stop licensing such salvaging World War I wrecks, as these legally become underwater cultural heritage, the coastal states might continue to do so with the sunken vessels from later conflicts unless an international protection regime is established. It is easier to establish such a regime with World War I wrecks as they are (or will soon become) underwater cultural heritage. Once such a regime is established, it can more readily be applied to later conflicts. Additionally, many of the maritime powers were deeply involved in the World War I and later conflicts. Collaborating in the spirit of the Convention's principle of cooperation can help heal the wounds of the past and utilize past artifacts of war as bridges for reconciliation and peace.

C. Exploitation of Underwater Cultural Heritage to Claim Disputed Territory

Control of maritime territory is important to countries for political, economic and geostrategic reasons. In addition, control of maritime territory often has an important role in the development of a nation's national identity.¹⁵⁷ It is little surprise that maritime territorial disputes often occur. Several recent disputes, however, have encompassed a disturbing development: the use, or – perhaps more fittingly – abuse, of underwater cultural heritage as a means to advance claims to sovereignty over disputed territory. The exploitation of terrestrial cultural heritage as a means of legitimising authority, as supporting evidence to claimed historical ties, or as a justification for the occupation of a certain territory, is not new.¹⁵⁸ Yet the use of underwater cultural heritage in similar ways is seemingly a relatively new phenomenon. Three examples will be discussed: (a) Canada's claims to

156. See L'Hour, *supra* note 149, at 99; *Recognition of War Graves*, *supra* note 151, at 127. A recent example involved the World War II Dutch wrecks of HNLMS De Ruyter, HNLMS Java and HNLMS Kortenaer, which were the last resting place of 2,200 people. The wrecks that were laying on the seabed off the coast of Indonesia have presumably been salvaged for metal. Oliver Holmes, *Mystery as Wrecks of Three Dutch WWII Ships Vanish from Java Seabed*, *GUARDIAN* (Nov. 16, 2016), <https://www.theguardian.com/world/2016/nov/16/three-dutch-second-world-war-shipwrecks-vanish-java-sea-indonesia>.

157. See James Manicom, *Maritime Boundary Disputes in East Asia Lessons for the Arctic*, 12 *INT'L. STUD. PERS.* 330 (2011).

158. See RANDALL H. MCGUIRE, *ARCHAEOLOGY AS POLITICAL ACTION* (2008); Don D. Fowler, *Uses of the past: Archaeology in the Service of the State*, 52 *AM. ANTIQUITY*, 229 (1987); Ian C. Glover, *National and Political Uses of Archaeology in South-East Asia*, 31:89 *INDO. MALAY WORLD* 16 (2003).

sovereignty in the Northwest Passage, (b) China's claims to sovereignty in parts of the South China Sea, and (c) Russia's annexation of Crimea.

i. Canada's Sovereignty Claims in the Northwest Passage

The Northwest passage is a sea route that connects the Atlantic and Pacific Oceans through the Canadian Arctic Archipelago. Canada maintains that the Northwest Passage forms part of its internal waters and therefore it exercises full sovereignty over it. Potential user states, such as the U.S., contend that the Northwest Passage is an international strait.¹⁵⁹ The increased interest in the Northwest Passage in recent years is seemingly a result of the impact of climate change on the Arctic: the distribution and thickness of sea ice is changing, resulting in the possibility of regular ice-free summers.¹⁶⁰ This has led to speculation that the Northwest Passage will become increasingly accessible to transit shipping and resource exploitation. Some even suggest that this is a global strategic game-changer, especially as the Northwest Passage might become an alternative to the Panama Canal.¹⁶¹

In its attempts to prove its sovereignty, Canada has strongly relied upon underwater cultural heritage finds. Ottawa has invested millions of dollars in an expedition aimed at finding the lost vessels *HMS Erebus* and *HMS Terror*, two ships that were lost in Sir John Franklin's expedition to discover the Northwest Passage.¹⁶² In 2014, the (then) Prime Minister Stephen Harper explained that the lost vessels are an important testament to Canadian Arctic sovereignty, saying that "Franklin's ships are an important part of Canadian history given that his expeditions, which took place nearly 200 years ago, *laid the foundations of Canada's Arctic sovereignty*".¹⁶³ Canada's (then) President of the Treasury

159. Gillian Macneil, *The Northwest Passage: Sovereign Seaway or International Strait? A Reassessment of The Legal Status*, 15 DALHOUSIE J. L. & SOC'Y 204, 206 (2006).

160. *Id.* at 208–09; Klaus-John Dodds & Alan Hemmings, *Polar Oceans Sovereignty and the Contestation of Territorial and Resource Rights*, in ROUTLEDGE HANDBOOK OF OCEAN RESOURCES AND MANAGEMENT 576, 578 (Hance D. Smith et al. eds., 2015).

161. Macneil, *supra* note 159, at 207; *see also* ARCTIC MARINE TRANSPORT WORKSHOP (Lawson Brigham & Ben Ellis eds., 2004); Jeff S. Birchall, *Canadian Sovereignty: Climate Change and Politics in the Arctic*, 59 ARCTIC, iii (2006) (noting that voyage from Europe to the Orient through the Passage could save up to 35% of the costs compared to voyage through the Panama Canal or Cape Horn).

162. *HMS Erbus* was found in 2014, but *HMS Terror* has not yet been found. *See* Robin McKie, *Uncovering the secrets of John Franklin's doomed voyage*, GUARDIAN (Nov. 2, 2014), <https://www.theguardian.com/science/2014/nov/02/secrets-of-john-franklins-doomed-voyage-north-west-passage>; Alex Boutilier, *Franklin Ship Found in Arctic was HMS Erebus*, TORONTO STAR (Oct. 1, 2014), https://www.thestar.com/news/canada/2014/10/01/franklin_expedition_ship_identified_as_hms_erebus.html; *The Franklin Expedition*, PARKS CANADA, <http://www.pc.gc.ca/eng/culture/franklin/index.aspx>; *Parks Canada Announces Funding for The Wrecks of HMS Erebus and HMS Terror National Historic Site*, PARKS CANADA (Mar. 17, 2016), <http://news.gc.ca/web/article-en.do?nid=1041269>.

163. *Franklin ship discovery: Stephen Harper's full statement*, CBC NEWS (Sept. 09, 2014), <http://www.cbc.ca/news/politics/franklin-ship-discovery-stephen-harper-s-full-statement-1.2760566>

Board, Tony Clement, made similar assertions, saying “This is part of our history, part of our heritage as a nation and, quite frankly, part of our Arctic sovereignty as well, I don’t think we’re going to find a Russian flag on the Erebus so I think it underscores our point [about Canadian Arctic sovereignty].”¹⁶⁴

ii. *China’s Claims to Sovereignty in Parts of the South China Sea*

On the other side of the world, in the South China Sea, increasing tensions have recently gained global attention. The South China Sea is remarkably rich in natural resources and is economically and geo-politically strategic.¹⁶⁵ China, Vietnam, Malaysia, Brunei, Taiwan, and the Philippines all claim sovereignty to the South China Sea, or parts thereof. Maritime territorial disputes are not rare in East Asia;¹⁶⁶ however, China’s actions in the South China Sea – building artificial islands and sending its military and coastal guard to patrol the disputed waters – caused global political concern and even resulted in the Philippines taking China to court.¹⁶⁷ Yet China employs another strategy in supporting its territorial claims: utilizing underwater cultural heritage.

In recent years China has initiated a comprehensive underwater archaeological survey of the South China Sea, founded the “China Center of Underwater Cultural Heritage Protection”, opened several shipwreck museums, launched its first underwater archaeological vessel (the *Kaogu-01*), and approved plans for constructing the “National Underwater Cultural Heritage South China Sea Base”.¹⁶⁸ These are commendable actions that help promote preservation of underwater cultural heritage, however, these actions are also used as a means to a different end: supporting the Chinese claims to the disputed waters. Liu

(emphasis added).

164. Ameya Charnalia, *New footage offers look into HMS Erebus wreck*, GLOBE AND MAIL (Apr. 16, 2015), <http://www.theglobeandmail.com/news/national/new-footage-offers-look-into-hms-erebus-wreck/article23993670/>. Note that the British and Canadian Governments have signed an agreement according to which the two governments share the archaeological finds (see *supra* note 77). This, of course, is welcome cooperation, nevertheless, it does not diminish the problems associated with the way Canada exploits underwater cultural heritage to claim territory or settle maritime territorial disputes. An additional difficulty relating to the Canadian-British agreement regards the lack of proper consultation with the Inuit people. See Dean Beeby *Inuit press claim for co-ownership of Franklin artifacts*, CBC NEWS (July 24, 2016), <http://www.cbc.ca/news/politics/franklin-hms-erebus-inuit-parks-canada-hms-terror-1.3689503>.

165. With \$5.3 Trillion in total trade passing in these waters annually, and 11 billion barrels of oil and 190 cubic feet of natural gas buried in its ground, it is easy to understand the waters’ potential, and the potential meaning of controlling them. COUNCIL ON FOREIGN RELATIONS, CHINA’S MARITIME DISPUTES, <http://www.cfr.org/asia-and-pacific/chinas-maritime-disputes/p31345#1/p31345>.

166. There are over 60 disputes concerning maritime boundaries, less than 30 percent have been resolved thus far. Barry Wain, *Latent Danger: Boundary Disputes and Border Issues in Southeast Asia*, SOUTHEAST ASIAN AFF. 38, 52 (2012).

167. On July 12, 2016, the Permanent Court of Arbitration ruled in favor of the Philippines against China. It held that China cannot claim historical rights based on the nine-dash line (a demarcation line on an old map used by Taipei and later also by Beijing to make territorial claims in the South China Sea). *South China Sea (Phil. v. China)*, Case No. 2013-19, (Perm. Ct. Arb. 2016).

168. Erickson & Bond, *supra* note 1.

Shuguang, head of the Chinese government's Center of Underwater Cultural Heritage explained that these actions are indeed aimed at establishing China's sovereignty to the disputed waters, saying that "[w]e want to find more evidence that can prove Chinese people went there and lived there, *historical evidence that can help prove China is the sovereign owner of the South China Sea*".¹⁶⁹ Similarly, in 2015, when the controversies regarding the Parcel Islands in the South China Sea peaked (the islands are also claimed by Taiwan and Vietnam), China sent a team of underwater archaeologists to the islands. Xiaojie Li, the (then) director of the State Administration of Cultural Heritage of China explained in an interview that "underwater archaeology plays an important role in safeguarding national interests, highlighting state sovereignty, and providing historical evidence thereto."¹⁷⁰

iii. *Russia's Annexation of Crimea*

In 2011, Vladimir Putin personally retrieved two ceramic jars from a wreck in the submerged harbor of the city of Phanagoria, an ancient Greek city on the Taman Peninsula, a few miles from Crimea.¹⁷¹ Putin's political allies are claimed to have invested \$3.5 billion in archaeological research in Phanagoria.¹⁷² While the investment of resources in cultural heritage was supposed to be welcome news, many in the archaeological community were alarmed, seemingly because they feared of ulterior political motives given that Russian nationalists view Phanagoria's ancient kings as proto-Russians.¹⁷³ Three years later, Putin justified the annexation of Crimea mainly by highlighting Russia's historical ties to the peninsula. On December 4, 2014, in his Presidential Address to the Russian Federal Assembly, Putin stated that the peninsula is "the spiritual source" of the Russian nation and state, maintaining that Grand Prince Vladimir was baptized in Crimea.¹⁷⁴

169. Page, *supra* note 3 (emphasis added).

170. Guojia Wenwu Juzhang Li Xiaojie: *Nanhai Shuixia Kaogu ke Zhangxian Zhuquan* (国家文物局长励小捷: 南海水下考古可彰显主权) [*Director of the State Administration of Cultural Heritage Xiaojie Li: South China Sea Underwater Archeology Can Demonstrate Sovereignty*], GUANCHAZHE (观察者), (June 7, 2015 9:01 AM), http://www.guancha.cn/local/2015_06_07_322442.shtml.

171. Tom Parfitt, *Vladimir Putin's Greek Urns Claim Earns Ridicule*, GUARDIAN (Aug. 12, 2011), <http://www.theguardian.com/world/2011/aug/12/vladimir-putin-greek-urns-ridicule>; *see also Prime Minister Vladimir Putin Visits the Excavation Site of the Ancient Greek City of Phanagoria on Russia's Taman Peninsula*, GOV'T OF THE RUSSIAN FED'N (Aug. 10, 2011), <http://archive.government.ru/eng/docs/16171/>.

172. Peter Campbell, *Could Shipwrecks Lead the World to War?*, N.Y. TIMES (Dec. 18, 2015), http://www.nytimes.com/2015/12/19/opinion/could-shipwrecks-lead-the-world-to-war.html?_r=0.

173. *Id.* Indeed, it has been suggested that the Russian contingency plans for the annexation of Crimea have likely been prepared since, at least, the 1990s. *See* Anton Bebler, *Crimea and the Russian-Ukrainian Conflict*, 15 ROM. J. EUR. AFF. 35, 39 (2015).

174. Bebler, *supra* note 172, at 45; *see also* Presidential Address to the Federal Assembly, The Kremlin (Dec. 4, 2014), <http://en.kremlin.ru/events/president/news/47173>.

Soon after the annexation, the Russian authorities provided UNESCO with “Information on the Situation in the Republic of Crimea (Russian Federation) in the Fields of UNESCO Competence, Received from Russian Competent Authorities.”¹⁷⁵ Despite Russia not being a part of the Convention, the document provides a comprehensive account on actions concerning underwater cultural heritage carried out by the Russians in Crimea.¹⁷⁶ This document exemplifies how Russia uses underwater cultural heritage as a means to advance its annexation of Crimea.

The issue of the utilization of underwater cultural heritage as a means to advance national claims to sovereignty over disputed territory introduces a real challenge: on the one hand, allocating resources to underwater cultural heritage is timely and vital. The historical, cultural, and educational significance of discoveries like the *HMS Erebus* or the Chinese merchant ships in the South China Sea is self-evident, and governments’ involvement also provides added protection to precious cultural heritage. On the other hand, exploitation of underwater cultural heritage for political means goes against the spirit of positive cooperation amongst nations; harms the public’s appreciation of, and the ability to enjoy, the educational and cultural benefits from this human heritage; and turns cultural artifacts into artifacts of conflict. The Convention, however, might prove helpful in preventing such undesirable outcomes.

First, and foremost, the Convention clearly states that “[n]o act or activity undertaken on the basis of this Convention shall constitute grounds for claiming, contending or disputing any claim to national sovereignty or jurisdiction.”¹⁷⁷ This provision is unequivocal, and is in stark contrast to the attempts to prove sovereignty by using underwater “historical evidence.”¹⁷⁸

Second, the Convention stipulates that any state party may declare its interest in being consulted on how to ensure the effective protection of underwater cultural heritage that is found in the Exclusive Economic Zone, Continental Shelf, or the Area.¹⁷⁹ Although the provisions provide that such a declaration shall be based on a verifiable link to the underwater cultural heritage in question, it seems that such links will not be hard to establish as these can be any “cultural, historical or archaeological link[s].”¹⁸⁰ For example, the shipwrecks found in the South China Sea have historical and cultural significance to many of the nations that share, and dispute the sovereignty of, the South China Sea. Similar links exist in Crimea,

175. The Delegation of the Russian Federation to UNESCO, Information on the Situation in the Republic of Crimea (Russian Federation) in the Fields of UNESCO Competence, Statement Submitted by the Director General to UNESCO, U.N. Doc. 195 EX/5.INF.5 (Oct. 21, 2014), *available at* <http://unesdoc.unesco.org/images/0023/002303/230360E.pdf> .

176. *Id.*

177. The UNESCO Convention, *supra* note 6, art. 2(11).

178. It is interesting to note that neither Canada nor China or Russia are members to the Convention.

179. The UNESCO Convention, *supra* note 6, art. 9(5) (regarding the Exclusive Economic Zone and Continental Shelf) and art. 11(4) (regarding the Area).

180. *Id.* art. 9(5).

where the wrecks are significant to Russia, but also to Greece, Italy, and Ukraine. This means that the coordinating party (China and Russia in the above examples) has a duty to consult and coordinate with the other interested states about the measures taken with regards to the underwater cultural heritage. Consultations and coordination between interested parties, founded on the acknowledgment that other states have links and interests in the underwater cultural heritage, diminishes states' ability to base sovereignty claims on underwater cultural heritage.

Third, one of the Convention's underlying principles, articulated in article 19, is that of cooperation and collaboration between states.¹⁸¹ Any act of abuse of underwater cultural heritage as a means to settle territorial disputes in a unilateral and non-cooperative manner is incompatible with the Convention.

Fourth, the Convention states that nothing therein "shall prejudice the rights, jurisdiction and duties of states under international law, including [UNCLOS]."¹⁸² UNCLOS provides clear rules as to the definition of maritime boundaries which are based on law, not archaeology.¹⁸³ The finding of underwater cultural heritage can of course prove economic, historic, and cultural ties, but it cannot establish or prove sovereignty under international law including under UNCLOS.

V.

GAPS, DRAWBACKS AND POSSIBLE SOLUTIONS

The Convention, as the previous discussion suggests, is adequately equipped to cope successfully with many of the current challenges that underwater cultural heritage governance faces. Nonetheless, the Convention is far from being a perfect apparatus. There still remain issues that the Convention is seemingly ill-equipped to properly address. This part discusses several such matters. I will propose some initial thoughts on how these might be overcome, and suggest that despite its flaws the Convention's advantages outweigh its possible drawbacks.

Sunken ships can sometimes pose risks to the ships floating above them. Many submerged warships, especially those from conflicts in the 20th century, carry aging ammunition which can detonate, thus proving a potential hazard to ports, other vessels at sea, divers, and the marine environment.¹⁸⁴ A notable example is the *SS Richard Montgomery*, which was wrecked off Sheerness, England in 1944 with around 1,400 tonnes of explosives on board—explosives that still pose an actual threat to the port in which it sunk.¹⁸⁵ Another hazard that

181. *Id.* art. 19.

182. *Id.* art. 3.

183. *See supra* Part I.

184. *See* Forrest, *supra* note 61.

185. On the U.K.'s actions regarding handling the ship, which is classified as a dangerous wreck under the Protection of Wrecks Act 1973 (U.K.) see MAR. & COASTGUARD AGENCY, REPORT ON THE WRECK OF THE SS RICHARD MONTGOMERY (2000), http://webarchive.nationalarchives.gov.uk/20121107103953/http://www.dft.gov.uk/mca/2000_survey_report_montgomery.pdf; *see also* Sam Webb, *WWII shipwreck packed bombs that could destroy a Kent port pictured using high-tech sonar*, DAILY MIRROR (Jan. 3, 2016),

several wrecks pose regards navigation. Ships that foundered close to the sea surface restrict the available sea room, thus not leaving enough clearance for modern ships to navigate freely.¹⁸⁶ In 2007-2008, for example, the British authorities had to relocate a sunken German submarine from World War I that was deemed a danger to ships sailing in the Dover Straits.¹⁸⁷ Third, some lost ships damage marine and coastal environments, usually due to the substances that they were carrying when they foundered.¹⁸⁸ The Convention does not provide clear instructions as to how to deal with underwater cultural heritage that is potentially hazardous. This can result in legal and political complications: for example, does the removal of such a sunken state vessel harm the flag state's sovereign immunity? Who is responsible for the removal—the flag state or the coastal state? What happens when archaeological principles and in particular *in situ* preservation conflict with the removal strategy? And so on. The lack of clear rules may also lead to an inconsistent international practice, with different countries practicing different schemes.

Another problem touches on the definitions in the Convention. In order to avoid ownership-related problems, the Convention provisions that submerged traces of human existence become underwater cultural heritage only after 100 years have passed since their sinking.¹⁸⁹ This means that vessels that were submerged less than a hundred years ago—such as World War II vessels—are not legally protected by the Convention, despite the fact that many such vessels are of great cultural heritage significance. The lack of legal protection exposes these vessels to the risk of being looted and disrupted. This is not just a theoretical concern: some governments permit industrial salvagers to recover lost vessels from both World Wars and use their metal for scrap.¹⁹⁰

Additionally, the Convention defines underwater cultural heritage as “all traces of human existence,” explicating that this translates to *tangible* objects such as sites, structures, buildings, and vessels.¹⁹¹ This definition takes what can be

<http://www.mirror.co.uk/news/uk-news/wwii-shipwreck-packed-bombs-could-7110626>.

186. Forrest, *supra* note 61.

187. *Dover Strait U-boat to be moved*, BBC NEWS (Aug. 19, 2007, 11:30 AM), http://news.bbc.co.uk/2/hi/uk_news/england/kent/6953664.stm. For a general discussion on sunken warships that potentially pose threats see Forrest, *supra* note 61 (noting the Convention's failure to adequately address the issue of potentially dangerous underwater cultural heritage).

188. Forrest, *supra* note 61, at 80–81.

189. Panayotopoulos, *supra* note 49, at 29, 33.

190. See *supra* Part IV. Relatedly, several provisions in the Convention carry some ‘constructive’ ambiguities. Commentators have suggested that the Convention *deliberately* includes ‘constructive ambiguities’ that can be interpreted in different ways, so that as many countries as possible will consider joining the Convention. See Alves, *supra* note 70, at 49; Dromgoole, *supra* note 8, at 23, 27. This is not unique to the Convention. Constructive ambiguities can be found in many international arrangements where in order to reach a wide as possible consensus some provisions are intentionally phrased vaguely so that each party can interpret its obligations in a manner it deems favorable. In the upcoming years we are likely to witness some of the constructive ambiguities in the Convention clarified. It can be argued that countries that do not join the Convention will have limited ability to impact the interpretation of the ‘constructive ambiguities’ in a manner they deem favorable.

191. The UNESCO Convention, *supra* note 6, art. 1.

described as a Western approach to cultural heritage.¹⁹² The Convention does not cover intangible aquatic cultural heritage, such as sacred lakes and rivers. Intangible aquatic cultural heritage is sometimes at the very heart of certain communities, religious groups, and indigenous peoples' heritage.¹⁹³ This means that not only does the Convention not provide legal protection to this aquatic cultural heritage, but that it possibly has adverse effects as it alienates certain religious groups and indigenous peoples and precludes non-Western concepts of culture and heritage.

It can also be argued that the Convention is ill equipped to deal with possible future threats to underwater cultural heritage. One such example is the potential impacts of climate change on underwater and terrestrial cultural heritage. Due to change in sea levels, some terrestrial cultural heritage sites will possibly become submerged.¹⁹⁴ Estimates have placed this number at over 130 sites considered as cultural and historical treasures by UNESCO, by the year 2100.¹⁹⁵ Conversely,

192. A "Western" approach to cultural heritage is typically understood as emphasizing tangible aspects of cultural heritage rather than intangible aspects. Namely, "heritage" is linked to a physical consistency. See Lyndel V. Prott & Patrick J. O'Keefe, 'Cultural Heritage' or 'Cultural Property'?, 1 INT'L. J. CULTURAL. PROP. 307, 313 (1992) (holding, *inter alia*, that "[w]hile cultural heritage is seen to merit protection in virtually every community, different relationships to land or objects of ritual in certain societies may be difficult for Western lawyers to understand and accept although they represent concepts of importance in cultural heritage law."); Marilena Vecco, *A Definition of Cultural Heritage: From the Tangible to the Intangible*, 11 J. CULTURAL HERITAGE, 321 (2010).

193. Three quick examples: The *Zuni Salt Lake* in New-Mexico is sacred to the Native American Zuni tribe. It is home to Ma'lokyattsik'i, the Salt Mother (in the early 2000s, the lake barely escaped destruction due to the suggested construction of a coal mine). See TEST. OF MALCOLM B. BOWEKATY, GOVERNOR OF THE ZUNI TRIBE, THE UNITED STATE SENATE, COMMITTEE ON INDIAN AFFAIRS, (July, 17 2002), [available at http://web.archive.org/web/20040718185853/www.sacredland.org/Bowekaty.pdf](http://web.archive.org/web/20040718185853/www.sacredland.org/Bowekaty.pdf). See also *Indigenous Religious Traditions*, COLORADO COLLEGE <http://sites.coloradocollege.edu/indigenoustraditions/sacred-lands/zuni-salt-lake/>. *Lhamo La-tso* (or *Lha Mo Bla Mtsho*), a sacred lake in Tibet, is home to Palden Lhamo (or Dpal Idan Lha Mo), the guardian spirit that protects the lineage of the Dalai Lamas by providing visions that help discover the Dalai Lamas' reincarnations. See ROBERT E. BUSWELL & DONALD S. LOPEZ, THE PRINCETON DICTIONARY OF BUDDHISM 472 (2014). *Gosaikunda* is a sacred lake in Nepal. Hindu mythology perceives it as the abode of Hindu Deities Lord Shiva and Goddess Gauri. Its holy waters are considered of particular significance during the Gangadashahara and the 'Janai Purnima' (a sacred thread festival). See BIDYA BANMALI PRADHAN ET AL., NEPAL BIODIVERSITY RESOURCE BOOK: PROTECTED AREAS, RAMSAR SITES, AND WORLD HERITAGE SITES 85–86 (2007). An important recent development is the granting of legal personhood status to the Whanganui River in New-Zealand. The river has a strong spiritual meaning to the indigenous Whanganui Iwi people – Kevin Lui, *New Zealand's Whanganui River Has Been Granted the Same Legal Rights as a Person*, TIME (Mar. 15, 2017), <http://time.com/4703251/new-zealand-whanganui-river-wanganui-rights/>; Daniel Melfi, *New Zealand grants Whanganui River legal personhood, settles case dating back to 1870s*, NATIONAL POST (Mar. 15, 2017), <http://news.nationalpost.com/news/world/new-zealand-grants-whanganui-river-legal-personhood-settles-case-dating-back-to-1870s>.

194. *Mapping Choices, Carbon, Climate, and Rising Seas, Our Global Legacy*, CLIMATE CENTRAL (Nov. 2015), <http://sealevel.climatecentral.org/uploads/research/Global-Mapping-Choices-Report.pdf>.

195. Ben Marzeion & Anders Levermann, *Loss of Cultural World Heritage and Currently Inhabited Places to Sea-Level Rise*, 9 ENVTL. RES. LETTERS 7 (2014).

some submerged cultural heritage sites will surface and eventually dry-out.¹⁹⁶ Furthermore, changes in temperature and the chemical composition of the water in some of the world's seas as well as changes in ocean currents are projected.¹⁹⁷ This means that the marine environment that now safeguards the underwater cultural heritage might become less protective, and might even have a negative impact on the cultural heritage. These predictions question whether *in situ* preservation is indeed the best method of preservation.

The question of effective enforcement and compliance is yet another issue that requires more work. Article 17 of the Convention discusses 'sanctions'; however, these sanctions are directed at inner-jurisdiction enforcement.¹⁹⁸ Namely, the state parties are required to implement laws against actors who violate the Convention's measures such as illegal salvagers, unauthorized treasure-hunters, etc. within their jurisdictions. But the Convention does not deal with violations carried out by states themselves.¹⁹⁹ Article 25 merely lays out a mechanism aimed at the "peaceful settlement of disputes".²⁰⁰ The lack of enforcement mechanisms is not unique to the Convention and is apparently commonplace in international cultural heritage frameworks.²⁰¹ It can be argued that the lack of a meaningful enforcement or compliance mechanism renders the Convention less effective.

196. Cathy Daly, *Climate Change and the Conservation of Archaeological Sites: A Review of Impacts Theory*, 13 CONSERVATION & MGMT. ARCHAEOLOGICAL SITES 293, 299 (2011); Elena Perez-Alvaro, *Climate Change and Underwater Cultural Heritage: Impacts and Challenges*, 21 J. CULTURAL HERITAGE 842 (2016). A famous example is "Jesus' Boat", a 2,000-year-old boat found in the Sea of Galilee in 1986 after several years of drought which saw the lake's water levels at an all-time low, thus exposing this rare boat. After extensive preservation by the Israeli Antiques Authority, it is now on display in a museum. See SHELLEY WACHSMANN, *THE SEA OF GALILEE BOAT: A 2000-YEAR-OLD DISCOVERY FROM THE SEA OF LEGENDS* (1995); Orna Cohen, *Conservation of the Ancient Boat from the Sea of Galilee*, 50 ATIQOT 219 (2005).

197. Daly, *supra* note 196, at 299; Perez-Alvaro, *supra* note 196; Mark Dunkley, *The Potential Effects of Oceanic Climate Change on the Management and Curation of Underwater Archaeological Remains*, 89 ARCHAEOLOGIST 60, 61–62 (2013).

198. The UNESCO Convention, *supra* note 6, art. 17.

199. Article 17 of the Convention (*supra* note 6) states as follows:

Each State Party shall impose sanctions for violations of measures it has taken to implement this Convention.

Sanctions applicable in respect of violations shall be adequate in severity to be effective in securing compliance with this Convention and to discourage violations wherever they occur and shall deprive offenders of the benefit deriving from their illegal activities.

States Parties shall cooperate to ensure enforcement of sanctions imposed under this Article. The UNESCO Convention, *supra* note 6, art. 17.

200. The UNESCO Convention, *supra* note 6, art. 25. During the negotiations, some countries suggested that disputes relating to the Convention and its interpretation be brought to the International Court of Justice. This was rejected by other states (apparently due to the interfaces between UNCLOS and the Convention) – Chechi, *supra* note 101, at 112.

201. Francesco Francioni, *Plurality and Interaction of Legal Orders in the Enforcement of Cultural Heritage Law*, in ENFORCING INTERNATIONAL CULTURAL HERITAGE LAW, *supra* note 74, at 17.

It can also be argued that while it is compelling to protect underwater cultural heritage, there are other options that states can consider in lieu of joining the Convention. For example, states can enter bilateral or multilateral agreements which can be more conducive to the specific countries' interests.

All the above concerns require serious attention. Due to the confines of this paper, I will not lay out a full account of possible ways to address them, but will rather suggest some initial thoughts as to possible solutions. With regard to hazardous wrecks, the Nairobi International Convention on the Removal of Wrecks ("Nairobi Convention") can provide some useful guidance:²⁰² In brief, the Nairobi Convention provides rules as to actions that can be taken by a state that is negatively affected by wrecks of a ship registered in another country. These rules establish the scope of the measures to be taken, and the criteria for the determination of hazard, liability, etc. Despite the Convention and the Nairobi Convention being concerned with two different issues (cultural heritage as opposed to the removal of wrecks), the latter can still provide the former with helpful guidance when the issue of the removal of culturally-significant wrecks arises.²⁰³

As for underwater artifacts that have been submerged for less than 100 years, a possible partial solution arises from the principle of state immunity. Sunken state vessels enjoy immunity despite being submerged less than 100 years.²⁰⁴ While this is not a solution with regard to privately owned vessels – the *Titanic* being a notable example thereof – it nevertheless means that at least for state-owned vessels, there exists protection from salvage and interference.²⁰⁵ Additionally, if a global regime for the protection of underwater graves is established, a part of the privately owned vessels might enjoy some protective measures as underwater gravesites.

It is rather hard to work around the tangibility criterion in the definition of underwater cultural heritage; however, other existing international law frameworks might be able to provide some protection for intangible aquatic cultural heritage. One such framework is the 2003 Convention for the Safeguarding of the Intangible Cultural Heritage ('the Intangible Heritage Convention').²⁰⁶ The Intangible Heritage Convention defines cultural heritage as "practices, representations, expressions, knowledge, skills – as well as the

202. Convention on the High Seas, *supra* note 75.

203. See Sarah Dromgoole & Craig Forrest, *The Nairobi Wreck Removal Convention 2007 and Hazardous Historic Shipwrecks*, LLOYD'S MAR. & COM. L. Q. 92 (2011) (suggesting that the Nairobi Convention might be used to guide countries in the removal of wrecks and protection of underwater cultural heritage); see also Jhonnie M. Kern, *Wreck Removal and the Nairobi Convention – A Movement Toward a Unified Framework?*, 3 FRONTIERS IN MAR. SCI. 1 (2016) (outlining the Nairobi Convention's features and holding that, despite ambiguities, it may prove beneficial to a unified wreck removal regime).

204. See *supra* Part II.

205. The *Titanic* constitutes a *sui generis* case in that it has been subject to an *ad hoc* international agreement. Agreement Concerning the Shipwrecked Vessel RMS *Titanic*, *supra* note 100.

206. Convention for the Safeguarding of the Intangible Cultural Heritage, Oct. 17, 2003, 2368 U.N.T.S. 3.

instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage”.²⁰⁷ This naturally includes intangible aquatic cultural heritage.²⁰⁸ It should be noted, however, that the Intangible Heritage Convention’s provisions include only a vague ‘best efforts’ requirement that does not impose strong obligations on the member states.²⁰⁹ Nonetheless, it can be a first step towards a more inclusive definition of underwater cultural heritage.

With regard to potential impacts of climate change on underwater cultural property, it seems that the overarching principle of preservation in accordance with archaeological standards can be a solution. Archaeological standards should be interpreted as meaning to provide stable and lasting preservation. So, for example, if environmental scientists and archeologists identify possible perils to a particular underwater cultural artifact or artifacts in a certain marine area, then archaeological standards should dictate other methods of preservation rather than *in situ*.

The lack of an effective enforcement mechanism is not unique to the Convention and not uncommon in international law apparatuses.²¹⁰ As Brunnée and Toope suggest, compliance in international law is often the consequence of dynamics of state identities such as interactions, persuasion, norms, policy, and standards.²¹¹ Given the growing consensus around the Convention and its substantive provisions, it seems that its coercive power and ability to advance compliance is substantial; and with the Convention’s growing momentum, this power and ability are becoming even stronger. Additionally, the strong assertion of immunity of sunken state vessels by the flag states provides that violations thereof will probably be scarce and that matters will usually be settled amicably.²¹²

207. *Id.* art. 2.

208. *But cf.* Richard Kurin, *Safeguarding Intangible Cultural Heritage in the 2003 UNESCO Convention: a critical appraisal*, 56(1) MUSEUM INT’L 66, 70 (2004) (claiming that “the [Intangible Heritage] Convention, in effect, operationally makes the intangible tangible, [and so] the conceptual distinction and separation of the two domains is problematic”).

209. Article 11(a) of the Convention for the Safeguarding of the Intangible Cultural Heritage states: “Each State Party shall take the necessary measures to ensure the safeguarding of the intangible cultural heritage present in its territory”. Convention for the Safeguarding of the Intangible Cultural Heritage, *supra* note 206. This is indeed a vague ‘best efforts’ requirement. While the Convention too has some vague language, many of its provisions create stronger obligations. *See also* Paul Kuruk, *Cultural Heritage, Traditional Knowledge and Indigenous Rights: An Analysis of the Convention for the Safeguarding of Intangible Cultural Heritage* 1 MACQUARIE J. INT’L & COMP. ENV. L. 111, 128–29 (2004) (claiming that it remains unclear that the Intangible Heritage Convention creates a mechanism by which indigenous peoples can effectively influence government policy, and that the exhortatory terms in that convention substantially weaken the force of the duties that are imposed on member states).

210. Jutta Brunnée & Stephen Toope, *Persuasion and Enforcement: Explaining Compliance with International Law*, 13 FIN. Y.B. INT’L L. 273 (2002).

211. *Id.*

212. Chechi argues that due to the Convention’s subject matter and the way it is structured, we are not likely to see many cases of violation or the need to revert to courts (because of diplomacy,

Finally, it is true that the Convention is not the only way by which underwater cultural heritage can be protected. However, it seems that with the growing consensus around the Convention as *the* tool for underwater cultural heritage governance, the ability of non-member states to impact global underwater cultural heritage governance through alternative agreements is diminished. Moreover, as noted by the Dutch committee, if a non-member state wants another (member or non-member) state to protect its sunken state vessels from activities carried out against them, it needs to negotiate with the coastal state, or appeal to the interfering salvage company's flag state, or (when certain international law rules permit) act itself against the interfering vessel.²¹³ Instead of such a cumbersome solution (usually carried out *after* underwater cultural heritage is already found and interrupted, rather than before), a state can join the Convention and automatically have its sunken state vessels protected by all the other member states, many of which are coastal states.

The Convention is not perfect. Nonetheless, even with its gaps and drawbacks, it seems that its benefits outweigh its disadvantages. The main apparent gain from not joining is assuring that coastal states do not *possibly* acquire *limited* jurisdiction over underwater cultural heritage in the Exclusive Economic Zone and the Continental Shelf.²¹⁴ Not joining the Convention means, *inter alia*, a limited ability to impact international underwater cultural heritage governance and limited aptitude to demand action (or inaction) from other countries. To that, the advantages of joining should be added: The Convention can actually be seen as a useful tool for reinstating sovereignty over sunken state vessels and adhering to international law with regard to marine jurisdiction; it can be used as a constructive instrument to reconcile post-colonies' claims with post-colonial powers' interests; and it can be a significant apparatus for establishing an international regime for the protection and preservation of underwater gravesites and preventing abuse of underwater cultural heritage. In short, a cost-benefit analysis supports the claim that the Convention's advantages outweigh its shortcomings.

CONCLUSION

Since its institution, the Convention has accomplished some notable achievements: it helped raise global awareness of the importance of protecting underwater cultural heritage, inspired international cooperation towards that end, and developed an ever-growing international consensus around its principles. Concerns expressed by notable maritime powers when it was negotiated – that it might dilute certain international law principles, particularly, that it might compromise sovereign immunity of sunken state vessels and disrupt the delicate

respect amongst sovereigns, the general adherence to archaeological standards, etc.). Chechi, *supra* note 101, at 128, 186–92.

213. *Dutch Report*, *supra* note 126, at 14.

214. Coastal states, as noted, already enjoy the rights to the natural resources in these waters.

balance achieved in UNCLOS concerning coastal states' jurisdiction in international waters – did not materialize, as this paper suggests.

Despite the Convention's many achievements, the protection and governance of underwater cultural heritage is still facing troubled waters. Unauthorized salvage and looting remain an acute threat to this richness of humankind legacy. Alongside these, new challenges arise. These include recognizing contradicting interests of former colonies and former colonial powers in underwater cultural heritage, devising a global policy for the protection of underwater gravesites, and preventing the exploitation of underwater cultural heritage as a means for asserting territorial claims. The Convention—the international framework aimed at the protection and governance of underwater cultural heritage—can be a bridge over these troubled waters. As this paper discusses, the Convention's provisions regarding *in-situ* preservation and international cooperation can mitigate former colonies and former colonial powers' interests, providing a win-win situation in which both international principles of immunity and patrimonial ties are respected. The Convention can fill the void in international law concerning underwater graves by utilizing the historical opportunity in which World War I's sunken war vessels legally become underwater cultural heritage to create an international regime for the protection of underwater graves. The provisions prohibiting the use of the Convention as grounds to assert national sovereignty claims, along with the cooperation and coordination mechanisms, and the provisions acknowledging possible joint links to underwater cultural heritage set in the Convention, illustrate that the Convention can be an important tool in the prevention of exploiting underwater cultural heritage as a means to assert territorial claims. This, the Convention does while upholding, and perhaps even strengthening, international law of marine jurisdiction and sovereign immunity.

The Convention still contains some gaps and drawbacks that need to be settled: It lacks a clear mechanism for dealing with hazardous underwater cultural heritage; its definition of underwater cultural heritage excludes recently submerged artifacts (even if they carry significant cultural value), and excludes intangible aquatic cultural heritage (thus failing to recognize non-Western perceptions of heritage); it lacks practical enforcement mechanisms; and it is perhaps not well equipped to tackle possible threats related to climate change. Nonetheless, the Convention's advantages outweigh its disadvantages.

Joining the Convention is, therefore, the way forward. Strengthening the Convention is paramount not merely because it protects precious cultural heritage, but also because its principles have the power to mitigate current challenges and construct wise choices for the future.

To Be a Woman in the World of Sport: Global Regulation of the Gender Binary in Elite Athletics

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ABSTRACT

Indian sprinter Dutee Chand made headlines and history when she successfully challenged the validity of an international rule of athletics that disqualified her from competition because of the “masculine” level of naturally-occurring testosterone in her body. The decision of the Court of Arbitration for Sport in Chand’s favor demonstrates that the International Association of Athletics Federations, despite being the duly authorized regulator of international athletics competition, does not operate unconstrained in policing the boundaries of sex and gender, particularly when it does so in a discriminatory manner. Rather, a number of accountability principles and mechanisms of so-called “global administrative law” must be satisfied to justify any rule for dividing elite athletes into binary sex categories. This paper considers the particular administrative law requirements that, pursuant to the landmark decision in Chand’s case, must characterize the development, implementation, and review of international sporting rules, particularly those that discriminate on the basis of sex or gender. In doing so, it illustrates that global administrative law has an important role to play in protecting and promoting gender equality in sport.

I am unable to understand why I am asked to fix my body
in a certain way simply for participation as a woman.
I was born a woman, reared up as a woman, I identify as a woman
and I believe I should be allowed to compete with other women.

Dutee Chand¹

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1. Letter addressed to the Athletics Federation of India, reproduced in part in *Dutee Chand v.*

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INTRODUCTION

In 2015, Indian sprinter, Dutee Chand, made headlines and history when she successfully challenged the validity of an international rule of athletics, which had disqualified her from competition based on the “masculine” level of naturally-occurring testosterone in her body. In a landmark decision, the Court of Arbitration for Sport (CAS) suspended the rule, which effectively governed the binary division of the sexes in athletics, concluding that it unjustifiably discriminated against certain female athletes. The Court granted the global rule-maker, the International Association of Athletics Federations (IAAF), two years to provide additional evidence to justify its discriminatory rule, failing which, it would be declared void. A final decision by the CAS based on the additional evidence submitted by the IAAF is still pending at this time.

Chand’s successful appeal illustrates that the IAAF, despite being the duly authorized regulator of international athletics competition, does not operate

Athletics Fed’n of India (AFI) & The Int’l Ass’n of Athletics Fed’ns (IAAF), Interim Arbitral Award, CAS 2014/A/3759 [Chand], ¶ 29.

unconstrained in policing the boundaries of sex and gender. Rather, its regulatory efforts are subject to various checks and balances to ensure legitimacy and legality. This paper considers some of the particular accountability principles and mechanisms, collectively termed “global administrative law” (GAL)² that must be satisfied to justify a binary sex classification rule for elite athletics competition. It contends that, by imposing certain fairness requirements on the development, implementation, and review of sporting rules, GAL plays an important role in protecting and promoting gender equality in athletics and the broader world of sport.

For context, this article begins by considering the underlying purposes of binarily dividing the sexes in athletics (Part I). It then describes how enforcement of the binary division as well as common understandings of sex, gender, and equality have evolved, albeit incongruously (Parts II and III). The controversial case of Dutee Chand is then introduced (Part IV), followed by a summary of the landmark ruling on her appeal to the CAS (Part V). Next, an overview of the broader regime governing international athletics, in which the IAAF operates, is described (Part VI). This provides the basis for an analysis of GAL constraints on the IAAF’s regulatory authority, with respect to the development, implementation, and review of a binary sex classification rule (Part VII). Finally, some concluding reflections are offered on the role of GAL in promoting gender equality in sport (Part VIII).

I.

THE PURPOSE OF THE BINARY DIVISION OF THE SEXES IN ATHLETICS

Competitive sport, with few exceptions,³ is organized into binary sex categories: male and female. This division is purportedly meant to create and maintain a level playing field, to the benefit of female athletes, who could not meaningfully compete against male athletes due to the latter’s natural physical advantages.⁴ While this rationale does not necessarily hold true across all sports, it is largely undisputed with respect to athletics, with its emphasis on outright speed and power.⁵ Nevertheless, notions about the fairness achieved by binary sex classification must take into account its other functions, as well as its challenges and contradictions.

2. See Benedict Kingsbury, Nico Krisch & Richard B. Stewart, *The Emergence of Global Administrative Law*, 68 *LAW & CONTEMP. PROBS* 15 (2005).

3. For instance, equestrian and luge are the only Olympic sports that include mixed events in which men and women compete against each other without restriction. Certain other sports (e.g., badminton, sailing, tennis, alpine skiing, figure skating) include mixed team events in which each team is composed of an equal number of male and female athletes. See *Sports*, OLYMPICS, <https://www.olympic.org/sports> (last visited Apr. 13, 2017).

4. *Chand*, *supra* note 1, ¶ 36(d).

5. *But see*, Bruce Kidd, *Sports and Masculinity*, 16 *SPORT IN SOCIETY: CULTURES, COMMERCE, MEDIA, POLITICS* 553, 558 (2013).

International athletics competition began as a celebration of hyper-“masculinity” – characterized by attributes such as physical strength, power, aggression and dominance – from which women were excluded altogether.⁶ In fact, the founder of the modern Olympics, Pierre de Coubertin, envisioned the Games as “the solemn and periodic exaltation of male athleticism with internationalism as a base, loyalty as a means, art for a setting, and female applause as a reward.”⁷ In his outdated and outlandish opinion, Olympics with women would be impractical, uninteresting, unaesthetic and incorrect.⁸ The formal, albeit limited, integration of women was only conceded in response to the threat of separate female sports federations and Games.⁹ Beyond ensuring fair competition, then, binary sex classification can be seen to function as a means of monopolizing prestige, generating economic value,¹⁰ and preventing “feminization” of the traditional domain of men’s sport.¹¹

Not only does binary sex classification serve multiple purposes beyond ensuring fairness, the rationality of this purported primary purpose is not beyond doubt. In particular, reliance on binary sex classification as the fundamental means of ensuring fairness in sport glosses over the fact that innumerable other natural and environmental factors contribute to each athlete’s relative advantages and disadvantages – from height and lung capacity to coaching and training facilities – none of which are used as a formal basis for separate categories of competition. Rather than being a level playing field, athletics is “a site wherein broader forms of social inequality are accepted, tolerated, and ignored.”¹² So too are all biological inequalities besides age, certain recognized disabilities, and, of course, sex. Notably, the binary division of the sexes is a uniquely absolute organizational rule in athletics, permeating all other categories of competition, such as age and ability.¹³

6. See *id.* at 554–58; Sylvain Ferez, *From Women’s Exclusion to Gender Institution: A Brief History of the Sexual Categorisation Process within Sport*, 29 INTL. J. HIST. SPORT 272, 273 (2012).

7. *Revue Olympique* (July 1912) 2nd Series, N° 79, at 110–11. The original French text reads: “[N]otre conception des Jeux Olympiques dans lesquels nous estimons qu’on a cherché et qu’on doit continuer de chercher la réalisation de la formule que voici: l’exaltation solennelle et périodique de l’athlétisme mâle avec l’internationalisme pour base, la loyauté pour moyen, l’art pour cadre et l’applaudissement féminin pour récompense.”

8. *Id.* at 110.

9. Ferez, *supra* note 6, at 272.

10. SEEMA PATEL, INCLUSION AND EXCLUSION IN COMPETITIVE SPORT: SOCIO-LEGAL AND REGULATORY PERSPECTIVES 153 (2015).

11. See, e.g., Kidd, *supra* note 5, at 558–59.

12. Cheryl Cooky & Shari L. Dworkin, *Policing the Boundaries of Sex: A Critical Examination of Gender Verification and the Caster Semenya Controversy*, 50 J. SEX RES. 103, 107 (2013).

13. Though athletes may never compete outside of their designated sex category, younger or disabled athletes are often permitted to compete “above” their designated category with older athletes or able-bodied peers. See, e.g., *Rio 2016 Olympic Games Entry Standards*, IAAF, <https://www.iaaf.org/competition/standards/2016>, at 4 (last visited Apr. 12, 2017); Kharunya Paramaguru, *Before Oscar Pistorius: Athletes Who Have Competed in Both the Olympics and Paralympics*, TIME, <http://olympics.time.com/2012/09/03/before-oscar-pistorius-athletes-who-have-competed-in-both-the-olympics-and-paralympics>, Sept. 3, 2012 (last visited Apr. 13, 2017).

In light of the complex array of factors that contribute to athletic performance, binary sex classification provides a simple and standardized structural framework within which sport can operate.¹⁴ It therefore has significant pragmatic value, providing the stability, predictability, and international consistency necessary for elite athletics competition. These benefits come at the risk, however, of perpetuating the patriarchal status quo upon which athletics competition was founded. The binary division of the sexes in athletics must therefore be assessed in relation to its sole legitimate objective: ensuring fairness by maintaining a level playing field for the benefit of female athletes. The question, then, is how to define and enforce the division between sexes in a manner that faithfully achieves this aim.

II.

THE EVOLUTION OF BINARY SEX CLASSIFICATION ENFORCEMENT

As soon as women began participating in significant numbers in sanctioned athletics competitions, so too did strict policing of the sex binary. Following a variety of early intermittent sex verification practices,¹⁵ the IAAF introduced a rule in 1948 requiring female competitors to provide a medical certificate to prove their eligibility.¹⁶ The basis and content of the certificate were not standardized, indicating an underlying assumption that “the social or cultural definition [of ‘female’] in any nation was acceptable for sports, and that any nation’s judgement could be trusted.”¹⁷ This changed in the 1960s as a rise in the performance level of elite female athletes¹⁸ and mounting concerns about males posing as female led the IAAF and the International Olympic Committee (IOC) to institute systematic biomedical sex testing.¹⁹ Starting in 1966, all female athletes were required to undergo physical inspections of their breasts and genitalia by a panel of physicians prior to international competitions. Unsurprisingly, these “nude parades” proved to be terribly demeaning and, in 1968, were replaced by mandatory chromosomal testing of saliva.²⁰ While less invasive, the “Barr test,” which determines female-status based on the presence of a second X chromosome, was found to be scientifically unreliable, as it did not account for atypical chromosomal

14. PATEL, *supra* note 10, at 153.

15. Nathan Q. Ha et al., *Hurdling Over Sex? Sport, Science, and Equity*, 43 ARCHIVES SEXUAL BEHAV. 1035, 1036 (2014).

16. Dee Amy-Chinn, *The Taxonomy and Ontology of Sexual Difference: Implications for Sport*, 15 SPORT IN SOCIETY 1291, 1298 (2012); Erin Elizabeth Berry, *Respect for The Fundamental Notion of Fairness of Competition: The IAAF, Hyperandrogenism, and Women Athletes*, 27 WIS. J.L. GENDER & SOC’Y 207, 210 (2012).

17. Vanessa Heggie, *Testing Sex and Gender in Sports; Reinventing, Reimagining, and Reconstructing Histories*, 34 ENDEAVOUR 157 (2010).

18. Berry, *supra* note 16, at 208.

19. Ha et al., *supra* note 15, at 1036. There is only one documented instance of a man “masquerading” as a woman for the purposes of athletics competition. See Laura Donnellan, *Gender Testing at The Beijing Olympics*, 1 BRIT. ASS’N SPORT & L. 20, 21 (2008).

20. Ha et al., *supra* note 15, at 1036.

combinations or the “array of developmental possibilities where chromosomal, gonadal, hormonal, anatomic, and psychosocial sex may be discordant.”²¹ Still, it took the IAAF and the IOC two decades – and an infamous case of unfair disqualification – to make any changes.²² In the early 1990s, the IAAF briefly instituted comprehensive medical examinations of both male and female athletes.²³ This costly procedure was quickly replaced, however, with individual medical determinations on an “as needed” basis, where concerns were raised by competitors, anti-doping officials or an athlete herself.²⁴ Not until 1999 did the IOC, which had continued with chromosomal testing, harmonize its rules with the IAAF’s on-site “inspect if you suspect” policy.²⁵

In 2006, the IAAF elaborated this approach in a “Policy on Gender Verification,” which stipulated that in the event of any “suspicion” or a “challenge” concerning an athlete’s gender, she can be asked to attend a medical evaluation before a panel comprised of a range of specialists.²⁶ The Policy provided only very vague guidance, however, with respect to the steps to be taken in the handling of such cases. The significant shortcomings of the Policy – both practical and ethical – were soon revealed in two highly publicized and controversial cases. The testing and disqualification of Santhi Soundarajan of India in 2006 and of Caster Semenya of South Africa in 2009 each involved a lack of informed consent and leaks to the media, resulting in severe emotional distress for both athletes as well as widespread public outrage.²⁷ These cases thus made clear that the IAAF’s policy was inadequate to ensure a professional and confidential investigative procedure in “suspicious” cases.

In an attempt to improve its approach, the IAAF consulted with the IOC to develop “Regulations Governing Eligibility of Females with Hyperandrogenism to Compete in Women’s Competition” (the “Hyperandrogenism Regulations” or “Regulations”).²⁸ Introduced in 2011, the Regulations purported to “replace the IAAF’s previous Gender Verification Policy” and emphasized that “the IAAF has now abandoned all reference to the terminology ‘gender verification’ and ‘gender

21. *Id.*

22. In 1985, Maria Jose Martinez Patino of Spain was disqualified from international athletics competition after failing a sex-verification test. Patino became the first woman to publicly protest her disqualification and, after a geneticist proved she had complete androgen insensitivity and therefore derived no competitive advantage from testosterone, she was reinstated in 1988. *See Berry, supra* note 16, at 212.

23. Ha et al., *supra* note 15, at 1037.

24. *Id.*

25. *Id.* at 1037, 1039.

26. IAAF Medical & Anti-Doping Comm’n 2006, *IAAF Policy on Gender Verification*, (Sept. 16, 2009), https://oii.org.au/wp-content/uploads/2009/01/iaaf_policy_on_gender_verification.pdf.

27. Ha et al., *supra* note 15, at 1037; Ruth Padawer, *The Humiliating Practice of Sex-Testing Female Athletes*, N.Y. TIMES (June 28, 2016), https://www.nytimes.com/2016/07/03/magazine/the-humiliating-practice-of-sex-testing-female-athletes.html?_r=0.

28. IAAF, *Regulations Governing Eligibility of Females with Hyperandrogenism to Compete in Women’s Competition* (2011) [hereinafter *Hyperandrogenism Regulations*].

policy’ in its Rules.”²⁹ The Regulations restricted the permissible amount of naturally-occurring testosterone female athletes may have in their bodies. More specifically, they deemed women ineligible to compete in international athletics competition if they had a functional endogenous testosterone level in the “normal male range”, defined as 10nmol/L or above (i.e. hyperandrogenism).³⁰ The Regulations thus instituted a limitation on the IAAF’s general sex categorization rule, which provides that an athlete is eligible to compete in women’s events if she is “recognised as a female in law”.³¹

The Regulations further set out when and how a female athlete may be investigated for hyperandrogenism. In addition to requiring mandatory self-declaration, the Regulations empower the IAAF Medical Manager to investigate an athlete if the Manager has “reasonable grounds” for believing, based on “any reliable source”, that the athlete may be hyperandrogenic.³² The investigative process involves three stages: an initial clinical examination, a preliminary endocrine assessment and a full examination and diagnosis.³³ An Expert Medical Panel then makes a recommendation, including any conditions that would bring the athlete into compliance, to the IAAF Medical Manager, who makes the final decision.³⁴ The Regulations are of “mandatory application” to all female athletes who seek to compete in international athletics and “recommended as a guide” for national athletics federations and domestic competitions.³⁵ The Regulations’ Explanatory Notes describe their underlying rationale:

The IAAF’s role as the international governing body for the sport of Athletics is first and foremost to guarantee the fairness and integrity of the competitions that are organized under its Rules. Men typically achieve better performances in sport because they benefit from higher levels of androgens than women and this is predominantly why, for reasons of fairness, competition in Athletics is divided into separate men’s and women’s classifications. By extension, since it is known today that there are rare cases of females with [hyperandrogenism] competing in women’s competitions, in order to be able to guarantee the fairness of such competitions for all female competitors, the new Regulations stipulate that no female with [hyperandrogenism] shall be eligible to compete in a women’s competition if she has functional androgen [testosterone] levels that are in the male range.³⁶

29. *Id.* at Reg. 1.4.

30. *Id.* at Reg. 6.5 (noting that an athlete’s testosterone is considered “functional” unless an androgen resistance prevents her body from deriving a competitive advantage from testosterone).

31. IAAF, *Competition Rules 2016-2017*, Rule 141 ¶ 5.

32. *Hyperandrogenism Regulations*, *supra* note 29, at Reg. 2.1 – 2.2.

33. *Id.* at Chapter 5.

34. *Id.* at Reg. 5.24.

35. *Id.* at Reg. 1.2.

36. Chand, *supra* note 1, ¶ 67.

The Regulations, like all past sex verification practices, apply only to female athletes.³⁷ Although the Regulations do not determine an athlete's sex or gender writ large, they effectively do so for the purpose of athletics competition. That is, the Regulations continue to define what it means to be a "female athlete."³⁸ This has led many to aptly observe that removing the "gender verification" or "sex testing" label is merely a symbolic gesture or semantic change.³⁹ The Hyperandrogenism Regulations are thus simply the latest incarnation of a nearly century-long tradition of "femininity testing" in athletics, which exhibits a relentless "determination to establish gender bi-categorization biologically, despite the difficulties and dead-ends in the way."⁴⁰ These difficulties arise from evolving understandings of sex, gender, and equality, which reveal how the binary division of the sexes – a strategy for ensuring female athletes an equal opportunity to engage in fair and meaningful competition – can be regulated in a manner that, paradoxically, undermines that very aim.

III.

EVOLVING UNDERSTANDINGS OF SEX, GENDER, AND EQUALITY

Since the emergence of international athletics competition, global understandings of sex and gender identity, and associated legal protections, have evolved significantly. While not globally consistent, and subject to constant challenge, several general trends can be identified.⁴¹ First, there is now wide acknowledgement that despite their significant overlap, sex (a biological state) is distinct from gender (a social construction).⁴² There is also growing acceptance that both sex and gender exist on a spectrum, which includes a variety of overlapping characteristics and identities beyond the polar opposites of male and female.⁴³ As a result, there is increasing reluctance to rely on singular, or even multiple, characteristics as determinative of a certain sex or gender. In fact, at least 10 indicators of sex and gender have been identified: chromosomal sex, gonadal sex, foetal hormonal sex, internal morphological sex, external morphological sex, brain sex, sex of assignment and rearing, pubertal hormonal

37. *Hyperandrogenism Regulations*, *supra* note 28, at Chapter 1.

38. *Id.* at Reg. 1.3 ("No female with hyperandrogenism shall be permitted to compete in the female category of an International Competition until her case has been evaluated by the IAAF in accordance with these Regulations.").

39. See Anaïs Bohuon, *Gender Verifications in Sport: From an East/West Antagonism to a North/South Antagonism* 32 INT'L J. HIST. SPORT 965, 966 (2015); Alex Hutchinson, *An Imperfect Dividing Line*, THE NEW YORKER (March 27, 2015), <http://www.newyorker.com/news/sporting-scene/dutee-chand-gender-testing-imperfect-line/>.

40. Ferez, *supra* note 6, at 272.

41. The description of these trends is a simplification of very complex socio-legal developments, sufficient only for the purposes of this article.

42. It has also been argued that sex is as socially constructed as gender, and thus there is actually no such distinction between them. See Amy-Chinn, *supra* note 16, at 1296.

43. See, e.g., *Gender Revolution: Special Issue on the Shifting Landscape of Gender*, NATIONAL GEOGRAPHIC (Jan. 2017), <http://www.nationalgeographic.com/magazine/2017/01/>.

sex, gender identity and role, and procreative sex.⁴⁴ The development of such comprehensive and nuanced conceptions of sexual and gender identity has corresponded with a wide range of efforts to overcome prejudicial gender stereotypes, particularly those which define masculinity and femininity in terms of physical dominance and submission, respectively.⁴⁵

Sex testing in athletics largely ignores these developments, however, by conflating sex, gender, and femininity, and enforcing a binary it admits does not exist in reality.⁴⁶ For instance, the terms “sex testing,” “gender verification,” and “femininity testing” are commonly used nearly interchangeably by officials, athletes, and reporters.⁴⁷ Further, the Hyperandrogenism Regulations themselves, despite recognizing sex as a continuum, effectively reinstate it as a binary in sporting practice. In so doing, they impose a test that reflects “socially inscribed dichotomous sex in the face of evidence to the contrary.”⁴⁸

Another important development with implications for the legitimacy of binary sex classification is the emergence and development of human rights law and its protection of sexual and gender equality. The past half century has seen explicit prohibitions against discrimination on the basis of sex or gender enshrined in a range of legal instruments, including national constitutions and human rights legislation,⁴⁹ as well as international declarations and treaties.⁵⁰ Although most of these instruments do not explicitly refer to transgender individuals, evolving

44. Amy-Chinn, *supra* note 16, at 1297, (citing Anne Fausto-Sterling, *How to Build a Man*, in CONSTRUCTING MASCULINITY 129 (Maurice Berger et al. eds., 1995)). Further, even the chairman of the IOC’s medical commission has listed eight criteria to be taken into account in determining sex: sex chromosome constitution; sex hormonal patterns; gonadal sex (i.e. testes or ovaries); internal sex organs; external genitalia; secondary sexual characteristics; apparent sex; and psychological sex. *Id.*

45. See, e.g., UN Office of the High Commissioner for Human Rights, *Gender stereotypes/stereotyping* (last visited Apr. 13, 2017), <http://www.ohchr.org/EN/Issues/Women/WRGS/Pages/GenderStereotypes.aspx/>; UN Women, *Countering Gender Discrimination and Negative Gender Stereotypes: Effective Policy Responses* (July 13, 2011), <http://www.unwomen.org/en/news/stories/2011/7/countering-gender-discrimination-and-negative-gender-stereotypes-effective-policy-responses>.

46. See Chand, *supra* note 1, ¶ 35(e).

47. Laura A. Wackwitz, *Verifying the Myth: Olympic Sex Testing and the Category ‘Woman.’* 26 WOMEN’S STUD. INT’L F. 553, 554 (2003).

48. Ha et al., *supra* note 15, at 1037.

49. See UN Women, *Global Gender Equality Constitutional Database* (last visited Apr. 13, 2017), <http://constitutions.unwomen.org/en>.

50. See, e.g., G.A. Res. 217 (III) A, Universal Declaration of Human Rights (Dec. 10, 1948); International Covenant on Civil and Political Rights, Dec. 16, 1966, 999 U.N.T.S. 171; International Covenant on Economic, Social and Cultural Rights, Dec. 16, 1966, 993 U.N.T.S. 3; Convention on the Elimination of All Forms of Discrimination against Women, Dec. 18, 1979, 1249 U.N.T.S. 13; Fourth World Conference on Women, *Beijing Declaration and Platform for Action*, U.N. Doc. A/CONF.177/20 (Sept. 4-15, 1995) and A/CONF.177/20/Add.1 (Sept. 4-15, 1995); European Convention for the Protection of Human Rights and Fundamental Freedoms, Nov. 4, 1950, 213 U.N.T.S. 221; American Convention on Human Rights, Nov. 22, 1969, 1144 U.N.T.S. 123; African Charter on Human and Peoples’ Rights, June 27, 1981, 1520 U.N.T.S. 217.

judicial conceptions of human rights broadly interpret gender equality to include gender identity as a prohibited grounds of discrimination.⁵¹

Gender equality has also recently gained unprecedented traction in the world of sport. For instance, 2004 saw the establishment of the IOC's Women in Sport Commission and the addition of a Fundamental Principle to the Olympic Charter, prohibiting discrimination on a number of grounds including sex.⁵² Other relevant Fundamental Principles of Olympism include "the preservation of human dignity" and the assurance that "[e]very individual must have the possibility of practising sport, without discrimination of any kind."⁵³ The Olympic Charter was further amended in 2007 to explicitly task the IOC "to encourage and support the promotion of women in sport at all levels and in all structures with a view to implementing the principle of equality of men and women."⁵⁴ These developments are mirrored within the IAAF, which now has a Women's Committee and, pursuant to its Constitution, the obligation to "strive to ensure that no gender...discrimination exists, continues to exist, or is allowed to develop in Athletics in any form, and that all may participate in Athletics regardless of their gender."⁵⁵

Despite these important advances, the administration of international athletics has not fully embraced contemporary conceptions of sex, gender, and equality that challenge traditional binary thinking. These evolving conceptions, which have had substantial impacts in many areas of social life, are poorly reflected in the context of athletics because "few other fields rely so absolutely for their functioning on a clear distinction between male and female bodies."⁵⁶ Even if a contrived binary division is appropriate and necessary for athletics, however, evolving understandings of sex, gender, and equality cannot be easily ignored. Rather, they form the context for assessing the legitimacy of any rule that divides the sexes and provide a basis for challenging such a rule when it unfairly impacts a female athlete, like it did Dutee Chand.

51. See, e.g., *Identoba and Others v. Georgia*, No. 73235/12, European Court of Human Rights (Fourth Section), ¶ 96 (May 12, 2015), [http://hudoc.echr.coe.int/eng#{"itemid":\["001-154400"\]}](http://hudoc.echr.coe.int/eng#{) (clarifying that all trans people are protected against discrimination on grounds of gender identity under Article 14 of the European Convention on Human Rights); National Legal Services Authority v. Union of India, No. 604, Writ Petition (Civil), Supreme Court of India, ¶¶ 76-77 (2013), <http://supremecourtindia.nic.in/outtoday/wc40012.pdf> (declaring transgender a "third gender" with which anyone may self-identify, and affirming that the fundamental rights granted under the Constitution of India apply equally to all three genders).

52. International Olympic Committee, *Women in Sport Commission*, <https://www.olympic.org/women-in-sport-commission>; International Olympic Committee, Olympic Charter, Aug. 2, 2015, Fundamental Principle 6, at 14.

53. International Olympic Committee, Olympic Charter, Fundamental Principle 2, 4, at 13.

54. *Id.* at 18, Art. 2, ¶ 7.

55. International Association of Athletics Federation, Nov. 1, 2015, art. 3.4 [hereinafter *IAAF Constitution*].

56. Amy-Chinn, *supra* note 16, at 1291.

IV.

THE CASE OF DUTEE CHAND

In June 2016, at age 20, Dutee Chand became the first Indian sprinter to qualify for the women's 100-metre dash at the Olympics since 1980.⁵⁷ Just one year before that qualifying performance, however, it was unclear whether she would ever race again. The series of events leading to that uncertainty began in 2012, when Chand moved to an elite training facility in India and began a very successful career in junior athletics. The facility was operated by the Sports Authority of India (SAI), a public body established by the Government of India's Ministry of Youth Affairs and Sports.⁵⁸ In 2013, the Ministry promulgated a "Standard Operative Procedure to identify circumstances (female Hyperandrogenism) in which a particular sports person [would] not be eligible to participate in competitions in the female category" (the "SOP").⁵⁹ The SOP, a binding procedure with which the SAI and the Athletics Federation of India (AFI) are required to comply, provided for a similar, but not identical, process of hyperandrogenism testing as the IAAF's Regulations.⁶⁰

In June 2014, several female athletes attending a training camp with Chand apparently expressed concern to the AFI President about her "masculine" physique.⁶¹ Subsequently, some officials from the Asian Athletics Federation and national coaches present at the Junior Athletics Championships questioned Chand's right to participate in female events based on her "stride and musculature."⁶² Later that month, under the supervision of the Director of the AFI, Chand underwent an ultrasound examination which she believed to be part of a routine doping test.⁶³ Soon after, the AFI sent a letter to the SAI expressing "definite doubts" regarding Chand's gender.⁶⁴ Since it could not identify a

57. Joshua Arpit Nath, *Dutee Chand Becomes First Indian In 36 Years To Qualify For Women's 100m In Olympics*, TIMES OF INDIA (June 25, 2016), <http://www.indiatimes.com/sports/rio-olympics/dutee-chand-finally-qualifies-for-rio-olympics-sprints-to-100m-in-11-30-seconds-257332.html>.

58. Chand, *supra* note 1, ¶ 8.

59. *Id.* ¶ 9.

60. *Id.* Pursuant to the SOP, cases of suspected hyperandrogenism are referred to a "nodal officer" of the national sports federation or SAI, who arranges for a female doctor to conduct a physical examination of the athlete. If that examination raises questions, the athlete is tested to determine the level of testosterone in the athlete's serum. If the concentration exceeds 6.9nmol/L, a medical panel selected by the SAI conducts a detailed medical evaluation that includes determining the level of certain hormones and a chromosomal analysis, and may also include an MRI scan of the pelvis and a psychological evaluation. On the basis of those tests, the panel makes a recommendation to the SAI as to whether the athlete should be allowed to compete in the female category. See Chand, *supra* note 1, ¶ 391.

61. *Id.* ¶ 392.

62. *Id.*

63. *Id.* ¶ 11. The AFI claimed the examination was carried out in response to Chand's complaints about stomach problems, and was not connected to gender or hyperandrogenism testing. See *id.*, ¶ 12.

64. *Id.* ¶ 13.

suitable female investigative officer, as required by the SOP, the AFI suggested the SAI conduct a gender verification test “as per the established protocol.”⁶⁵ The SAI then subjected Chand to a number of medical examinations, including blood tests, gynaecological tests, karyotyping, an MRI and a further ultrasound.⁶⁶

In mid-July, the SAI notified Chand that she would be excluded from the upcoming World Junior Championships and would not be eligible for selection to the Commonwealth Games because her “male hormone” levels were too high.⁶⁷ The SAI then issued a public statement indicating that an unnamed athlete had been found ineligible to participate in female events based on the results of a hyperandrogenism test, which was part of “SAI protocol” and “stipulated by the IAAF and the IOC.”⁶⁸ The SAI then informed the AFI that Chand had hyperandrogenism and should be excluded from competition, noting that it would assist Chand in accessing the medical assistance necessary to lower her testosterone to permissible levels for competition.⁶⁹ Soon after, the AFI notified Chand that, based on medical reports received from the SAI, she was provisionally suspended from all athletics competitions until she complied with the IAAF’s Regulations.⁷⁰ Both Chand and the SAI unsuccessfully petitioned the AFI to reconsider its decision.⁷¹

Rather than undergo the recommended treatment to lower her testosterone, Chand appealed the AFI’s decision to the Court of Arbitration for Sport (“CAS”) – an independent tribunal that resolves global sports-related disputes through private arbitration.⁷² Chand alleged that the IAAF’s Hyperandrogenism Regulations unlawfully discriminated against certain female athletes on the basis of sex and a natural physical characteristic (testosterone level).⁷³ Her bold move to publicly challenge the IAAF’s regulatory regime was path-breaking in the world of global sports law, but an even bigger breakthrough was to come.

V.

THE LANDMARK CAS DECISION

In July 2015, after a three-day hearing involving detailed submissions from the parties and testimony from 16 witnesses, the CAS released its ruling on

65. *Id.* ¶ 14.

66. *Id.* ¶ 15.

67. *Id.* ¶ 16.

68. *Id.* ¶ 20.

69. *Id.* ¶ 24.

70. *Id.* ¶ 27.

71. *Id.* ¶¶ 29–31.

72. COURT OF ARBITRATION FOR SPORT, *Frequently Asked Questions: What is the Court of Arbitration for Sport?* <http://www.tas-cas.org/en/general-information/frequently-asked-questions.html>.

73. Chand, *supra* note 1, ¶ 4.

Chand's appeal ("*Chand*").⁷⁴ Significantly, there was no dispute that the Hyperandrogenism Regulations were prima facie discriminatory, contrary to the Olympic Charter, the IAAF Constitution, and the laws of Monaco (where the IAAF is headquartered).⁷⁵ Thus, the panel's analysis focused on whether the discrimination was justified as a necessary, reasonable, and proportionate means of creating a level playing field for female athletes as whole, despite denying some individuals the fundamental right to compete at all.⁷⁶

At the outset, the parties agreed that, although human sex is "not simply binary" and "there is no single determinant of sex," the binary division of the sexes is "appropriate and is for the benefit of female athletes and their ability to engage in meaningful competition by competing on a level playing field."⁷⁷ Further, all agreed that while it is necessary for the IAAF to formulate a basis for the binary division of the sexes based on an objective criterion or criteria,⁷⁸ "gender testing" is not an appropriate mechanism in this regard.⁷⁹ That is, the basis for dividing the sexes for the purpose of athletics competition cannot be determinative of a person's sex per se, as that determination is purely "a matter of law."⁸⁰ This tenuous distinction suggests that while Chand is indisputably a woman in law and every other area of social life,⁸¹ she may not be considered as such in the sports arena. In fact, the panel acknowledged that the IAAF is essentially responsible for crafting a rule that has no bearing off the track:

As the body responsible for regulating the sport of athletics, the IAAF is in the invidious position of having to reconcile the existence of a binary male/female system of athletics categorization with the biological reality that sex in humans is a continuum with no clear or singular boundary between men and women. Devising eligibility rules that respect both of these contrasting realities – while ensuring fairness to individual athletes – is difficult and presents unique scientific, ethical and legal issues. The Panel is conscious of the significant challenges that the IAAF faces in establishing a regulatory framework that achieves the IAAF's goals in this sensitive and complex area.⁸²

When assessing the scientific evidence supporting the Hyperandrogenism Regulations, the CAS found the IAAF was reasonably entitled to rely on endogenous functional testosterone levels to differentiate between male and female athlete populations since there is a significant difference in average levels

74. Chand, *supra* note 1.

75. *Id.* ¶ 117.

76. *Id.* ¶¶ 35(f), 230, 500.

77. *Id.* ¶ 35(d)–(e).

78. *Id.* ¶ 35(f).

79. *Id.* ¶¶ 35(g), 510. The CAS also deemed mere examination of external genitalia or chromosomal testing inappropriate.

80. *Id.* ¶ 510.

81. *Id.* ¶ 36.

82. *Id.* ¶ 504.

of this hormone between men and women.⁸³ The panel emphasized, however, that women with high levels of endogenous testosterone relative to other females remain female and are not eligible to compete in the male category.⁸⁴ Therefore, according to the panel, “the Regulations do not police the male/female divide but establish a female/female divide within the female category.”⁸⁵ While this distinction is somewhat dubious, the panel properly focused its analysis not on whether measuring endogenous testosterone is an appropriate means of distinguishing between men and women, but rather on whether it is appropriate for distinguishing between women within the female category. The panel framed the question before it as follows: “[I]s it reasonable and proportionate to impose a test that excludes [a female athlete] from the female athlete category for the purposes of competition, when she exhibits, naturally, the characteristic most closely associated with male competitive advantage?”⁸⁶

In answering this question, the panel brought to light the implicit assumption underlying the Hyperandrogenism Regulations: “that hyperandrogenic females enjoy a significant performance advantage over their nonhyperandrogenic peers, which outranks the influence of any other single genetic or biological factor, and which is of comparable significance (if not identical magnitude) to the performance advantage [of 10 to 12%] that males typically enjoy over females.”⁸⁷ However, since no evidence before the panel scientifically established the degree of competitive advantage enjoyed by hyperandrogenic females over other females, the panel found that the Regulations could not be said to achieve their objective of excluding only female athletes with a competitive advantage “of the same order as that of a male athlete.”⁸⁸ Accordingly, the panel concluded that excluding hyperandrogenic females from competition (unless they take medication or undergo treatment) is not a “necessary and proportionate means of preserving fairness in athletics competition and/or policing the binary male/female classification.”⁸⁹

As a remedy, the panel immediately suspended the Hyperandrogenism Regulations.⁹⁰ Chand and all other legally female athletes have since been eligible to compete in both domestic and international athletics events.⁹¹ The panel’s decision is the first and only time the CAS has invalidated an entire regulatory regime enacted by an international federation – although it did not do so definitively. Rather, the panel granted the IAAF two years, plus a two-month extension – until the end of September 2017 – to provide additional evidence to

83. *Id.* ¶ 494.

84. *Id.* ¶ 510.

85. *Id.*

86. *Id.* ¶¶ 511–12.

87. *Id.* ¶ 517.

88. *Id.* ¶ 531.

89. *Id.* ¶ 532.

90. *Id.* ¶ 548.

91. *Id.* ¶ 2, at 160.

justify its Regulations, failing which they will be declared void.⁹² The panel also provided clear guidance as to the minimum required content of the additional evidence: it must establish that the degree of competitive advantage enjoyed by hyperandrogenic females over other females accords with that which justifies the male/female divide,⁹³ and is thus so significant that the participation of hyperandrogenic women in the female category “would subvert the very basis for having the separate category and thereby prevent a level playing field.”⁹⁴ The submission of such evidence by the IAAF would not automatically revalidate the Regulations. Rather, Chand would be granted an opportunity to respond and the panel would hold a further hearing to consider whether the evidence is sufficient to justify the Regulations in light of all the circumstances.⁹⁵

This landmark ruling – widely declared “a victory for women’s equality in sport”⁹⁶ – has resulted in the unprecedented absence of any rule to police the bi-categorization of the sexes in athletics. Historically, the abandonment of ineffective and unethical methods of bi-categorization has been conditional on international governing bodies first finding some other means of verifying sex or gender.⁹⁷ The *Chand* decision illustrates, however, that whether the IAAF justifies its suspended rule with new evidence or decides to either develop a new rule or accept the absence of any rule, its efforts to regulate the gender binary in sport will continue to be shaped and constrained by global administrative law (GAL).

VI.

THE GLOBAL GOVERNANCE REGIME FOR ATHLETICS

To appreciate the significance of the CAS holding the IAAF to GAL standards, the IAAF’s place within the broader global governance regime for athletics must be understood. Figure 1 provides a simplified diagrammatic representation of this regime, highlighting the key institutions and legal

92. *Id.* ¶ 548; Court of Arbitration for Sport, *CAS suspends the IAAF Hyperandrogenism Regulations until end of September 2017* (Jul. 28, 2017), http://www.tas-cas.org/fileadmin/user_upload/Media_Release_3759_July_2017.pdf. The IAAF recently announced that it has been collecting additional evidence, which has presumably now been submitted to the CAS. See IAAF, *Levelling the Playing Field in Female Sport: New Research Published in the British Journal of Sports Medicine* (Jul. 3, 2017), <https://www.iaaf.org/news/press-release/hyperandrogenism-research>.

93. Chand, *supra* note 1; *Id.* ¶ 535.

94. *Id.* ¶ 529. The CAS added that if the degree of advantage were well below 12%, the IAAF would have to consider whether that level justified excluding women with that advantage from the female category. *Id.* ¶ 534.

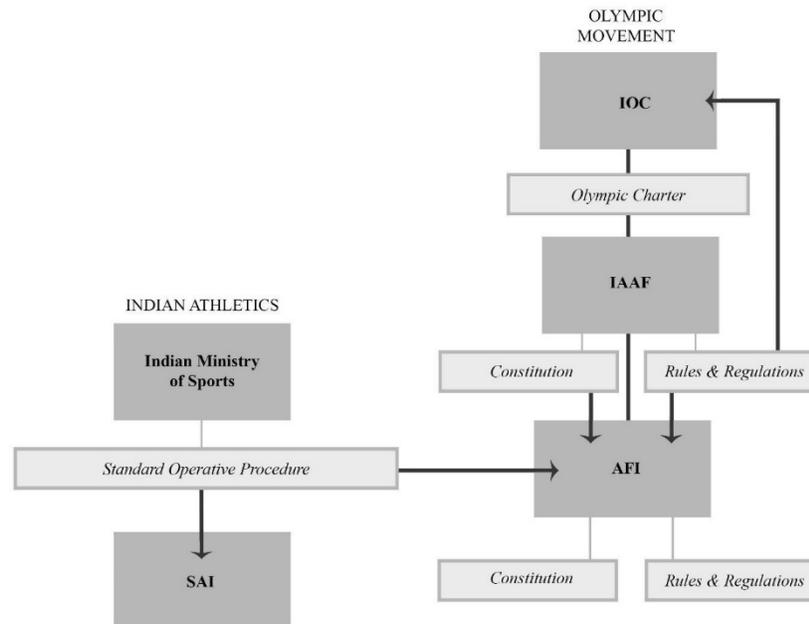
95. *Id.* ¶ 548.

96. Nihal Koshie, *Dutee Chand wins the right to compete*, INDIAN EXPRESS, July 29, 2015 (quoting Katrina Karkazis, <http://indianexpress.com/article/sports/sport-others/sprinter-dutee-chand-wins-right-to-compete/>).

97. See *supra*, Part II.

instruments involved in the creation and enforcement of global sports law in the particular context of Chand's case.

Figure 1: Overview of the Regime Governing Chand's Participation in International Athletics



The IAAF's rulemaking power within the above regime is best understood under the rubric of the Olympic Movement, which encompasses all organizations, athletes and others who wish to be a part of the Olympic Games. At the peak of the Olympic Movement is the IOC, which exercises "supreme authority and leadership" over all other components, including international governing bodies, like the IAAF, as well as national associations, like the AFI.⁹⁸ All members of the Olympic Movement are bound by the Olympic Charter and the decisions of the IOC.⁹⁹ The Charter, however, delegates to international federations the power "to establish and enforce, in accordance with the Olympic spirit, the rules concerning the practice of their respective sports and to ensure their application".¹⁰⁰ Accordingly, the IAAF aims to "compile and enforce rules and regulations governing Athletics and to ensure in all competitions, whether sanctioned by the

98. Olympic Charter, *supra* note 52, at Rule 1.1–1.3.

99. *Id.* at Rule 1.4.

100. *Id.* at Rule 26.1.1.

IAAF, an Area Association or a Member [i.e. national governing body], that such rules and regulations shall be applied in accordance with their terms.”¹⁰¹ To this end, the IAAF Constitution requires all national governing bodies to abide by its Rules and Regulations.¹⁰² The IAAF is therefore the primary regulator of athletics from the sub-national level all the way up to the Olympic level.¹⁰³

However, national federations are also subject to various domestic rules and regulations, which may differ from those of the IAAF. For instance, the AFI did not, at least initially, handle Chand’s case in accordance with the IAAF’s recommended Hyperandrogenism Regulations, finding itself (along with SAI) bound instead by the Indian Ministry of Sport’s SOP.¹⁰⁴ Nonetheless, when the AFI found itself unable to comply with the SOP-mandated investigatory procedure, it seemingly advised the SAI to implement the IAAF Regulations “so as to avoid any embarrassment to India in the International arena at a later stage.”¹⁰⁵ While it is unclear which investigatory procedure, if either, was actually followed in Chand’s case, this series of events illustrates the challenges that can arise from the overlap of multiple regulatory regimes, as discussed in further detail below.

Within this basic regime structure, it is worth considering the institutional character of the sole authorized rule-maker for international athletics competitions at the center of Chand’s case: the IAAF. This body was founded in 1912 by seventeen national athletic federations with the aim of meeting the needs for a global governing authority, a competition programme, standardized technical equipment and a list of official world records.¹⁰⁶ More recently, the IAAF has expanded its focus, emphasizing that “athletics is no longer just about high performance, gold medals and records, but also about ‘sport for all’ and about ensuring that the maximum number of citizens are able to participate in athletics.”¹⁰⁷ To this end, in 1982, the IAAF abandoned the traditional concept of amateurism, which restricted participation to socially and financially privileged individuals.¹⁰⁸ By increasing financial incentives, “the way to high performance was opened to larger groups of extremely talented athletes.”¹⁰⁹

An “association” under the laws of Monaco, the IAAF is a private governance institution that derives income from a combination of membership

101. IAAF Constitution, *supra* note 55, Art. 3.5.

102. *Id.*, Art. 4.1.

103. Nevertheless, as a result of the closely entwined histories of athletics and the Olympics and athletics’ place as the main spectator stadium sport of the Games, the IAAF has a particularly significant institutional relationship with the IOC when it comes to rulemaking, evinced by their close consultation in the crafting of the Hyperandrogenism Regulations. IAAF, *About the IAAF*, IAAF, <http://www.iaaf.org/about-iaaf>.

104. Chand, *supra* note 1, ¶¶ 310, 391, 397.

105. Chand, *supra* note 1, ¶¶ 14, 19.

106. *About the IAAF*, *supra* note 105.

107. *Id.*

108. *History*, IAAF, <http://www.iaaf.org/about-iaaf/history> (last visited Apr. 11, 2017).

109. *Id.*

dues and, increasingly, corporate sponsorship.¹¹⁰ With over 214 national/territorial member federations, the IAAF is among the world's largest sporting organizations and has more members than the United Nations ("UN").¹¹¹ While its members are private national governing bodies rather than national governments, there are generally strong links between the two, thereby introducing a public quality to global sport governance. For instance, in Chand's case, the Indian government imposed gender verification procedures on the AFI, which worked closely with a governmental body, the SAI, in implementing those and other procedures related to the administration of sport in India.¹¹² Moreover, national governments and federations share an interest in sending their best athletes to compete on the international stage without restriction, as was clearly seen in South Africa's adamant defense of Caster Semenya.¹¹³ Thus, the IAAF might be more precisely classified as a hybrid private-public governance institution, which can create particular accountability challenges.¹¹⁴

With its sweeping regulatory power, the IAAF can be seen as creating genuine "global law," as opposed to "international law," insofar as its rules and regulations "are spread across the entire world, . . . involve both international and domestic levels, and . . . directly affect individuals."¹¹⁵ The remainder of this article will illustrate that, just like regulatory action at the domestic level is subject to administrative review, the IAAF's regulatory activities are subject to scrutiny pursuant to certain global administrative principles that, as illustrated by the *Chand* decision, have become an essential part of global sports law.

VII.

ASSESSING THE LEGITIMACY OF A BINARY SEX CLASSIFICATION RULE

As the CAS panel aptly recognized, "nature is not neat"; it offers no clear dividing line between the sexes.¹¹⁶ Thus, as others have noted, "[i]f we want a line, we have to draw it *on nature*."¹¹⁷ While the IAAF is primarily responsible for any such line-drawing, it does not do so in a vacuum. Rather, Chand's case illustrates that concerns about legitimacy and accountability are increasingly

110. *Id.*

111. *IAAF Nat'l Member Fed'ns.*, IAAF, <https://www.iaaf.org/about-iaaf/structure/member-federations> (last visited Apr. 11, 2017).

112. *See supra*, Part IV and Figure 1.

113. *See* Media Statement, S. Afr. Parliament, Sport Comm. to Report Int'l Ass'n. of Athletics Ass'ns. (IAAF) to U.N. Human Rights Comm'n (Aug., 22, 2009), <http://www.gov.za/sport-committee-report-international-association-athletics-associations-iaaf-united-nations-un-human>.

114. *See* Kingsbury, Krisch & Stewart, *supra* note 2, at 22.

115. Lorenzo Casini, *The Making of a Lex Sportiva: A Court of Arbitration for Sport 'Der Ernahrer'* (June 3, 2010) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1621335.

116. Chand, *supra* note 1, ¶ 35(e).

117. Amy-Chinn, *supra* note 16, at 1293 (quoting Alice Dreger, *Sex Typing for Sport*, 40 HASTINGS CENTER REP. 22, 23 (2010)).

arising within the global community with respect to the IAAF's regulatory activities. Easing these concerns is a difficult task given the likely impossibility of crafting a sex classification rule that eliminates the tension between the reality of continuous sex and gender and its contrived binary division in athletics.¹¹⁸ The *Chand* decision suggests, however, that the prejudicial effects of this tension on individual athletes can and should be minimized, in particular, by applying elements of GAL. Although the CAS panel did not refer to GAL by name, its ruling is replete with concepts that fall within the meaning of this emerging field.

GAL encompasses the "mechanisms, principles, practices, and supporting social understandings that promote or otherwise affect the accountability of global administrative bodies, in particular by ensuring they meet adequate standards of transparency, participation, reasoned decision, and legality, and by providing effective review of the rules and decisions they make."¹¹⁹ Such GAL standards are particularly important in the context of a binary sex classification rule for a number of reasons. First, since the precise substance of the rule will necessarily be somewhat arbitrary, procedural protections may offer the most effective means of ensuring fairness. Second, history has shown that sex classification rules have a serious impact on the human rights of marginalized individuals, thus demanding not only procedural but also substantive standards of administrative action.¹²⁰ Finally, any binary sex classification rule must be perceived as legitimate by the web of decentralized administrators responsible for its implementation, which can be achieved, at least in part, through compliance with GAL.¹²¹ The *Chand* decision points, both implicitly and explicitly, to a number of GAL standards that must be satisfied during the (a) development, (b) implementation and (c) review of a binary sex classification rule. These standards constrain the IAAF in its regulatory activities, in a manner that promotes gender equality within the traditionally patriarchal international system of athletics competition.

A. Rule Development

The *Chand* decision makes clear that it is not just the substance of the IAAF's sex classification rule that matters, but also the process by which the rule is developed. In particular, the IAAF's rulemaking process must be characterized by certain standards of transparency, participation, and proportionality. While the precise content of each of these GAL elements is not necessarily made explicit in the panel's ruling, there is no doubt that the degree of their presence in the rulemaking process is a relevant factor in determining whether a binary sex classification rule is justifiable.

118. See Hutchinson, *supra* note 39.

119. Kingsbury, Krisch & Stewart, *supra* note 2, at 17.

120. See *id.* at 40.

121. See *id.* at 21, 36–37.

1. *Transparency and Reason-giving*

From the outset, the only way for the IAAF to justify its Hyperandrogenism Regulations to the CAS was to openly articulate clear and compelling reasons for their adoption.¹²² In particular, the panel required that the IAAF be transparent about the scientific basis for its binary sex classification rule.¹²³ Therefore, in order to lift the suspension of the Regulations, the IAAF must publicly offer specific and convincing scientific evidence indicating the degree of competitive advantage enjoyed by hyperandrogenic women, along with its source.¹²⁴ It is conceivable that the IAAF might also be required to reveal, as a matter of transparency, any evidence in its exclusive possession to the contrary. In any event, the IAAF will also have to explain why the proven advantage of hyperandrogenic women justifies their disqualification, particularly if the advantage is “well below 12%” – the average advantage of men over women.¹²⁵ To this end, the IAAF will likely need to disclose its consultation process and reveal whose views it has taken into consideration, as further discussed below.

Beyond the evidentiary obligations it places on the IAAF, the *Chand* decision stands for transparency in rulemaking insofar as it elucidates, and calls attention to, the existence, content and operation of the binary sex classification rule. In so doing, the CAS holds the IAAF accountable not only directly, as a review mechanism, but also indirectly insofar as “the more information athletes have the more they are likely to object to sex testing.”¹²⁶ Indeed, the *Chand* decision has sparked calls for “a *proactive* campaign to provide proper education for *all* those concerned in sport . . . on the inadequacy of the current taxonomy of sexual difference” which might “justify the immediate elimination of attempts to determine (or, worse still, produce) a ‘true’ sex for female athletes whose biology is questioned.”¹²⁷

Therefore, the *Chand* decision goes some way toward addressing the purported “general lack of transparency in the construction and application of rules in sport.”¹²⁸ It does not, however, fully address the persistent denial by sports bodies of any conflict between the traditional bi-categorization of the sexes and modern understandings of sex, gender and equality.¹²⁹ In particular, the CAS panel accepted that the Hyperandrogenism Regulations do not constitute sex or gender testing,¹³⁰ thereby rejecting valid suggestions to the contrary, such as the following witness testimony:

122. See *Chand*, *supra* note 1, ¶ 501.

123. See *id.* ¶ 493.

124. See *id.* ¶¶ 535, 3.

125. *Id.* ¶ 534.

126. Amy-Chinn, *supra* note 16, at 1300.

127. *Id.* at 1301.

128. PATEL, *supra* note 10, at 157.

129. See *id.*

130. See *Chand*, *supra* note 1, ¶ 510.

The act of drawing a line between the endogenous testosterone levels of male and female athletes, in combination with scrutinising other bodily and behavioural characteristics of women, is unmistakably an attempt to define those who are not women for the purposes of athletic competition, even if they are not explicitly being defined as men...The use of the term 'masculine' in place of 'male' is a semantic strategy that in no way absolves the Regulations of their sex test function.¹³¹

By overlooking such views, the CAS has not required the IAAF to be completely forthright and transparent about the practical effect (if not the intended purpose) of its rule.¹³² The Hyperandrogenism Regulations effectively deem certain women too masculine or insufficiently feminine for participation in athletics competition. Whether or not such an athlete is reclassified as a male athlete, the outcome is the same: She is barred from competition for failing to conform with an imposed standard of femininity.¹³³

The IAAF's assertion that the purpose of the Regulations is not sex or gender testing is thus unconvincing and requires further investigation. Such investigation would enhance transparency in the reasoning of both the IAAF and the CAS, leading to greater fairness and accountability in athletics rulemaking. Beyond these outcomes, the degree to which the *Chand* decision increases decisional transparency and access to information is also important because it is foundational to the effective exercise of another key element of GAL: participation rights.¹³⁴

2. Participation and Consultation

The CAS panel made clear that it matters who participates in the development of the IAAF's binary classification rule:

The IAAF consulted widely with respect to this issue in order to create a new set of rules that reflect the state of the available science and avoid the shortcomings inherent in the old gender verification policy. While it is apparent to the Panel that there is a range of views within the body of female athletes on this subject, the representatives of those athletes to the IAAF were supportive of the present Regulations. Indeed, their urging was, apparently, a motivating factor in the adoption of a regulation that recognised the need to separate males and females on

131. *Id.* ¶ 352.

132. For instance, the panel took the view that although endogenous testosterone levels are a key biological indicator of the difference between males and females, "that is not the use to which endogenous testosterone is being put under the Hyperandrogenism Regulations." *Id.* Rather, they are "being used to introduce a new category of ineligible female athletes within the female category." *Id.* ¶ 511.

133. Athletes disqualified under the Hyperandrogenism Regulations are not eligible to compete in the male category of competition, and are therefore excluded from competition altogether. Reclassifying a disqualified athlete as male for the purposes of athletics competition would not realistically alter this outcome given the unlevel playing field between men and women that binary categorization is meant to address in the first place. Thus, exclusion from the female category under the Regulations has the same outcome as previous gender verification/sex testing strategies. *See supra* Part V.

134. *See* Kingsbury, Kirsch & Stewart, *supra* note 2, at 38.

the basis of a criterion that reflected the significant performance advantage of male athletes over female athletes.¹³⁵

The panel thus seems to have accepted the reasoning of one of the IAAF's expert witnesses who argued that the rules of a given sport, while in some sense arbitrary, "must pass muster with the community of those who play and love that sport."¹³⁶ As the witness explained, it is these stakeholders who decide what is unfair, such that "[t]he limitations each sport chooses for itself reflect a shared understanding of what that sport is meant to display and reward."¹³⁷ It does not appear, however, that the CAS panel specifically questioned whether the IAAF had engaged with a diverse group of female stakeholders, obtained support from the majority of the female athlete community, or attempted to resolve the divergence in the views of female athletes, which are exacerbated by the inherently competitive nature of athletics. Nonetheless, the panel's decision and the IAAF's response together make clear that participation by external actors in the IAAF's rulemaking process is a prerequisite to legitimacy, even if the details of such participation were not thoroughly considered in the panel's reasoning.¹³⁸ The IAAF's press release following the *Chand* decision reemphasized that its Regulations "were adopted following a lengthy and comprehensive consultation exercise by the IAAF's Expert Working Group in conjunction with the IOC, involving world-leading experts across various fields, along with numerous other stakeholders."¹³⁹

Little consideration seems to have been given, however, to the identity of the rulemaking actors *within* the IAAF. In this regard, the fact that the membership of the IAAF (like the IOC) is overwhelmingly male can be seen to undermine the legitimacy of a rule that applies only to women. Of the IAAF's 27 Council members, only six – the mandated minimum – are women. Men thus make up over three-quarters of the current Council and hold all six executive positions: President, four Vice-Presidents and Treasurer.¹⁴⁰ Furthermore, the IAAF

135. *Chand*, *supra* note 1, ¶ 506.

136. *Id.* ¶ 277

137. *Id.*

138. *See id.* ¶¶ 505–06.

139. IAAF, *IAAF Comments on Interim Award Issued by the CAS on the IAAF's Hyperandrogenism Regulations*, (Jul. 27, 2015), <http://www.iaaf.org/news/press-release/hyperandrogenism-regulation-cas-dutee-chand>.

140. *See* Council, IAAF, <https://www.iaaf.org/about-iaaf/structure/council>; *see also* International Olympic Committee, *The Los Angeles Declaration, 5th IOC World Conference on Women and Sport*, Feb. 18, 2012, at 3, available at http://www.olympic.org/Documents/Commissions_PDFfiles/women_and_sport/Los-Angeles-Declaration-2012.pdf (Women have been similarly excluded from the IOC: The IOC did not accept its first female member and Executive Board member until 1981 and 1990, respectively. Today, only 24 of the 106 active IOC members and 4 of the 15 Executive Board members are women); *see generally* International Olympic Committee, *Factsheet: Women in the Olympic Movement* (Oct. 2013), http://www.olympic.org/Documents/Reference_documents_Factsheets/Women_in_Olympic_Move

Athletes' Commission, Ethics Commission and Medical and Anti-Doping Commission, which should presumably be involved in crafting a binary sex classification rule, are all chaired and numerically dominated by men. Perhaps predictably, the Women's Committee is the only IAAF body in which women are at least equally represented.¹⁴¹ It is unclear if and precisely how any of these committees were involved in the development of the Hyperandrogenism Regulations. Regardless, legitimacy concerns resulting from the persistent underrepresentation of women within the IAAF are particularly acute given the historical governance of international sport by "powerful men who answer to no one [and] decide whether women can participate."¹⁴²

3. Proportionality

The CAS panel's invocation of GAL (in substance if not in name) went beyond implicit references to the procedural protections afforded by transparency and participatory rights. Indeed, the panel explicitly framed its assessment of the Hyperandrogenism Regulations in terms of substantive standards falling within the realm of GAL. In particular, the panel relied on the general legal principle of proportionality¹⁴³ and its attendant requirements of necessity and reasonableness as the appropriate legal test for justifying discrimination.¹⁴⁴ Although these administrative law standards are not mentioned in the antidiscrimination provisions of the IOC Charter, the IAAF Constitution, or the laws of Monaco, the *Chand* decision confirms that they form part of global sports law.

In its proportionality analysis, the CAS panel, took for granted that a rule defining who may compete as female, going beyond legal status, is necessary in athletics. It did not question this proposition, agreed to by the parties, even though there was "no evidence before the Panel that legal recognition as a female varies in most countries other than reference by the parties to the fact that there are a small number of countries where a person's status as a male or female is determined exclusively by a process of self-identification."¹⁴⁵ If there really is a global consensus on the legal binary division of the sexes, then perhaps a rule for enforcing this division through physical testing is entirely unnecessary. If there is no such consensus, it would be worth considering the different approaches between countries rather than glossing over them as both the parties and the CAS

ment.pdf.

141. *See Committees*, IAAF, <https://www.iaaf.org/about-iaaf/structure/committees>; *Commissions*, IAAF, <https://www.iaaf.org/about-iaaf/structure/commissions>.

142. Laura Robinson, *One step forward, two steps back*, TORONTO STAR (Dec. 17, 2010), https://www.thestar.com/news/insight/2010/12/17/one_step_forward_two_steps_back.html.

143. Some version of a proportionality test is featured in judicial analyses of human rights throughout the world. *See, e.g.*, PROPORTIONALITY AND THE RULE OF LAW: RIGHTS, JUSTIFICATION, REASONING (Grant Huscroft, Bradley W. Miller & Grégoire Webber eds.), 2014.

144. *Chand*, *supra* note 1, ¶ 230 ("The detrimental impact of a measure must be proportionate, in that it must not exceed that which is reasonably required in the search of the justifiable aim.").

145. *Id.* ¶ 510.

did in this case. In any event, their reluctance to question the necessity of a rule designed to limit the definition of a “female athlete” based on biology is somewhat puzzling given that no woman has ever reached elite male performance levels in athletics. The complete disregard of the possibility that physical sex testing is futile or redundant indicates that GAL standards, such as the necessity prong of the proportionality analysis, can be diluted when incorporated into certain contexts, particularly when they challenge a long tradition of patriarchy.

The CAS panel compensated for any such dilution to the meaning of “necessity,” by demanding a lot of the IAAF to establish the “reasonableness” of its Regulations. In particular, the CAS panel required scientific evidence that proves “to a level higher than that of the balance of probabilities,” that the Regulations actually achieve their stated objective of excluding – and only excluding – female athletes with a competitive advantage “of the same order as that of a male athlete.”¹⁴⁶ This places a burden on the IAAF that will be very difficult, if not impossible, to satisfy due to the lack of definitive research linking female hyperandrogenism and sporting performance; the challenges of proving causation rather than mere correlation; and the ethical barriers to human hormone experimentation.¹⁴⁷ Furthermore, even if science can prove that hyperandrogenism provides a significant competitive advantage, going on to prove that this advantage is greater than that derived from the numerous other variables that affect female athletic performance, as the CAS indicated would be required,¹⁴⁸ would be a very difficult feat indeed. Moreover, scientific proof that hyperandrogenic women benefit from a competitive advantage comparable to that of men would raise the controversial question of whether such women should fairly compete in the male category, which the Regulations do not permit.

In any event, scientific evidence is necessary, but not sufficient to satisfy the proportionality test. In light of the serious harm that can befall those subjected to the Hyperandrogenism Regulations or similar rules, including severe sex and gender identity crises, demeaning treatment, social isolation, depression and suicide, it is doubtful any sex bifurcation rule could be deemed proportionate, regardless of its scientific backing.¹⁴⁹ This may be especially true when applied to women from certain cultures where a “legal” determination that suggests a woman is not actually female would have serious social consequences due to transphobic attitudes or the prioritization of values such as fertility and sexual purity. Thus, the substantive GAL standards imposed by the CAS panel represent a “very high hurdle for IAAF to clear.”¹⁵⁰

146. *Id.* ¶¶ 443, 531.

147. *See id.* ¶¶ 148, 189, 530.

148. *Id.* ¶¶ 517, 532.

149. Amy-Chinn, *supra* note 16, at 1297.

150. Jennifer Henderson, *Davies Ward Wins Big for Female Sprinter Banned for High Testosterone*, THE AMERICAN LAWYER (July 28, 2015), <http://www.americanlawyer.com/id=1202733339155/Davies-Ward-Wins-Big-for-Female-Sprinter-Banned-for-High-Testosterone?mcode=1202615731542&curindex=0&curpage=ALL>.

B. Rule Implementation

As illustrated above, the IAAF relies on a decentralized system of distributed administrators to implement its rules. In such a system, “domestic regulatory agencies act as part of the global administrative space: they take decisions on issues of foreign or global concern.”¹⁵¹ In Chand’s case, for instance, the Indian Ministry of Sports, the SAI and the AFI each played a role in enforcing hyperandrogenism regulations in both domestic and international athletics competition.¹⁵² The autonomy or semi-autonomy of such public or private regulatory bodies at the national level creates the potential for pushback against international regulators, and thus another means of subjecting the IAAF to accountability checks.¹⁵³ Even where national and international regulations accord in terms of substantive content (e.g., the particular biological factor and threshold determinative of an athlete’s sex classification), the procedural methods of enforcement are far more difficult to harmonize globally.¹⁵⁴

The parties agreed during Chand’s hearing that if the CAS panel were to invalidate the Hyperandrogenism Regulations, the IAAF would communicate this to all its member federations, who would then be required to amend their national implementation rules accordingly.¹⁵⁵ This is in line with the IAAF Constitution, which provides that CAS decisions are binding on all IAAF members.¹⁵⁶ In this way, a CAS ruling enhances international harmonization of sporting rules, but variation is sure to persist when it comes to rule implementation, particularly when an international rule is merely recommended, rather than mandatory, in domestic competitions. In this regard, the targeting of test subjects and the specific design of test procedures pursuant to the Hyperandrogenism Regulations are of particular concern.

1. Testing Targets

There is proven risk of discriminatory application of the Hyperandrogenism Regulations, based on intersecting sexist and racist stereotypes.¹⁵⁷ The “reasonable suspicion” standard has been said to effectively carry on the previously denounced practice of “inspect if you suspect,” which is “over-reliant on arbitrary visual expectations of normative femininity and masculinity that are culturally and historically specific, and often privilege white, middle-class, and

151. See Kingsbury, Krisch & Stewart, *supra* note 2, at 21.

152. See *supra* Part IV.

153. See, e.g., AFI did not join IAAF in defending regulations.

154. See, e.g., SOP vs Regulations; issues of capacity, etc. discussed *infra*.

155. Chand, *supra* note 1, ¶ 105.

156. IAAF Constitution, *supra* note 55, art. 15.3. Further, CAS awards are enforceable in all 156 countries party to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards, June 7, 1959, 330 U.N.T.S. 38.

157. See generally Bohuon, *supra* note 39.

Western standards of female beauty.”¹⁵⁸ Indeed, the CAS panel recognized that the Regulations have disproportionately burdened women from the global south, noting that this “increases the concerns about lack of informed consent, particularly as women from poorer socio-economic backgrounds may be affected by additional pressures which arise from the fact that their families, teams and nations may be particularly reliant on them competing”.¹⁵⁹ This implementation defect detracts from the rule’s legitimacy and, as seen in Chand’s case, opens the door to collective resistance from athletes, human rights advocates, national governments, and the national governing bodies on which the IAAF relies to implement its rules.

2. Testing Design

The IAAF also relies on distributed administrators, such as national governing bodies, to themselves carry out testing and related procedures in order to create a globally consistent regulatory system. Such decentralization raises questions about a basic element of GAL: the presence of effective “checks for coordinated domestic administration.”¹⁶⁰ The underlying idea is that a collection of norms, promoted by international regulators such as the IAAF can govern “not only the substance of domestic regulation, but also the decisional procedures followed by domestic regulatory agencies when applying a global norm.”¹⁶¹ However, the normative procedural steps contained in the Hyperandrogenism Regulations, or any other binary sex classification rule may not result in harmonized implementation at the global level given discrepancies in capacity and development between countries.

For instance, in countries where “women have less access to obstetric care, and therefore, have less awareness about the biological composition of their bodies“ the Regulations’ self-declaration requirement may have little value.¹⁶² Moreover, a hyperandrogenism diagnosis might be especially shocking or confusing and, depending on the particular sociocultural context, might lead to stigmatization, or worse, of hyperandrogenic athletes.¹⁶³ In addition, appropriate counselling and support may not be available in some countries or communities, resulting in great reluctance to self-declare and great risk to any athlete that does.

158. Ha et. al, *supra* note 16, at 1039.

159. Chand, *supra* note 1, ¶¶ 251, 259; see also John Branch, *Dutee Chand, Female Sprinter With High Testosterone Level, Wins Right to Compete*, N.Y. TIMES, July 27, 2015, http://www.nytimes.com/2015/07/28/sports/international/dutee-chand-female-sprinter-with-high-male-hormone-level-wins-right-to-compete.html?_r= (noting that at the London Olympics, four female athletes from rural areas of developing countries were subjected to the Hyperandrogenism Regulations).

160. Kingsbury, Krisch & Stewart, *supra* note 2, at 36.

161. *Id.*

162. Berry, *supra* note 16, at 227.

163. *Id.*

As another example, options for achieving compliance with the Regulations, including treatment and surgery, could be effectively limited by both the capacities of the local healthcare system and the financial means of the particular hyperandrogenic athlete. Further, sociocultural conditions, along with confidentiality concerns, might induce an athlete to withdraw from competition rather than undergo treatment or contest her disqualification in order to avoid public shaming.¹⁶⁴ As a result, it is likely that not all athletes would benefit from the same procedural protections during the implementation phase of binary sex classification rule, despite its intended universality.

The Hyperandrogenism Regulations themselves acknowledge that they “merely set out an overall framework for the management of cases that might arise.”¹⁶⁵ This fact, combined with their purely recommendatory status at the domestic level, leaves significant room for national governing bodies to implement the IAAF’s Regulations differently in terms of the procedural protections provided. In Chand’s case, for instance, it is not clear that the AFI and the SAI followed the testing procedure stipulated by either the IAAF or the Indian Ministry of Sports, seemingly due to a lack of capacity to satisfy all the required steps.¹⁶⁶ In any event, the SAI, an agency of the Indian government, ended up asking the AFI to reconsider Chand’s disqualification, or to at least support her appeal before the CAS, based on national objections to the IAAF’s Regulations.¹⁶⁷ The fact that the AFI neither appeared at the CAS hearing nor filed any written submissions is perhaps a reflection of the difficult position in which it found itself: an agent caught between two principals, one national and one international. Despite the significant pressure on national bodies to conform with IAAF regulations, complete harmonization of implementation procedures is conditional on all distributed administrators (and all who influence them) perceiving those procedures as legitimate and having sufficient capacity to properly carry them out. These conditions represent another means by which the IAAF is held accountable by a wide range of actors the world over.

C. Rule Review

A final and essential element of GAL, which proved central to Chand’s ability to hold the IAAF accountable, is the availability of review mechanisms. Access to judicial review generally brings with it the crucial GAL-mandated opportunities for those affected by regulations to be heard and to participate in the review proceedings, which most certainly enhances the accountability of those subjected to review.¹⁶⁸ More generally, the range of judicial or quasi-judicial fora

164. Ha et al., *supra* note 15, at 1037.

165. *Hyperandrogenism Regulations*, *supra* note 28, at Reg. 5.1.

166. See, e.g., *Chand*, *supra* note 1, ¶ 14 (noting the AFI’s inability to identify a suitable Nodal officer as required by the SOP).

167. *Id.* ¶ 30-31.

168. Kingsbury, Krish & Stewart, *supra* note 2, at 38.

before which athletes and others may challenge the IAAF's rules form an integral part of the global governance system that applies to athletics and constrains the IAAF's regulatory authority when it comes to the binary division of the sexes. It is thus worth reflecting on both the forum Chand chose for her appeal, as well as other potential venues for challenging discriminatory sports rules.

1. *Court of Arbitration for Sport*

The Hyperandrogenism Regulations provide for an automatic right of appeal to the CAS from a decision by the IAAF to disqualify an athlete pursuant to the Regulations.¹⁶⁹ Although it was technically a decision of the AFI, not the IAAF, that disqualified Chand (arguably situating the appeal within the exclusive jurisdiction of Delhi Courts, in accordance with the AFI's Rules and Regulations), the IAAF agreed to the ad hoc submission of the dispute to the CAS because it wanted the validity of the Regulations to be determined by an independent tribunal with the necessary sport-specific expertise. Further, the AFI's actions in engaging with the CAS proceedings were deemed to constitute implicit acceptance of its jurisdiction.¹⁷⁰

Such willingness to submit sports-related disputes to the CAS, despite potential challenges to its jurisdiction, enhances its position as the institutional actor "most prominent in constructing global sports law".¹⁷¹ Indeed, the creation of the CAS in 1983, as part of the IOC, can be seen as a response to the need for a centralized review mechanism for the activities of sports organizations, as well as the need to limit the increasing intervention by domestic courts in sporting matters, which was perceived as a threat to the autonomy of sports organizations and the sports legal system as whole.¹⁷² In order to strengthen the role of the CAS in these respects, the IAAF, like most other international sports federations, dissolved its own dispute resolution body.¹⁷³ The CAS was re-launched in 1994 as an independent and self-funding body, purportedly free from any interference from any constituent of the Olympic Movement including the IOC.¹⁷⁴ Despite this transformation, significant concerns with respect to the governance structure, independence, and impartiality of the CAS have been documented elsewhere.¹⁷⁵ For the purposes of the present article, it is sufficient to bear in mind the importance of independent review when it comes to holding international sport

169. *Hyperandrogenism Regulations*, *supra* note 28, art. 7.2.

170. *Chand*, *supra* note 1, ¶¶ 422-36.

171. Casini, *supra* note 115.

172. *Id.* at 18.

173. *Id.*

174. Mark James & Guy Osborn, *The Sources and Interpretation of Olympic Law*, 12 LEGAL INFO. MGMT. 80, 82 (2012).

175. *See, e.g.*, ANDREW VAITIEKUNAS, *THE COURT OF ARBITRATION FOR SPORT: LAW-MAKING AND THE QUESTION OF INDEPENDENCE* (2014); Rachele Downie, *Improving the Performance of Sport's Ultimate Umpire: Reforming the Governance of the Court of Arbitration for Sport*, 12 MELB. J. INT'L L. 315, 344 (2011).

regulators such as the IAAF accountable for unlawfully discriminating against its member athletes.

The CAS serves a number of overlapping functions relevant to the formation of global sports law, which then operate to constrain the IAAF's regulatory authority and the system of distributed administrators on which it relies for regulation implementation. Lorenzo Casini identifies at least three such functions of the CAS:

First, the CAS has been applying general principles of law to sporting institutions, and it has been also creating specific "principia sportiva". Secondly, the CAS plays a significant role in interpreting sports law, thus influencing and conditioning rulemaking activity by sporting institutions. Thirdly, the CAS greatly contributes to the harmonization of global sports law, also because it represents a supreme court, the apex of a complex set of review mechanisms spread across the world.¹⁷⁶

All three of these functions are evident in the decision on Chand's appeal. The panel transplanted general legal principles, such as proportionality, from public law into the private realm of sports law. It then interpreted sport-specific non-discrimination rules in light of this general principle, thereby restricting the IAAF's regulatory autonomy. The panel's decision contributed to the harmonization of sports law not only by requiring both the IAAF and all its member federations to amend their regulations, but also by setting a precedent for national and international regulators of other sports, almost all of which also divide competition into binary sex divisions.

In addition to these broad functions that promote substantive fairness in sport, the CAS panel's review of the Hyperandrogenism Regulations epitomizes certain procedural elements of GAL. For instance, simply releasing CAS decisions to the public exemplifies transparency. Notably, Chand requested that the hearing of her appeal also be open to the public "so people can understand what I have gone through. This will help them realise that I have done nothing wrong. Then they can decide for themselves whether the IAAF regulation on hyperandrogenism is right."¹⁷⁷ Although the CAS was unable to grant this request due to objections from the IAAF and the AFI,¹⁷⁸ its decision offers a summary of the proceedings and evidence and thorough reasons for its decision as "a reflection of the complexity of those issues, and the exceptional care and detail in which they were presented to the Panel by the parties' representatives."¹⁷⁹

176. Casini, *supra* note 115 at 11.

177. Narain Swamy, *My CAS hearing should be in public: Dutee Chand*, THE TIMES OF INDIA, Feb. 12, 2015, <http://timesofindia.indiatimes.com/sports/more-sports/athletics/My-CAS-hearing-should-be-in-public-Dutee-Chand/articleshow/46209929.cms>.

178. *Chand*, *supra* note 1, ¶ 88. The agreement of all parties is a prerequisite to public hearing. CAS, *Code of Sports-Related Arbitration* (2016), R44.2.

179. *Chand*, *supra* note 1, ¶ 5. The decision is 161 pages in length.

In sum, the CAS is an essential GAL mechanism, which itself abides by certain GAL principles and goes some way toward holding the IAAF and its distributed administrators accountable to such principles – from reason-giving and transparency to participation and proportionality. Despite its various shortcomings, discussed elsewhere, the CAS plays a key role within the global governance regime for athletics by holding the IAAF accountable in its regulatory activities. It is not, however, the only review mechanism with such potential.

2. Additional Review Mechanisms

Although the IAAF Constitution states that all decisions of the CAS “shall be final and binding on the parties and no right of appeal will lie from the CAS decision,”¹⁸⁰ there do exist further (and potentially alternative) routes to challenge IAAF rules. A detailed analysis of all these appeal routes within the complex jurisdictional world of sport is beyond the scope of this article. However, a few are worth brief mention to illustrate that additional GAL instruments, in the form of review mechanisms, exist and have the potential to constrain the IAAF’s regulatory activities.

First, the Swiss Federal Court has jurisdiction to hear appeals of arbitral decisions made in Switzerland, where the CAS is located. The policy rationale for this jurisdiction is that athletes, who have no choice but to accept mandatory arbitral clauses if they wish to participate in elite competition, should have the right to judicial review to remedy breaches of fundamental principles and essential procedural guarantees.¹⁸¹ In other words, this additional appeal route somewhat corrects the imbalance of power between athletes and their regulatory bodies. Athlete appeals to the Swiss Federal Court have been relatively rare,¹⁸² likely because they are permitted on very narrow grounds, namely blatant procedural defects and incompatibility with public policy.¹⁸³ While no athlete has ever successfully argued this latter ground of appeal before the Swiss Federal Court,¹⁸⁴ a speed-skater did so before the Munich Court of Appeals. Although the decision has since been overturned,¹⁸⁵ the German court initially reversed a CAS decision that had confirmed the disqualification of a speed-skater based on a doping violation.¹⁸⁶ In particular, the court held that the mandatory CAS arbitration

180. IAAF Constitution, *supra* note 55, Art. 15.2

181. Matthew J. Mitten, *Judicial Review of Olympic and International Sports Arbitration Awards: Trends and Observations*, 10 PEPPERDINE L. REV. 51, 53 (2009).

182. Casini, *supra* note 115, at 20.

183. Mitten, *supra* note 181, at 54. The other grounds of appeal are: the arbitral panel was constituted irregularly; it erroneously held that it did or did not have jurisdiction; it ruled on a matter beyond the submitted claims; it failed to rule on claim; the parties were not treated equally; or the party’s right to be heard was not respected.

184. *Id.* at 58.

185. The decision of the Munich Court of Appeals was overturned by the German Federal Court of Justice. Bundesgerichtshof [BGH] [Federal Court of Justice] June 7, 2016, NEUE JURISTISCHE WOCHENSCHRIFT [NJW] 2266, 2016.

186. See CAS, *Statement of the Court of Arbitration for Sport (CAS) on the decision made by*

agreement between the athlete and the international skating federation constituted an abuse of the latter's monopolistic position and therefore violated public policy codified in German competition law.¹⁸⁷ The same could be said with respect to the arbitration agreement imposed on athletes by the IAAF, which likewise requires that all disputes concerning the IAAF's Rules and Regulations be resolved by the CAS.¹⁸⁸ Athletes seeking to compete internationally have no choice but to accept this arbitration agreement. Such absence of meaningful consent on the part of athletes might allow them to invoke public policy to challenge CAS rulings, including those upholding discriminatory IAAF binary sex classification rules, before domestic courts.

It is also possible for athletes to challenge sporting regulations before regional courts. There have been a number of relevant cases, for instance, before the European Court of Justice (ECJ).¹⁸⁹ Indeed, the ECJ has specifically held that rules governing sporting activity are not immune from the provisions of European Union law. Rather, "the rules which govern that activity must satisfy the requirements of those provisions, which, in particular, seek to ensure freedom of movement for workers, freedom of establishment, freedom to provide services, or competition."¹⁹⁰ Moreover, the ECJ requires that sporting rules be limited to ensuring the proper conduct of sporting competition and do not go beyond their stated legitimate objective, such as that of guaranteeing fair competitive sport.¹⁹¹ A challenge to the Hyperandrogenism Regulations along the same vein is not difficult to imagine. Indeed, this was precisely the type of challenge that succeeded before the CAS in *Chand*.¹⁹²

Another option, although one without precedent, is for an athlete to launch an application with a regional human rights court, such as the European Court of Human Rights, once she has exhausted all national legal remedies.¹⁹³ An athlete or her home country might also lodge a complaint with the UN Human Rights Council or a UN treaty body such as the Committee on Elimination of Discrimination against Women (CEDAW), the Committee on the Elimination of

the Oberlandesgericht München in the case between Claudia Pechstein and the International Skating Union (ISU), (2015), http://www.tas-cas.org/fileadmin/user_upload/CAS_statement_ENGLISH.pdf.

187. Antoine Duval & Ben Van Rompuy, *The Compatibility of Forced CAS arbitration with EU Competition Law: Pechstein Reloaded* (June 23, 2015), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2621983, at 10-11.

188. See: IAAF Constitution, *supra* note 55, Art. 15.

189. MARIOS PAPALOUKAS, SPORT: JURISPRUDENCE DE LA COUR DE JUSTICE (CJE) DES C.E. (2008); An Vermeersch, *All's Fair in Sport and Competition? The Application of EC Competition Rules to Sport*, 3 J. CONTEMP. EUR. RES. 238 (2007).

190. Case C-519/04 P, *Meca-Medina v. Comm'n*, 2006, E.C.R. I-06991, ¶ 2.

191. *Id.* ¶¶ 42-43.

192. The Panel concluded that the IAAF had "not discharged its onus of establishing that the Hyperandrogenism Regulations are necessary and proportionate to pursue the legitimate objective of organising competitive female athletics to ensure fairness in athletic competition." *Chand*, *supra* note 1, ¶ 547.

193. European Convention for the Protection of Human Rights and Fundamental Freedoms, Sept. 3, 1953, E.T.S. No. 5, arts. 34-35.

Racial Discrimination (CERD), the Committee on Economic, Social and Cultural Rights (CESCR), or the Human Rights Committee (CCPR).¹⁹⁴ Such complaints, however, must be directed toward a state, rather than toward a private organization such as the IAAF. This is perhaps why South Africa's complaint to the UN High Commissioner of Human Rights, in response to the highly publicized and controversial application of the IAAF's former Gender Verification Policy to Caster Semenya, never progressed.¹⁹⁵

Put simply, existing routes for challenging the IAAF's rules outside the CAS are limited in many ways. Still, the availability of certain additional review mechanisms is significant not least because, unlike the CAS, they benefit from greater expertise in human rights adjudication. Such expertise could be seen as a critical qualification when it comes to the judicious and legitimate review of discriminatory binary sex classification rules alleged to violate women's equality rights. Nonetheless, in its decision on Chand's appeal, the CAS proved that what it lacks in human rights expertise, it might make up in GAL know-how.

CONCLUSION

It has become clear that not just any rule for dividing the sexes for the purposes of elite athletics competition will be tolerated. The abandonment of a string of highly criticized rules, in light of evolving understandings of sex, gender, and equality, capped off with the landmark CAS decision in Chand's case, illustrates that a system of checks and balances constrains the IAAF's regulatory authority to impose binary sex classifications. In particular, any binary sex classification rule must be necessary, reasonable, and proportionate in light of its legitimate objective of ensuring fairness for female competitors. The particular evidentiary requirements stipulated by the CAS, which would allow the Hyperandrogenism Regulations to pass this test, create a high threshold for the IAAF to meet. Further, whatever specific rule formulation might comply with such substantive GAL standards, the rule will be justifiable only if developed using a procedure characterized by transparency and meaningful stakeholder participation. In addition, the rule must be crafted so the entire network of distributed administrators on which the IAAF relies is willing and able to effectively and harmoniously implement it. Finally, the IAAF must be prepared to justify the content and implementation of its rule before the CAS and perhaps certain additional review bodies. This collection of GAL principles and mechanisms constrains the IAAF's regulatory authority, particularly when human rights concerns such as gender discrimination, are involved. In this way, GAL

194. See UN Office of the High Commissioner, *Human Rights Bodies - Complaints Procedures*, <http://www.ohchr.org/EN/HRBodies/TBPetitions/Pages/HRTBPetitions.aspx>.

195. See Parliament of the Republic of South Africa, *Media Statement: Sport committee to report International Association of Athletics Associations (IAAF) to United Nations (UN) Human Rights Commission*, <http://www.gov.za/sport-committee-report-international-association-athletics-associations-iaaf-united-nations-un-human>.

offers a promising means of incorporating—contemporary socio-legal understandings of human rights and gender equality into the sports world.

The *Chand* decision suggests that fairness in competition must be preceded by fairness in rulemaking; that a rule that is not created, implemented, and reviewed in accordance with the largely procedural standards of fairness that make up GAL is at great risk of being unfair in substance. Given the significant GAL constraints on the IAAF, it is difficult to imagine that any rule imposing a ceiling on what it means to be a woman in the world of sport will be justifiable. This holds true whether or not the rule is purported to be a sex or gender verification test. Any rule that determines whether an individual is female, even if only for the purposes of athletics competition, will necessarily either enforce or challenge broader cultural norms in relation to gender identity.¹⁹⁶ Whether the IAAF can craft a rule that both catches up with and stimulates broader normative developments with respect to human rights and gender identity remains to be seen.

In conclusion, it should be acknowledged that exclusionary categorization can be a justifiable means of protecting the essence of sport,—but only when that essence is understood as the furthering of human capacity,¹⁹⁷ not of patriarchal tradition. Given its deep roots and fear of the unfamiliar, overcoming patriarchal sporting culture is no easy task.¹⁹⁸ Until all stakeholders accept the challenge to think differently about the complexity of sex determination, efforts will continue to be directed at “legitimizing what is already known and attempting to bolster the status quo.”¹⁹⁹ Hopefully the IAAF is in the process of engaging in such different thinking, rather than merely searching in vain for unattainable evidence to support its latest binary sex classification regulations. That is the only way for the IAAF to live up to its promise to innovate and respond to the changing demands of sport in modern society.²⁰⁰ If, indeed, the abolition of sex-based structural barriers for women athletes is “only a few court cases away,”²⁰¹ GAL is poised to play a key role. In the meantime, there is a clear opportunity to build on the momentum gained from Dutee Chand’s significant stride forward in the grueling marathon toward gender equality in sport.

196. Alice Dreger, *Should female athletes have to prove they are women?*, LOS ANGELES TIMES, July 30, 2015, <http://www.latimes.com/opinion/op-ed/la-oe-0730-dreger-chand-sport-testosterone-20150730-story.html>.

197. See PATEL, *supra* note 10, at 17.

198. See *id.* at 157.

199. Amy-Chinn, *supra* note 16, at 1292.

200. See *About the IAAF*, *supra* note 103.

201. Amy-Chinn, *supra* note 16, at 1301.

Legal Implementation and Management of Infrastructure Finance Models: Trade-offs Between Risk and Maturity

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ABSTRACT

Many economies have difficulty financing infrastructure development: Bank loans of the long tenure necessary pose currency and maturity risks, and stable capital markets require robust legal foundations. Shortfalls in infrastructure finance, however, reduce the quality of life for citizens and inhibit the productive capacity of economies. Intermediate financing models therefore must sustain private finance in infrastructure projects in economies in which legal reforms remain ongoing. Previous studies have explored possible structures for these models. The studies, however, have not considered the legal infrastructure necessary to implement and support these financing techniques. This paper analyzes the tradeoffs that intermediate models for financing infrastructure present, in terms of augmenting the availability of long-term capital versus managing its risks. The paper explores potential fault lines in each model, and the necessary role for law in each.

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INTRODUCTION

Many emerging economies urgently require investment in infrastructure.¹ According to a McKinsey study, total infrastructure finance must increase from 3.8% of GDP to 5.6% of GDP by 2020.² In emerging economies, the G20 has suggested the need for an additional \$1 trillion in infrastructure finance per year.³

Quality of life depends on sufficient infrastructure, and infrastructure also can generate economic growth.⁴ Infrastructure supports services essential to the needs of citizens.⁵ Many industries also depend on infrastructure, and shortfalls in infrastructure make production more costly or impossible.⁶

Infrastructure projects have proven difficult to finance.⁷ Infrastructure projects typically are large scale, with large up-front capital requirements, a long initial period without returns, and extended payback periods.⁸ Nevertheless, the projects create positive externalities beyond the revenue stream the projects eventually may generate.⁹

Because infrastructure projects demand long-term finance, capital markets can contribute suitable finance,¹⁰ but the risks of this type of finance necessitate a developed legal system.¹¹ When, for example, investors lack information about the potential risks of bond issuances¹² and the legal system cannot manage the

1. See FERNANDA RUIZ-NUNEZ & ZICHAO WEI, INFRASTRUCTURE INVESTMENT DEMANDS IN EMERGING MARKETS AND DEVELOPING ECONOMIES, 2 (Sept. 2015), <http://documents.worldbank.org/curated/en/141021468190774181/Infrastructure-investment-demands-in-emerging-markets-and-developing-economies>.

2. See GROUP OF THIRTY, LONG-TERM FINANCE AND ECONOMIC GROWTH (2013), http://group30.org/images/uploads/publications/G30_LongtermFinanceEconGrowth.pdf.

3. WORLD BANK INFRASTRUCTURE POLICY UNIT, DEMAND FOR LONG-TERM FINANCING OF INFRASTRUCTURE, 1 (2013), http://www.g20india.gov.in/pdfs/7a_Demand_for_Long-Term_Financing_of_Infrastructure_FINAL.pdf.

4. GROUP OF THIRTY, *supra* note 2, at 20.

5. UNITED NATIONAL INDUSTRIAL DEVELOPMENT ORGANIZATION, NEEDS AND OPPORTUNITIES FOR PRIVATE FINANCING OF INFRASTRUCTURE PROJECTS IN AFRICA – A CONCEPT FOR INTERNATIONAL PARTNERSHIP, 2 (July 2001), <http://www.unido.org/fileadmin/import/userfiles/timminsk/ecosocneedsandoppsprivatefinance.pdf>.

6. *Id.*

7. WORLD BANK, FINANCING FOR DEVELOPMENT POST-2015, 24 (Oct. 2013); See also Priya Basu, Varsha Marathe, & Inderbir Singh Dhingra, *Infrastructure Financing in India: Constraints and Challenges*, in INFRASTRUCTURE FINANCE: TRENDS AND TECHNIQUES, 146 (Henry A. Davis ed., 2008).

8. *See id.*

9. *See generally* Antonio Estache, *Infrastructure Finance in Developing Countries: An Overview*, in EIB PAPERS: PUBLIC AND PRIVATE FINANCING OF INFRASTRUCTURE 60 (2010), http://www.eib.org/attachments/efs/eibpapers/eibpapers_2010_v15_n02_en.pdf.

10. ORG. FOR ECON. CO-OPERATION & DEV., BOND MARKET DEVELOPMENT IN ASIA, 238 (2001) (*hereinafter* OECD).

11. *See* Luc Laeven, *The Development of Local Capital Markets: Rationale and Challenges*, 10 (Int'l. Monetary Fund, Working Paper WP/14/234, Dec. 2014).

12. This paper focuses on bonds, leaving equity financing techniques outside the scope of the paper. As residual claimants, equity investors in infrastructure bear the highest risks, which limits the

risks in foreseeable ways,¹³ investors cannot anticipate losses accurately.¹⁴ As a result, they misprice bonds and overinvest,¹⁵ creating instability that can spread if the law cannot adequately manage the instability.¹⁶

The countries with the greatest need for infrastructure investment often are the countries without the legal foundations to support capital markets, and most emerging economies have depended on finance by governments and from banks.¹⁷ Budget limitations constrain government investment¹⁸ and maturity risk constrains banks from extending long-term loans.¹⁹ The recent global financial crisis also demonstrated the ability of the banking system to propagate risks²⁰ and the difficulty of maintaining investment during disruptions to the banking system.²¹

A broader mix of financing models could mobilize untapped sources of private capital.²² Previous studies have suggested financing models without

potential pool of equity investors. In many countries, pension funds invest in unlisted infrastructure equity, but in several emerging economies, including India, pension funds legally cannot enter into such investments. In many emerging economies, potential equity investors also may perceive a lack of sufficient exit opportunities.

13. See WORLD ECONOMIC FORUM, *ACCELERATING EMERGING CAPITAL MARKETS DEVELOPMENT CORPORATE BOND MARKETS* 6, 14, 23 (April 2015); See also Dieter Helm, *Infrastructure and infrastructure finance: The role of the government and the private sector in the current world*, in EIB PAPERS: PUBLIC AND PRIVATE FINANCING OF INFRASTRUCTURE 8, 15 (2010).

14. See Fitch: *Bond Defaults a Long-Term Positive for China Market*, REUTERS (April 9, 2015), <http://www.reuters.com/article/idUSFit91926620150410> (discussing a default in the Chinese bond market as positive because it established a clear legal process in cases of default enables “more effective and appropriate pricing of risk”); See also Olufemi Olugbemiga Soyaju, *Public Assets Financing Nigeria: The Imperatives for Legal Reforms to Unlock Domestic Financial Resources and Foreign Capital for Infrastructure Development*, 58-59 (2012) (doctoral dissertation, Faculty of Law, University of Pretoria).

15. See *id.*

16. See INTERNATIONAL MONETARY FUND, *GLOBAL FINANCIAL STABILITY REPORT: MARKET DEVELOPMENTS AND ISSUES*, 139 (2007).

17. See Shubhomoy Ray, *Infrastructure Finance and Financial Sector Development*, 4 (Asian Dev. Bank, Working Paper No. 522, Mar. 2015), <http://www.adb.org/sites/default/files/publication/159842/adbi-wp522.pdf>.

18. See Hannah Levinger, *Current Issues Emerging Markets: What’s behind recent trends in Asian corporate bond markets?*, DEUTSCHE BANK RES. (Jan. 31, 2014).

19. See Vivek Rao, *Developing the Financial Sector and Expanding Market Instruments to Support a Post-2015 Development Agenda in Asia and the Pacific*, 10 (Asian Dev. Bank Sustainable Dev., Working Paper No. 36, Mar. 2015).

20. See Eugenio Cerutti, et al., *Systemic Risks in Global Banking: What Available Data can tell us and What More Data are Needed?*, 3 (Int. Monetary Fund, Working Paper WP/11/222, 2011).

21. See Stijn Claessens & Neeltje van Horen, *Foreign Banks and the Global Financial Crisis: Investment and Lending Behavior*, CENTER FOR ECON. & POL’Y RES. (Jan. 31, 2012), <http://voxeu.org/article/foreign-banks-and-global-financial-crisis-investment-and-lending-behaviour>; See also GROUP OF THIRTY, *supra* note 2, at 29.

22. See RICHARD DOBBS, ET AL., MCKINSEY GLOBAL INSTITUTE, *FAREWELL TO CHEAP CAPITAL? THE IMPLICATIONS OF LONG-TERM SHIFTS IN GLOBAL INVESTMENT AND SAVING*, 56 (Dec. 2010).

considering the legal infrastructure necessary to implement and support them.²³ Many of the models, including securitization of bank loans, government interventions in bond markets, and credit default swaps on corporate bonds, also pose risks in emerging economies in which legal reforms remain ongoing.²⁴ Others, including consortium lending by banks and covered bonds appear easier for emerging economies to implement.²⁵

This paper analyzes the tradeoffs that intermediate models for financing infrastructure present, in terms of augmenting the availability of long-term capital versus managing its risks. The paper uses India as a lens through which to explore the potential fault lines in each model, and the necessary role for law in each.

The analysis suggests that covered bonds could best mobilize investment in infrastructure. Covered bonds enable banks to sell their loans to downstream investors and also ring fence assets on the balance sheets of the banks to provide liquidity against the maturity risk that the bank loans entail.²⁶ Although covered bonds do not eliminate the maturity risk or facilitate significantly longer bank loans, and therefore do not attract capital from institutional investors, the assets in the cover pool reduce the risk exposure of investors in the covered bonds, which enables the investors to charge low interest rates on the bonds.²⁷ The legal foundations for the model appear easy to implement, even at early stages of legal development, and the model generates minimal risks for the law to contain.²⁸

Section I first anchors the arguments of the paper in financial theory.²⁹ The Section explains how bank finance of long-term infrastructure development projects introduces currency and maturity risks and information asymmetries, while, with the proper safeguards, the capital markets may offer a source of finance more suitable to the projects.³⁰

Section II portrays the infrastructure shortfalls that persist in emerging economies including India.³¹ The section argues that bank lending and public finance lack the capacity to eliminate the infrastructure deficits.³²

Section III explores the risks of using a long-term bond market to channel capital to infrastructure projects.³³ The Section presents three case studies that

23. See, M. S. Mohanty & Philip Turner, *Banks and financial intermediation in emerging Asia: reforms and new risks*, 45 (Bank for Int'l. Settlements, Working Paper No. 313, June 2010) (noting "dearth of legal-focus scholarly literature" in the context of infrastructure finance arrangements).

24. See *infra* Section IV.

25. *Id.*

26. See *infra* Section IV.A.3.1.

27. See *infra* Section IV.A.3.

28. *Id.*

29. See *infra* Section I.

30. *Id.*

31. See *infra* Section II.

32. *Id.*

33. See *infra* Section III.

illustrate the difficulties both of predicting the risks and resolving instability in a bond market.³⁴

Section IV sets out five intermediate financing models and evaluates the qualities of a legal system necessary to implement the models and manage their risks.³⁵ The Section presents three modifications to bank finance that accommodate maturity risk in different ways but do not offer long-term investment vehicles to attract additional capital from institutional investors.³⁶ The Section then presents two modifications to bond finance that provide long-term investment vehicles and attract institutional investors by transferring default risks onto governments and third parties but depend on improvements to macro-level governance and transparency within the financial market.³⁷ The Section concludes that covered bonds offer the most appropriate financing model for countries with legal systems at equivalent stages of development to India.³⁸ While covered bonds do not eliminate maturity risk, the implementation of covered bond structures by banks requires legal foundations that appear easy for countries to implement, and covered bonds appear to pose few risks.³⁹

Currently, when infrastructure investment needs run high, capital-constrained banks are limiting lending⁴⁰ and increasing the interest margins that they charge,⁴¹ and the Basel III regulations likely will constrain bank lending further.⁴² Capital markets could supplement bank lending, but developing the legal supports necessary to backstop the risks that the markets may produce takes time.⁴³ Emerging economies have more realistic options for mobilizing private finance into infrastructure development that pose risks that their legal systems may more easily accommodate. Turning to alternative models could more quickly increase the availability of funding for improvements to infrastructure.

34. *Id.*

35. *See infra* Section IV.

36. *See infra* Section IV.A.

37. *See infra* Section IV.B.

38. *See infra* Section IV.A.3.

39. *Id.*

40. *See* UNTT Working Group on Sustainable Development Financing, *Chapter 3: Challenges in raising private sector resources for financing sustainable development*, <https://sustainabledevelopment.un.org/content/documents/2106UNTT%20Chapter%20III.pdf>.

41. *See, e.g.*, Frank Damerow, et al., *How Covered Bond markets can be adapted for Renewable Energy Finance and How This Could Catalyse Innovation in Low-Carbon Capital Markets*, 2 (Climate Bonds Initiative, Discussion Paper, May 2012).

42. *See* JIM TURNBULL, RES. BANK OF AUSTR., CONFERENCE VOLUME DISCUSSION, 92 (2014), <http://www.rba.gov.au/publications/confs/2014/pdf/ehlers-packer-remolona-disc.pdf>; *See also* ANDRE LABOUL ET AL., ORG. FOR ECON. CO-OPERATION & DEV., PRIVATE FINANCING AND GOVERNMENT SUPPORT TO PROMOTE LONG-TERM INVESTMENTS IN INFRASTRUCTURE, 20 (Sept. 2014).

43. *See* Barry Eichengreen, et al., *A Tale of Two Markets: Bond Market Development in East Asia and Latin America*, 36 (Hong Kong Inst. for Monetary Res., Occasional Paper No.3, Oct. 2006).

I.

VARIETIES OF INFRASTRUCTURE FINANCE

To channel investment into infrastructure, economies may rely on bank-centered financial intermediation, or they may develop domestic capital markets.⁴⁴ While bank finance offers a basic form of funding from the deposits of individual savers,⁴⁵ bank finance of longer-term investments introduces risk deriving from currency and maturity mismatches⁴⁶ and information asymmetries.⁴⁷ By offering contracts to investors which specify payments over extended periods, domestic bond markets provide capital better suited to long-term finance;⁴⁸ however, without the proper safeguards, the introduction of a bond market into an economy also may destabilize the economy.⁴⁹ Both bank-based and bond-based funding strategies depend for their performance on legal supports, including reliable property rights and debt enforcement mechanisms.⁵⁰ This section examines the risks of bank and bond finance in the context of infrastructure development and argues that with sufficient legal protections bond finance better suits infrastructure development.

A. *Bank Finance*

Because of its relative simplicity, many less-developed economies have relied on bank finance of infrastructure, but the use of bank finance for long-term investments has restricted the availability of funding and introduced vulnerabilities into the economies.⁵¹ Banks extend loans from short-term deposits generally in domestic currency, but the depositors can withdraw the deposits supporting the loans at any time, and the fluctuation of foreign exchange rates introduces additional risk.⁵² Adverse selection problems also can result from the use of bank finance for infrastructure development because of limitations to the ability of banks to distinguish the quality of borrowers.⁵³ To offload some of these risks, banks have sold loans in the form of asset-backed securities to downstream

44. See Cedric Achille & Meng Mezui, *Assessing Local Markets for Infrastructure: Lessons for Africa*, 12 (African Dev. Bank, Working Paper No. 153, Oct. 2012).

45. See TODD A. GORMLEY ET AL. *CORPORATE BONDS: A SPARE TIRE IN EMERGING MARKETS?*, 2 (June 7, 2006), <http://apps.olin.wustl.edu/workingpapers/pdf/2006-06-042.pdf>.

46. See Carmen M. Reinhart & Mohsin S. Khan, *Macroeconomic Management in APEC Economies: The Response to Capital Inflows*, in *CAPITAL FLOWS IN THE APEC REGION* 15, 15 (1995).

47. See *id.*

48. See OECD, *supra* 10, at 240.

49. *Id.* at 244, 256, 269, 300.

50. See Eichengreen, *supra* note 43, at 9-10.

51. GROUP OF THIRTY, *supra* note 2, at 29.

52. See *infra* Section A.

53. See, e.g., P. Luengnaruemitchai & L. Ong, *An Anatomy of Corporate Bond Markets: Growing Pains and Knowledge Gains*, 3 (Int'l Monetary Fund, Working Paper WP/05/152, 2005); Philip E. Strahan, *Borrower Risk and the Price and Nonprice Terms of Bank Loans*, *BANKING STUDIES FUNCTION*, 1 (Oct, 1999), <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.460.3804&rep=rep1&type=pdf>.

investors,⁵⁴ but the recent financial crisis exposed the potential for the arrangements to destabilize economies.⁵⁵ Other banks successfully have collaborated to finance infrastructure projects.⁵⁶

Bank finance currently accounts for roughly 75% of all finance in economies at earlier stages of economic development including, for example, Malaysia and Thailand.⁵⁷ By developing relationships with firms and monitoring them over time, banks can sidestep some deficiencies in information about the firms that they lend to and generally can re-contract easily in the event of default.⁵⁸ Direct relationships with borrowers enable banks to enforce their agreements and reclaim their collateral through reputational pressures and repeat contact.⁵⁹ Nevertheless, bank finance of long-term infrastructure projects can create problems in the economies that rely on it.⁶⁰

Banks frequently must supplement domestic savings with external borrowing,⁶¹ which exposes the banks to currency risk.⁶² The performance of banks depends on both the success of their loans and any changes in the value of the foreign capital relative to the domestic capital.⁶³ A sharp depreciation in the domestic currency of the infrastructure project revenues can prevent banks from servicing foreign currency lenders.⁶⁴

In addition to the currency risk inherent to banks, which infrastructure finance accentuates, the general problem of duration mismatches within banks becomes severe when banks finance long-term infrastructure projects.⁶⁵ Banks lend to borrowers using assets from their depositors, but the depositors retain the right to withdraw the assets at any time.⁶⁶ When the time horizon of bank loans

54. See, e.g., Raffaele Della Croce & Stefano Gatti, *Financing Infrastructure: International Trends*, 1 *ORG. FOR ECON. CO-OPERATION & DEV. J.*, 131 (2014) (discussing basics of securitization).

55. See, e.g., Ray, *supra* note 17.

56. Croce & Gatti, *supra* note 54, at 131 (discussing basics of lending by bank consortia).

57. Levinger, *supra* note 18, at 4.

58. *Id.*

59. OECD, *supra* note 10, at 106 (stating that banks, as relationship-based systems, can function even in the absence of weak law related to contract enforcement).

60. See *infra* Section A.

61. See, e.g., MONTEK AHLUWALIA, *FINANCING PRIVATE INFRASTRUCTURE: LESSONS FROM INDIA*, 12, planningcommission.gov.in/aboutus/speech/spemsa/msa009.doc; TIMOTHY IRWIN, *GOVERNMENT GUARANTEES: ALLOCATING AND VALUING RISK IN PRIVATELY FINANCED INFRASTRUCTURE PROJECTS*, 72 (2007).

62. Basu, *supra* note 7, at 147.

63. See, e.g., Reinhart, *supra* note 46 (discussing possibility for “mismatch between the currency denomination of bank loans and the currency denomination of profits and incomes of the borrowing sector”).

64. See, e.g., Basu, *supra* note 7 (discussing risks related to foreign-currency borrowings and domestic infrastructure revenues and the need to hedge against the resulting currency risk).

65. See, e.g., Rao, *supra* note 19, at 10.

66. See, e.g., Christa H.S. Bouwman, *Liquidity: How Banks Create It and How It Should Be Regulated*, in *OXFORD HANDBOOK OF BANKING* (Allen .N. Berger et al. eds., 2nd ed. 2015); see also Anil Kashyap, et al., *Banks as Liquidity Providers: An Explanation For the Coexistence of Lending*

increases, the risk increases that banks will become unable to back their loans with sufficient assets, for example because the amount of deposits that a bank holds decreases or the value of the assets that a bank holds falls.⁶⁷ Requiring banks to retain more assets or charge higher interest rates to borrowers may decrease the risk, but these rules increase the cost of credit.⁶⁸

In addition to financing long-term investments in a high-risk and expensive way,⁶⁹ a large volume of long-term lending by banks can increase the vulnerability of economies to corrections.⁷⁰ During periods of economic stress, depositors tend to withdraw their deposits from banks.⁷¹ As a result, banks may lose the assets to support their long-term loan commitments at a time when replacing the assets has become difficult.⁷² If depositors withdraw their deposits at once, banks may fail.⁷³ The failures may spread through the domestic economies of banks and into the economies of other countries in which the banks have conducted business.⁷⁴

Meanwhile, banks cannot perfectly distinguish the quality of potential borrowers, and this information asymmetry becomes important in the context of bank financing of infrastructure.⁷⁵ If banks charge high interest rates to compensate for the uncertainty, only lower-quality projects may seek funding from banks, leaving the banks with high-risk lending portfolios.⁷⁶

and Deposit-Taking 57 J. FIN 33, 34-35 (2004).

67. See, e.g., Strahan, *supra* note 53, at 6 (stating that limiting the size of a bank loan limits the maturity risk and that as the time horizon of the loan increases, the size of the loan increases and maturity risk increases).

68. FIN. STABILITY BD, FINANCIAL REGULATORY FACTORS AFFECTING THE AVAILABILITY OF LONG-TERM INVESTMENT FINANCE: REPORT TO G20 FINANCE MINISTERS AND CENTRAL BANK GOVERNORS, 4 (Feb. 8, 201).

69. See BANKRUPTCY LAW REFORM COMMITTEE, INTERIM REPORT, 34 (Feb. 2015), http://finmin.nic.in/reports/Interim_Report_BLRRC.pdf.

70. OECD, *supra* note 10, at 239.

71. See, e.g., Hirwa Amatus & Nasiri Alireza, *Financial Inclusion And Financial Stability in Sub-Saharan Africa (SSA)*, 36 INT'L J. SOC. SCI. 39, 45 (2015).

72. See, e.g., Viral V. Acharya & Nada Mora, *Are Banks Passive Liquidity Backstops? Deposit Rates and Flows during the 2007-2009 Crisis*, 3, 4, 10, (Nat. Bureau Econ. Res., Working Paper 17838, Feb. 2012) <http://www.nber.org/papers/w17838.pdf>.

73. This is commonly known as a bank run, see Bouwman, *supra* note 66 at 4.

74. See, e.g., George G. Kaufman, *Bank Contagion: Theory and Evidence*, 8-12 (Fed. Res. Bank of Chi., Working Paper WP-92-13, 1992).

75. See, e.g., Iris Claus & Arthur Grimes, Treasury of New Zealand, *Current theories of financial intermediation Asymmetric Information, Financial Intermediation and the Monetary Transmission Mechanism: A Critical Review*, 12 (New Zealand Treasury, Working Paper 03/19, Sept. 2003).

76. See *id.* ("The interest rate an individual is willing to pay may act as a screening device. Those who are willing to pay high interest rates may, on average, be worse risks. They are willing to borrow at high interest rates because they perceive their probability of repaying the loan to be low.").

To circumvent some of these problems, some banks have sold their loans as asset-backed securities,⁷⁷ but the recent global financial crisis revealed that new risks can flow from this practice.⁷⁸ The process of securitization has enabled banks to transform their loans into tradable notes.⁷⁹ The banks have sold their loan books to special-purpose vehicles (“SPVs”), which have pooled the loans and sold rights to the repayment streams of the loans to downstream investors.⁸⁰ The crisis, however, demonstrated in part the incentives the securitization process created for banks inadequately to screen and monitor borrowers, among other problems, and the ability of banks to spread risks and the difficulty of resolving instability in the banking sector.⁸¹ The paper discusses securitization more fully in Section IV.⁸²

Banks also have provided finance for infrastructure development in cooperation with other banks.⁸³ Lead investors have arranged consortia of banks that have provided loans secured by project assets and repaid from the revenues produced by the projects.⁸⁴ The distribution of the risk of the project among multiple lenders has reduced the cost of capital for the projects and allowed for greater leverage.⁸⁵ European banks, for example, extensively have employed joint financing techniques, and many European banks offered infrastructure finance in Latin America prior to the recent financial crisis.⁸⁶ The paper discusses this financing technique in greater detail in Section IV.⁸⁷

B. Bond Finance

When an economy has established the safeguards necessary for managing a local bond market, bond finance of infrastructure may contribute to a lower cost of capital⁸⁸ and lower level of economic risk than bank finance.⁸⁹ Robust local-currency bond markets insulate economies from bad events that may occur in the banking sector and shift currency risks to foreign investors.⁹⁰ Domestic bond

77. Croce & Gatti, *supra* note 54, at 131.

78. See, e.g., Steven L. Schwarcz, *The Conundrum of Covered Bonds*, 66 *BUS. LAW.* 561, 574 (2011).

79. Croce & Gatti, *supra* note 54, at 131.

80. See *id.*

81. See Schwarcz, *supra* note 78.

82. See Section IV.A.2.

83. See, e.g., BRUCE COMER, PROJECT FINANCE TEACHING NOTE, 4 (1996), <http://finance.wharton.upenn.edu/~bodnarg/ml/projfinance.pdf>.

84. See *id.* at 2.

85. See *id.*

86. See, e.g., GUSTAVO HERNÁNDEZ & TONI SANDELL, AID FOR A GREEN DEVELOPMENT: THE LATIN AMERICAN INVESTMENT FACILITY (LAIF) ON THE MAKING, 3 (March 2013), http://actalliance.eu/wp-content/uploads/2016/04/LAIF-on-the-making_march.pdf.

87. See Section IV.A.1.

88. See, e.g., Dobbs et al., *supra* note 22, at 56.

89. See, e.g., WORLD BANK, *supra* note 7, at 29–30.

90. INT’L MONETARY FUND, LOCAL CURRENCY BOND MARKETS – A DIAGNOSTIC FRAMEWORK 6 (July 9, 2013), <http://www.imf.org/external/np/pp/eng/2013/070913.pdf>; GORMLEY,

markets also match long-term assets to long-term investments in infrastructure, which eliminates the maturity risk endemic to bank loans.⁹¹

A bond market introduces complexities not present in plain bank lending. Each bond represents a promise from its issuer to repay the investors in the bond, plus interest, by a specific date.⁹² The original investors may trade their rights to repayment to downstream investors, spreading the risk of nonpayment to a larger number of secondary investors.⁹³ Whereas banks assume credit risk from their depositors, who provide the assets that the banks lend to borrowers, and manage the risk of the loans by monitoring the borrowers,⁹⁴ numerous investors in the bonds of an issuer accept the risk that the issuer will default in exchange for interest payments.⁹⁵ The investors in the bonds may have no direct relationship with the original issuer, which can make bonds more difficult to restructure than bank loans.⁹⁶

Nevertheless, the development of a domestic bond market diversifies the types of finance available in an economy, which in many cases increases economic stability in the economy while also satisfying a broader range of investment needs.⁹⁷ Because the bond market may have the ability to continue operating even when banks fail, reducing the dependence of the economy on banks helps to insulate the economy from financial stresses in the banking sector.⁹⁸ Mexico and several countries in Asia, for example, maintained economic stability during the recent financial crisis because impairments to other financing channels did not affect their domestic bond markets.⁹⁹ Several emerging economies including Argentina, Brazil, Russia, and Turkey, however, have succumbed to earlier financial crises, and their domestic bond markets seemed to spread financial contagion rather than limit contagion.¹⁰⁰

ET AL., *supra* note 45; *see also* GROUP OF THIRTY, *supra* note 2, at 20.

91. *See, e.g.*, ORG. FOR ECON. CO-OPERATION AND DEV., *BOND MARKET DEVELOPMENT IN ASIA* 239 (2001).

92. *See, e.g.*, Alan Deardorff, *Univ. of Michigan Econ. 102 Bond Price Handout 1* (Jan. 27, 2002), <http://www-personal.umich.edu/~alandear/courses/102/handouts/BondPrices.pdf>.

93. *See, e.g.*, Rohini Tendulkar & Gigi Hancock, *Corporate Bond Markets: A Global Perspective, Volume 1* 41-46 (Int'l Org. of Sec. Comm'ns, Working Paper No. 4, Apr. 2014).

94. *See id.*

95. *See, e.g.*, SEC. AND EXCH. COMM'N., *WHAT ARE CORPORATE BONDS?* (June 2013), http://www.sec.gov/investor/alerts/ib_corporatebonds.pdf.

96. *See, e.g.*, Pipat Luengnaruemitchai & Li Lian Ong, *An Anatomy of Corporate Bond Markets: Growing Pains and Knowledge Gains*, Int'l Monetary Fund Working Paper WP/05/152, at 9 (2005).

97. *See* Deardorff, *supra* note 92; GROUP OF THIRTY, *supra* note 2, at 20.

98. Guorong Jiang et al., *The Costs and Benefits of Developing Debt Markets: Hong Kong's Experience*, 105 (Bank of Int'l Settlements, Working Paper No. 11, 2001) (observing that studies have indicated that the ability of the bond market to fulfill such a "spare tire" role may depend on variables including a lack of co-movement between bank lending, and bond and equity finance in the domestic setting, and the absence of contagion in the international capital markets).

99. *See* Deardorff, *supra* note 92.

100. Philip Turner, *Weathering Financial Crisis: Domestic Bond Markets in EMEs*, 17 (Bank of Int'l Settlements, Working Paper No. 63, 2012).

In many instances, a domestic bond market may eliminate the need for external borrowing, which also contributes to increased economic stability.¹⁰¹ External borrowing introduces exposures to foreign exchange risk¹⁰² and risks related to contagion.¹⁰³ A domestic bond market, by contrast, can intermediate local investments in local currency,¹⁰⁴ and sudden changes in foreign exchange rates or reversals in foreign capital flows will not directly affect the domestic bond market.¹⁰⁵ During the recent financial crisis, for example, bond markets in Mexico and several Asian countries contributed to the economic stability of the countries by reducing their reliance on external borrowing in foreign currency.¹⁰⁶ By contrast, other countries without developed bond markets including Hungary, Romania, Estonia, Latvia, and Lithuania remained reliant on foreign currencies and fared poorly during the recent crisis.¹⁰⁷ The development of a robust domestic bond market, however, has not prevented contagion through other channels.¹⁰⁸ In some economies, codependence between the banking system and capital markets amplified shocks during the recent crisis,¹⁰⁹ and inter-linkages among economies spread the shocks globally.¹¹⁰ In addition, the development of domestic bond markets may occur in conjunction with increasing integration with other economies,¹¹¹ which also can increase vulnerabilities to fluctuations in exchange rates¹¹² and reversals in the flow of foreign capital.¹¹³

101. Galina Hale, *Bonds or Loans? On the Choice of International Debt Instrument by Emerging Market Borrowers* 3 (Nov. 14, 2001), <http://www.econ.yale.edu/~gh79/jmp.pdf>.

102. See, e.g., HARINDER KOHLI ET AL., CHOICES FOR EFFICIENT PRIVATE PROVISION OF INFRASTRUCTURE IN EAST ASIA 97 (1997); GEORG IINDERST & FIONA STEWART, INSTITUTIONAL INVESTMENT IN INFRASTRUCTURE IN EMERGING MARKETS AND DEVELOPING ECONOMIES 16 (2014).

103. See, e.g., *Financial Contagion in the Era of Globalized Banking?* (Org. for Econ. Co-Operation and Dev. Econ. Dep't, Policy Note No. 14, Paris), Jun. 2012, at 3 (stating that “[i]nternational financial integration is commonly seen as increasing economic efficiency and growth, but it may also increase countries’ vulnerability to contagion. Not surprisingly, the more banks lend to each other through cross-border loans, the higher the risk of contagion.”).

104. Dilip K. Das, *Evolving Domestic Bond Markets and Financial Deepening in Asia*, 14 GLOB. ECON. J. 89, 92 (2014).

105. See, e.g., WORLD BANK, FINANCING FOR DEVELOPMENT POST-2015, at 29-30 (2013), <http://www.imf.org/external/np/pp/eng/2013/070913.pdf>.

106. See, e.g., Deardoff, *supra* note 92.

107. Turner, *supra* note 100, at 16.

108. Including real sector linkages such as similar macroeconomic fundamentals and trade flows.

109. See, e.g., M. S. Mohanty & Philip Turner, *Banks and Financial Intermediation in Emerging Asia*, BANK OF INT’L SETTLEMENTS, WORKING PAPER NO. 313, 10(2012).

110. See, e.g., Jiang et al., *supra* note 98, at 106.

111. See, e.g., Carmen Reinhart & Kenneth Rogoff, *Serial Default and Its Remedies*, MPRA PAPER NO. 7423, 5 (2005).

112. See, e.g., James R. Lothian, *Capital Market Integration and Exchange-Rate Regimes in Historical Perspective*, 1 RESEARCH IN BANKING AND FIN. 139, 139-40 (2000).

113. See, e.g., UNTT WORKING GROUP ON SUSTAINABLE DEVELOPMENT FINANCING, CHAPTER 3: CHALLENGES IN RAISING PRIVATE SECTOR RESOURCES FOR FINANCING SUSTAINABLE DEVELOPMENT 21 (2016).

With sufficient legal safeguards, however, a domestic bond market can offer more suitable finance for long-term investments than banks can provide.¹¹⁴ Unlike banks, which must transform their short-term deposits into more long-term loans, bond finance does not entail a maturity transformation.¹¹⁵ Investors in bonds enter contracts for a specific period of time.¹¹⁶ Whereas banks, moreover, lose the assets that have supported the loans they have extended if the amount and value of their deposits fall, investors in bonds have committed their capital for the duration of the contract and use the interest rates that they charge to manage the risk of nonpayment.¹¹⁷

In particular, the long-term nature of a bond market can offer finance for infrastructure development at a lower cost and fewer risks. Because infrastructure projects typically have a large scale, large up-front capital requirements, a long initial period without returns, and extended payback periods, infrastructure projects demand long-term finance.¹¹⁸ A domestic bond market can deploy capital to infrastructure development better than banks can by providing long-term finance supported by long-term capital, when sufficient legal protections have developed.¹¹⁹

Many emerging economies have established government bond markets with minimal default risk but have failed to develop corporate bond markets.¹²⁰ Governments generally enjoy inexpensive access to lending markets,¹²¹ since investors often perceive the power of governments to tax citizens and impose losses on them as eliminating the risk of default.¹²² By contrast, investors rely on

114. See, e.g., Kohli et al., *supra* note 102; see also Jonathan Batten & Peter Szilagyi, *Developing Foreign Bond Markets: The Arirang Bond Experience in Korea*, INST. FOR INT'L INTEGRATION STUDIES, DISCUSSION PAPER NO. 138, 4 (2006).

115. See, e.g., Philip Lowe, *The Transformation in Maturity Transformation*, Address at Thomson Reuters' Third Australian Regulatory Summit (May 27, 2015); see also MAHMOOD PRADHAN, ET AL., *ASEAN BOND MARKET DEVELOPMENT: WHERE DOES IT STAND? WHERE IS IT GOING?* 4 (2011).

116. BANKR. LAW REFORM COMM., INTERIM REPORT 34 (Feb. 2015).

117. See *id.*

118. UNTT WORKING GROUP, *supra* note 113, at 21.

119. See, e.g., John D. Burger et al., *Bond Market Development in Developing Asia*, ASIAN DEV. BANK, WORKING PAPER SERIES NO. 448, at 239 (2015).

120. See, e.g., Clemente del Valle, *Developing Bond Markets: A Comprehensive View* 9 (unpublished manuscript), <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.200.9896&rep=rep1&type=pdf>. On ease of government debt issuance, see, for example, Jorge Castellanos, *Developing Government Bond Markets*, INT'L MONETARY FUND, WORKING PAPER NO. IFM-111, 4 (1998) (observing that in fact, in India, the government bond market may have crowded out the corporate bond market); MONTEK S. AHLUWALIA, FINANCING PRIVATE INFRASTRUCTURE 14 (1997), planningcommission.gov.in/aboutus/speech/spemsa/msa009.doc; TIMOTHY C. IRWIN, WORLD BANK, *GOVERNMENT GUARANTEES: ALLOCATING AND VALUING RISK IN PRIVATELY FINANCED INFRASTRUCTURE PROJECTS* (2007).

121. See, e.g., U.S. Agency for Int'l Dev. *Developing Government Bond Markets* FS SERIES NO. 12 (2010), http://www.csdrms.org/uploads/public/documents/publications/FS%20Series%2012%20-%20Government%20Bonds_Final.pdf.

122. See, e.g., del Valle, *supra* note 120, at 9.

a complicated legal infrastructure to gain the ability to estimate the probability that corporate bond issuers will default and, if they do, the amount of recoveries they might receive from the liquidation or sale of the issuers.¹²³ The capacity of investors to predict and manage risk depends on strong disclosure requirements; credible accounting and auditing practices; reliable, independent rating agencies; clear laws setting out the rights of bondholders in the event of default; a strong enforcement mechanism for such rights, and an efficient judiciary to oversee the enforcement of creditor rights.¹²⁴ Among the countries that successfully have utilized a domestic bond market to support long-term investments in infrastructure, Chile, for example, has financed local road projects with long-term bonds of an average maturity of twenty-one years.¹²⁵ The road projects avoided the expense, capital shortfalls, and maturity transformation risks that reliance on bank finance might have introduced.¹²⁶

II.

THE INFRASTRUCTURE GAP

Many emerging economies urgently require investment in infrastructure.¹²⁷ Quality of life depends on sufficient infrastructure, and infrastructure also can generate economic growth.¹²⁸ India, for example, faces an acute need for investment in infrastructure.¹²⁹ The country, however, has relied on banks for financing infrastructure, and, though the Indian government has prioritized reducing the infrastructure gap, banks have not had the capacity to fund the infrastructure that India needs.¹³⁰ India requires new tools for meeting the challenge of financing the substantial deficits in infrastructure that have persisted in India.

A. *Infrastructure and Economic Development*

Facilitating investments in infrastructure can help to meet the needs of citizens and expand the productive capacity of an economy.¹³¹ Without sufficient infrastructure, living conditions suffer and economic development may slow.¹³²

123. *See id.*

124. *See, e.g.,* U.S. Agency for Int'l Dev., *supra* note 125.

125. James P. Walsh et al., *Financing Infrastructure in India*, INT'L MONETARY FUND, WORKING PAPER NO. 181, 18 (2011).

126. *See id.*

127. *See, e.g.,* NUNEZ & WEI, *supra* note 1, at 2.

128. GROUP OF THIRTY, *supra* note 2, at 20.

129. PwC, *The Opportunity and Challenge of India's Infrastructure*, GRIDLINES, Summer 2013, at 1.

130. *See, e.g.,* Rao, *supra* note 19, at 10.

131. Group of Thirty, *supra* note 2, at 20.

132. *See, e.g.,* UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION, NEEDS AND OPPORTUNITIES FOR PRIVATE FINANCING OF INFRASTRUCTURE PROJECTS IN AFRICA – A CONCEPT FOR INTERNATIONAL PARTNERSHIP 2 (2001),

Infrastructure supports services essential to a basic quality of life.¹³³ Infrastructure lies behind the provision of health, education, heating, lighting, transportation, and communication, among other services.¹³⁴ Disease prevention, for example, depends on clean water and sanitation.¹³⁵ Individual welfare depends on easy mobility¹³⁶ and the ability to communicate over distances.¹³⁷ Hospitals and new housing units offer vital services and improve living conditions.¹³⁸

Investing in infrastructure also can contribute to economic development.¹³⁹ The World Bank has estimated that an increase in infrastructure investments of ten percent would result in an increase in GDP of one percent.¹⁴⁰ Roads, bridges, and ports, for example, reduce transportation and logistics expenses, which decreases the cost of trade.¹⁴¹ When workers can travel easily to potential jobs, employment levels rise.¹⁴² Access to rural roads also can ameliorate health outcomes such as maternal mortality rates,¹⁴³ and the availability of advanced machinery and well-equipped factories can bolster production.¹⁴⁴ In India, for example, the development of railroad services has increased trade.¹⁴⁵

Conversely, unmet infrastructure needs pose an obstacle to development.¹⁴⁶ One economic study has indicated that if any country in Africa had access to the infrastructure of Mauritius, the GDP of that country would grow by an additional 2.2 percent per year.¹⁴⁷ In many countries, the absence of power, telecommunications, transportation, and access to water has made industrial production more costly.¹⁴⁸

<http://www.unido.org/fileadmin/import/userfiles/timminsk/ecosocneedsandoppsprivatefinance.pdf>.

133. *Id.*

134. Dieter Helm, *Infrastructure and Infrastructure Finance: The Role of the Government and the Private Sector in the Current World*, 15 Eur. Inv. Bank Papers 2, at 12 (2010).

135. *See, e.g.*, United Nations Industrial Development Organization, *supra* note 132, at 2.

136. *See, e.g.*, Georg Inderst & Fiona Stewart, *Institutional Investment in Infrastructure in Emerging Markets and Developing Economies*, WORLD BANK GROUP PUBLIC-PRIVATE INFRASTRUCTURE ADVISORY FACILITY 14 (2014),

137. *See, e.g.*, United Nations Industrial Development Organization, *supra* note 132, at 2.

138. *See, e.g.*, Helm, *supra* note 134, at 12.

139. *See, e.g.*, Walsh et al., *supra* note 125.

140. *See, e.g.*, Frank Beckers & Uwe Stegemann, *A Risk Management Approach to a Successful Infrastructure Project*, MCKINSEY WORKING PAPERS ON RISK, NO. 52, at 1 (2013).

141. *See, e.g.*, GROUP OF THIRTY, *supra* note 2, at 20.

142. *See* Beckers & Stegemann, *supra* note 140, at 2.

143. *See, e.g.*, Hubert Strauss et al., *Public and private financing of infrastructure: Policy challenges in mobilizing finance*, 15 EUROPEAN INVESTMENT BANK PAPERS 12 (2010) (speaking of death because of lack of transport to hospitals).

144. *See, e.g.*, GROUP OF THIRTY, *supra* note 2, at 20 (listing machinery and factories as important infrastructure assets).

145. *See* Walsh et al., *supra* note 125.

146. *See* Beckers & Stegemann, *supra* note 140, at 1.

147. *Id.*

148. *See, e.g.*, United Nations Industrial Development Organization, *supra* note 132, at 2.

B. Indian Infrastructure Needs

The World Economic Forum has estimated a global gap in infrastructure finance of \$1 trillion per year,¹⁴⁹ and in India the need for infrastructure development has become acute (Figures 1, 2, 3). A long period of underinvestment has left India with deficits in power, water, housing, rail, roads, ports, airports, and telecommunications relative to its growing population.¹⁵⁰ The Global Competitiveness Report of the World Economic Forum for 2014-15 ranked India 90th out of 144 countries on infrastructure.¹⁵¹

Figure 1: Annual Infrastructure and Investment Needs¹⁵²

Region	Investment and Maintenance Needs (2005 constant \$US, billions)	% projected 2010-20 GDP
East Asia and the Pacific ^a	406.7	5.5
Central Asia ^b	12.5	5.2
Europe	—	—
Latin America and the Caribbean ^b	81.2	2.6
Middle East and North Africa ^c	78.5	9.2
South Asia ^a	191.2	10.8
Sub-Saharan Africa ^d	93.3	9.8
Weighted average	—	6.1

Sources: Various sources as described in notes.
 Note: — = not available.
 a. Source: Bhattacharyay, Biswa, and Nath 2010. "Estimating Demand for Infrastructure in Energy, Transport, Telecommunications, Water and Sanitation in Asia and the Pacific: 2010–2020." Asian Development Bank Institute Working Paper No. 248. East Asia and the Pacific includes three original regions: East Asia, Southeast Asia, and the Pacific. Afghanistan and Pakistan are included in South Asia instead of Central Asia. The needs are estimated for the 2010–20 period.
 b. Source: Fay and Morrison 2007. "Infrastructure in Latin America and the Caribbean: Recent Developments and Key Challenges." The needs are estimated for the 2005–15. The model assumes 2.7 percent real growth.

149. See Beckers & Stegemann, *supra* note 140, at 3.

150. See PwC, *supra* note 129, at 1.

151. Klaus Schwab et al., *Global Economic Competitiveness Report, 2014–2015*, WORLD ECON. FORUM 213 (2014).

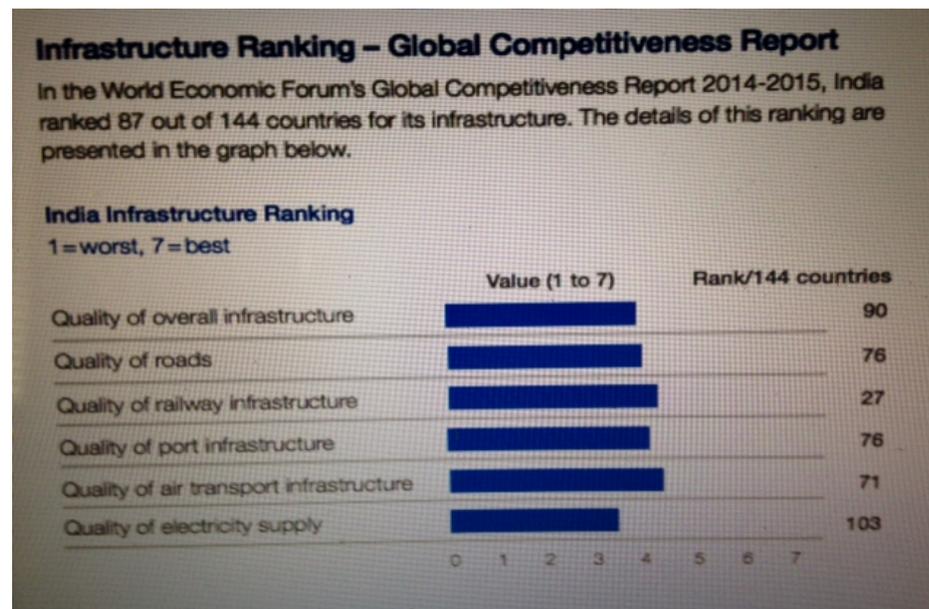
152. G20 DEVELOPMENT WORKING GROUP, INFRASTRUCTURE NEEDS ASSESSMENT 7 (2011), <http://www.g20dwg.org/documents/pdf/view/11/>.

Figure 2: Basic Infrastructure Access by Region¹⁵³

Table A.1: Basic Infrastructure Access by Region

Region	Population without electricity (millions)	% total population	Population without improved water (millions)	% total population	Rural population without access (millions)	% rural population
East Asia and the Pacific	186	9.2	237	11.9	57	5.6
Europe and Central Asia	3	0.2	18	5.1	29	25.1
Latin America and the Caribbean	31	6.6	38	6.5	24	46.1
Middle East and North Africa	24	5.9	107	28.8	26	66.2
South Asia	612	37.8	149	9.3	410	41.7
Sub-Saharan Africa	585	69.5	330	40.2	238	69.5

Sources: IEA World Energy Outlook 2010; Roberts, Shyam, and Rastogi 2006 "Rural Access Index"; WHO and UNICEF Progress on Sanitation and Drinking-Water 2010.

Figure 3: India Infrastructure Ranking¹⁵⁴153. *Id.* at 15.154. INFRASTRUCTURE INVESTMENT POLICY BLUEPRINT: COUNTRY PERFORMANCE ASSESSMENT 10 (World Economic Forum, Jan. 2015), http://www3.weforum.org/docs/WEF_Infrastructure_Investment_Policy_Blueprint.pdf.

The Indian population has surpassed 1.2 billion and continues to grow,¹⁵⁵ but infrastructure in India already fails to meet the needs of its people. The peak power deficit in India, for example, remains roughly ten percent.¹⁵⁶ According to the multinational management consulting firm McKinsey, India must also double its water generation capacity by the year 2030.¹⁵⁷ The multinational auditing and advisory firm KPMG has found that nearly one-fifth of Indian households have limited access to housing and that India would need to build 30,000,35,000 units of housing per day for the next eight years to meet the demand.¹⁵⁸

The urgency of upgrading infrastructure in India appears especially critical in its cities. India's urban population of roughly 375 million is projected to reach 500 million by 2017.¹⁵⁹ By 2030, sixty-eight Indian cities likely will have more than one million residents.¹⁶⁰

Since liberalizing its economy during the 1990s,¹⁶¹ rapid industrialization in India¹⁶² has intensified the strain on infrastructure.¹⁶³ Foreign trade, for example, has more than doubled in India over the last decade,¹⁶⁴ but the country lacks the logistics infrastructure to support the growth.¹⁶⁵ Because the Indian railway system does not have sufficient freight capacity, for example, most freight is transported by road, where traffic reduces highway speeds to roughly thirty-five kilometers per hour.¹⁶⁶

155. See, e.g., *World Population Prospects: The 2015 Revision, Key Findings and Advance Tables* 1, 4 (United Nations Department of Economic and Social Affairs Population Division, ESA/P/WP.241, 2015).

156. See, e.g., Charles K. Ebinger, *India's Energy Policy and Electricity Production*, BROOKINGS INSTITUTE (2011) (discussing 2010); *Energy in India: The Future is Black*, ECONOMIST, Jan. 21, 2012 (discussing 2012).

157. Gardiner Harris, *Rains or Not, India Is Falling Short on Drinkable Water*, N.Y. TIMES (Mar. 12, 2013), <http://www.nytimes.com/2013/03/13/world/asia/rains-or-not-india-is-falling-short-on-drinkable-water.html>.

158. FUNDING THE FUTURE – HOUSING FOR ALL BY 2020, at 22 (KPMG, 2014).

159. See PwC, *supra* note 133, at 1.

160. *Id.*

161. See, e.g., ASIA DEV. BANKS, INDIA: EQUITY INVESTMENT IN AND LOAN TO INFRASTRUCTURE DEVELOPMENT FINANCE COMPANY, at iii (Asia Development Bank, Sept. 2014).

162. See, e.g., Krishna Chaitanya, *Rapid Economic Growth and Industrialization In India, China & Brazil: At What Cost?* 3–4 (William Davidson Institute Working Paper Number 897, Oct. 2007).

163. See, e.g., ASIA DEV. BANKS, *supra* note 161, at iii.

164. See, e.g., Françoise Lemoine & Deniz Ünal-Kesenci, *China and India in international trade: from laggards to leaders?* Fig. 3 (CEPII, Working Paper No 2007-19, Nov. 2007).

165. See, e.g., INDIAN LOGISTICS: FOCUS ON INFRASTRUCTURE CREATION TO SUSTAIN AND DRIVE GROWTH 6, (Deloitte, Feb. 2014), https://www2.deloitte.com/content/dam/Deloitte/in/Documents/IMO/in-imo-indian_logistics_focus_on_infrastructure-noexp.pdf.

166. See, e.g., Arvind Kumar, *Freight Logistics & Intermodal Transport: Implications for Competitiveness* (Institute for Studies in Industrial Development, Working Paper 175, Dec. 2014).

C. Finance Landscape in India

Currently, banks finance most infrastructure investments in India,¹⁶⁷ with some supplemental public finance.¹⁶⁸ Bank lending has not provided enough capital¹⁶⁹ at a low cost,¹⁷⁰ and the lending has created risks related to the use of short-term loans to finance long-term projects.¹⁷¹ Regulators have restricted the concentration of infrastructure loans on bank balance sheets, and most banks have reached the ceilings.¹⁷² Meanwhile, the government has lacked the capacity to fill the remaining shortfalls, and the domestic bond market in India has not developed.¹⁷³

The legacy of the controlled economy that India adopted after independence from Britain has continued to influence the Indian financial market.¹⁷⁴ Upon independence, India created development financial institutions (“DFIs”) to provide long-term finance to industrial projects, stimulating domestic industry and reducing dependence on foreign imports.¹⁷⁵ The central bank and the government provided the DFIs with access to low-cost funds, so that the DFIs could provide inexpensive long-term finance,¹⁷⁶ and barred commercial banks from extending large, long-term loans to industry.¹⁷⁷

The Indian central bank and Indian government developed the DFIs into the primary source of long-term investment.¹⁷⁸ Until recently, the central bank fixed the interest rates in the economy,¹⁷⁹ setting them so that the DFIs could charge

167. Walsh et al., *supra* note 125, at 30; OECD, *supra* note 10.

168. Pronab Sen et al., *Developing the Indian Debt Capital Markets: Small Investor Perspectives* 5–6 (Perspective Planning Division, Planning Commission, Government of India, Jul. 2003).

169. See, e.g., Shubhomoy Roy, *Infrastructure Finance and Financial Sector Development* 7 (ADBI Working Paper Series No. 522, Mar. 2015), <http://www.adb.org/sites/default/files/publication/159842/adbi-wp522.pdf>.

170. Jacqueline Irving & Astrid Manroth, *Local Sources of Financing for Infrastructure in Africa* 51 (World Bank Policy Research Working Paper 4878, Mar. 2009) (noting that bank finance generally is expensive).

171. TORSTEN EHLERS ET AL., *INFRASTRUCTURE AND CORPORATE BOND MARKETS IN ASIA* 67 (2014), <http://www.rba.gov.au/publications/confs/2014/pdf/ehlers-packer-remolona.pdf>.

172. See, e.g., Walsh et al., *supra* note 125, at 30.

173. See, e.g., Asia Development Banks, *supra* note 161, at 14, 18.

174. James W. Fox et al., *Developing the Capital Market in Asia* 3 (US Agency for Int’l Dev., Apr. 1999), http://pdf.usaid.gov/pdf_docs/PNACA922.pdf.

175. See, e.g., SUBHASH CHANDRA DAS, *THE FINANCIAL SYSTEM IN INDIA: MARKETS, INSTRUMENTS, INSTITUTIONS, SERVICES AND REGULATIONS* 538–39 (2015).

176. Abdul Naser, *Changing Role of Development Financial Institutions in Indian Financial Sector*, 3 INT’L J. MGM’T RESEARCH & REV. 2658, 2661 (2013); R. H. Patil, *Broadbasing and Deepening the Bond Market in India* 2 (The Wharton Financial Institutions Center, Working Paper No. 01-32, 2001), <http://fic.wharton.upenn.edu/fic/papers/01/0132.pdf>.

177. See, e.g., Patil, *supra* note 176, at 1.

178. *Id.* at 1-2.

179. See, e.g., DAS, *supra* note 175, at 541.

lower interest rates than commercial banks and the nascent bond market.¹⁸⁰ As a result, industrial firms relied on the DFIs for finance and the corporate bond market in India did not grow.¹⁸¹

As the Indian economy liberalized, however, competition increased and the DFIs receded.¹⁸² Banks gained access to cheaper funds and more deposits, and they became able to offer less expensive finance.¹⁸³ A more liberal import policy subjected industrial firms to global competition, and many of the firms that the DFIs had funded defaulted on their loans. In response to the defaults, the DFIs restricted lending.¹⁸⁴

Eventually, banks overtook the DFIs to become the primary source of finance in India,¹⁸⁵ but recent defaults on bank loans have made banks less willing to finance long-term projects.¹⁸⁶ Between 2007 and 2013, for example, Indian banks lent roughly \$153 billion to develop infrastructure projects including improvements to roads, ports, power, telecoms, and railways.¹⁸⁷ Many of the borrowers, however, have defaulted,¹⁸⁸ and according to the Indian central bank,

180. See, e.g., Patil, *supra* note 176, at 1.

181. *Id.* at 2.

182. See Sen et al., *supra* note 168, at 7.

183. See, e.g., Sanjana Juneja, *Evaluation of Various Government Policies in Strengthening the Secondary Money Market and Debt Market*, 5 INT'L RESEARCH J. MGM'T SOC. & HUM. 712 (2014).

184. Patil, *supra* note 176, at 2.

185. Sen, *supra* note 168, at 19.

186. In 2010, India introduced a new category of financial institution, infrastructure finance companies, and gave them more access to borrowing in order to increase the flow of capital to infrastructure. The 2015 budget proposed to improve the access of the infrastructure finance companies to capital by raising their credit rating through investments from a newly-created National Investment in Infrastructure Fund. The National Investment in Infrastructure Fund, however, has failed to attract sufficient funding.

India has approached government partnerships with caution because of concerns over national security and the risks attending external capital flows, although Prime Minister Modi has increasingly courted investment from foreign government. While India has refused past offers of Chinese investment to protect its national security, last year China invested in Indian rail infrastructure and the development of industrial parks. Japan has financed transportation initiatives, and the U.S. has invested in the development of "smart cities," which use technology in the delivery of municipal services.

Other external investment carries similar risks and has failed to attract foreign lenders. Between 2007 and 2012, the private sector invested \$225 billion in Indian infrastructure, but many of the projects have failed. In 2013, for example, the London-based private equity, infrastructure, and debt management firm 3i, which had the world's largest India-dedicated infrastructure fund, exited all of its portfolio companies in the country after its investments did not generate adequate returns.

187. This period constitutes India's "Eleventh Plan Period," in which banks provide half the lending to Indian infrastructure. See, e.g., Arvind Kumar, *Infrastructure Investment: A Trillion Dollar Question* 5-6 (CIRC, Working Paper No. 06, 2013), http://circ.in/pdf/Infrastructure_Investment_A_Trillion_Dollar_Question.pdf.

188. See, e.g., Amy Kazmin & Simon Mundy, *India's banks face up to corporate debt problems*, FINANCIAL TIMES (Apr. 20, 2016), <https://www.ft.com/content/67409efa-02ca-11e6-9cc4-27926f2b110c>; see also Victor Mallet & James Crabtree, *Bad loans spiral in India's 'broken' banking system*, FINANCIAL TIMES (Oct. 8, 2015), <https://www.ft.com/content/23890fb4-6d77-11e5-aca9-d87542bf8673>.

Indian banks have restructured \$22 billion of infrastructure loans.¹⁸⁹ The 2010-2014 Financial Stability Reports published by the Indian central bank have documented consistent declines in the growth of credit from banks.¹⁹⁰

The Indian government has offered supplementary public finance,¹⁹¹ but the infrastructure needs of the country have exceeded the capacity of the government to fund them. The 2015 national budget, for example, delayed deficit reductions to allocate an additional \$11 billion to infrastructure projects including roads, railways, and ports and doubled spending on transportation.¹⁹² The budget prioritized the construction of an elevated rail corridor in Mumbai, three airports, two ports, and almost 6,000 miles of new roads.¹⁹³ The Indian Planning Commission, however, has estimated that the country needs 180 additional airports over the next ten years, and the Ministry of Road Transport has called for additional road-widening projects and improvements at ports.¹⁹⁴ The government also has identified shortfalls in power generation from coal and gas that wind, solar, and other energy development projects could help to ameliorate.¹⁹⁵

The long-term bond market in India, meanwhile, has not contributed significantly to infrastructure funding.¹⁹⁶ Few smaller investors have participated in the bond market, and daily trading volumes have remained minimal.¹⁹⁷ The bond market has not developed to the levels that other bond markets in Asian economies such as China, Korea, and Malaysia have attained (Figure 4).¹⁹⁸ In India, bank loans represent approximately thirty-six percent of GDP, while corporate bonds represent only about four percent of GDP.¹⁹⁹ By contrast, corporate bonds represent forty-nine percent of GDP in South Korea.²⁰⁰

189. See, e.g., *Infrastructure Issues Loom Over Modi's Dream*, TODAY ONLINE (Jul 31, 2014), <http://www.todayonline.com/chinaindia/india/infrastructure-issues-loom-over-modis-dream>.

190. BANKR. LAW REFORM COMM., INTERIM REPORT 35 (Feb. 2015).

191. See, e.g., Deloitte, *supra* note 165, at 7.

192. Anant Vijay Kala & Rajesh Joy, *India's Budget Focuses on Infrastructure*, WALL STREET J. (Feb. 28, 2015), <http://www.wsj.com/articles/india-budget-focuses-on-infrastructure-1425111915>.

193. Mukesh Jagota & Anant Vijay Kala, *India's PM Unveils Infrastructure Investment Plan*, WALL STREET J. (June 6, 2012), <http://online.wsj.com/article/SB10001424052702303665904577450692014546230.html>.

194. PwC, *supra* note 129, at 2.

195. *Id.*

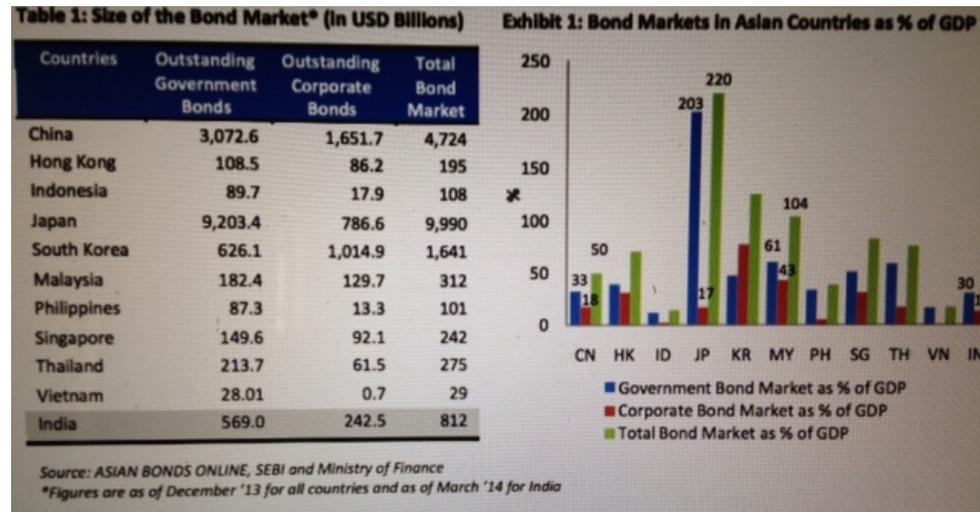
196. See, e.g., Asia Development Banks, *supra* note 161, at 18.

197. Sen et al., *supra* note 168, at 4, 12; Juneja, *supra* note 183, at 722.

198. Asian Development Bank, *supra* note 161, at 14.

199. Rajeswari Sengupta & Vaibhav Anand, *Indian Corporate Debt Market: Current Status* (IFMR Trust, Aug. 8, 2012), <http://www.ifmr.co.in/blog/2012/08/08/indian-corporate-debt-market-current-status/>.

200. *Id.*

Figure 4: Comparison of Asian Bond Markets²⁰¹

III.

CASE STUDIES ON RISK AND THE ROLE OF LAW IN THE BOND MARKET

The experience of the recent crisis has underscored the need for developing economies to develop domestic financing sources, in order to fund infrastructure projects while insulating their economies from shocks in more developed economies, but domestic bond markets require legal backstops to protect economies from the instability that bond markets can introduce.²⁰² Bank finance has grown less available due to losses at American and European banks during the recent crisis and regulatory reforms in response to the crisis.²⁰³ In addition, the dependence of other economies on foreign lending spread the crisis to additional countries.²⁰⁴ While long-term bond markets would offer a new and potentially less expensive source of finance for infrastructure,²⁰⁵ that also could

201. See CARE RATINGS, INDIAN BOND MARKET: STRIKING A CHORD WITH ASIAN PEERS, 2 (June 10, 2014), <http://www.careratings.com/upload/NewsFiles/Studies/Indian%20Bond%20Market-%20Striking%20a%20Chord%20with%20Asian%20Peers.pdf>.

202. See Batten & Szilagyi, *supra* note 114, at 4.

203. See Inderst & Stewart, *supra* note 136, at 4; *Infrastructure financing: A long and winding road*, ECONOMIST (Mar. 22, 2014), <http://www.economist.com/news/finance-and-economics/21599394-world-needs-more-infrastructure-how-will-it-pay-it-long-and-winding>.

204. For an analysis of this issue, See, e.g., ALLEN N. BERGER, TANAKORN MAKAEW, & RIMA TURK-ARISS, HOW DID FOREIGN BANK LENDING CHANGE DURING THE RECENT FINANCIAL CRISIS? EVIDENCE FROM A VERY COMPREHENSIVE DATASET, 1 (Dec. 2015), <http://moore.sc.edu/UserFiles/moore/Documents/Finance/Berger/BergerMakaewTurkAriss-ForeignBankLending.pdf>.

205. See Achille, *supra* note 44, at 11.

withstand disruptions in the banking sector,²⁰⁶ bond markets present risks that legal systems must have the capacity to contain.²⁰⁷ This section sets out three case studies that illustrate risks from fostering a long-term bond market and the necessity of a robust legal infrastructure to manage the risks. In Korea, the government sought to develop a domestic bond market, but investors expected the government to bail out firms including the Korean conglomerate firm Daewoo if they defaulted.²⁰⁸ The investors priced the bonds accordingly, but the government allowed Daewoo and other firms to go bankrupt.²⁰⁹ The investors consequently lost confidence in market prices, and the bond market collapsed.²¹⁰ In Dubai, the domestic investment firm Dubai World defaulted on its bonds after raising more bond finance than the firm had developed the capacity to manage.²¹¹ Nevertheless, the Dubai government created a new bankruptcy regime, which supported a fair resolution of the firm,²¹² and the domestic bond market rebounded.²¹³ In Argentina, the public budget became reliant on bond finance without a legal system capable of addressing the risks that the bond market introduced, and the country has become stuck in a cycle of repeated defaults.²¹⁴

A. Korea

The bankruptcy of the Korean conglomerate firm Daewoo has demonstrated the risks that a bond market poses when investors lack the information with which to price bonds correctly.²¹⁵ Investors in the bonds of Daewoo assumed that the firm would never go bankrupt and therefore charged interest rates that reflected no possibility of default.²¹⁶ After Daewoo defaulted, investors stopped investing in the Korean bond market.²¹⁷

Originally, the Korean government encouraged the growth of a domestic bond market to fund long-term investments by enacting a ceiling on the amount of bank credit that Korean firms could use.²¹⁸ Large Korean conglomerate firms known as chaebols responded by substituting bond finance for bank lending.²¹⁹

206. Juneja, *supra* note 183, at 723.

207. OECD, *supra* note 10, at 256, 269, 300 (2001).

208. *See infra* Section III(A).

209. *Id.*

210. *Id.*

211. *See infra* Section III(B).

212. Bertrand M. Renaud, *Real Estate Bubble and Financial Crisis in Dubai*, 20 J. Real Estate Literature 51, 64, 65 (2012).

213. *See infra*.

214. *See infra* Section III(C).

215. *Id.*

216. Gormley et al., *Ending "Too Big To Fail": Government Promises versus Investor Perceptions*, ADB Econ. Working Paper Series, 3 (Oct. 2012).

217. Kim & Park, *Structural Change in the Corporate Bond Market in Korea after the Currency Crisis*, BIS Paper No. 11, at 140, <http://www.bis.org/publ/bppdf/bispap11.pdf>.

218. *Republic of Korea*, IMF Staff Country Report No. 98/74, at 12 (Aug. 1998).

219. *Id.*

Investors perceived the bonds that the chaebols issued as risk-free investments and extended to the chaebols artificially cheap bond finance.²²⁰ The investors assumed that the large size of the chaebols would cause the government to bail out the chaebols if they failed.²²¹ The investors set low interest rates on the bonds not because of the stability of the chaebols but because of the expectation that the government would not allow the chaebols to default.²²²

Bonds therefore offered inexpensive finance, and the chaebols issued numerous bonds. By the end of 1997, leverage ratios among the chaebols had increased to more than 500% of equity.²²³ The investors did not monitor the firms closely, and the accounting and auditing of the chaebols did not conform to international standards.²²⁴ The lack of transparency masked the risks increasing within the chaebols.²²⁵ Despite their weak fundamentals, however, the chaebols continued to raise bond finance at rates reflecting zero risk of default.²²⁶

The access to cheap capital enabled the chaebols to forego restructuring long after restructuring became necessary.²²⁷ The chaebols eased any pressure to restructure that developed by issuing new bonds.²²⁸ Daewoo, for example, attained a leverage ratio of roughly 2,000%.²²⁹ The firm had issued 1 trillion won of bonds during each month of 1998.²³⁰ At current exchange rates 1 trillion won amounts to roughly \$900,990,000.

In spite of the expectations of the investors, Daewoo entered bankruptcy in 1999, and the investors suffered losses.²³¹ At the time it went bankrupt, Daewoo owed 60 trillion won, or roughly \$50 billion.²³² The bankruptcy procedures in Korea remained untested and did not appear capable of handling such a large bankruptcy.²³³ The government therefore entered into settlements with the

220. See Gormley et al., *supra* note 45, at 12.

221. Lim, *Restructuring of Corporate Sector and Conglomerates in Post-Crisis Korea*, Int'l Forum on Econ. Reforms in Korea & Implications for Japanese Econ., 16 (Aug. 2003); *The Death of Daewoo*, Economist (Aug. 19, 1999), <http://www.economist.com/node/233562>.

222. See Gormley et al., *supra* note 45.

223. *The Death of Daewoo*, *supra* note 221.

224. See *Id.* at 4.

225. *Id.*

226. See Gormley et al., *supra* note 45, at 3.

227. See Kim & Park, *supra* note 217, at 113

228. *Id.*

229. Kim, *A Forensic Study of Daewoo's Corporate Governance*, 28 NW J. INT'L L. & BUS. 273, 284 (2008).

230. Coe & Kim, *Korean Crisis & Recovery*, 233 (2002).

231. See Lim, *supra* note 221, at 16.

232. Sohn, *Korea's Corporate Restructuring Since the Financial Crisis*, Seminar on Promoting Growth and Welfare jointly hosted by Economic Commission for Latin America and the Caribbean – United Nations, Institute of Developing Economies – Japan External Trade Organization, and Instituto de Economia – Universidade Federal do Rio de Janeiro, Apr. 2002, at 15.

233. See Gormley et al., *supra* note 45, at 3.

investors in Daewoo, and paid them little more than market rate on the bonds that they held.²³⁴

In the wake of the Daewoo settlements, the Korean bond market collapsed.²³⁵ As investors gained awareness of the true risks of default among the chaebols, investors withdrew from the bond market.²³⁶ In addition, pooled investment vehicles known as investment trusts had realized significant losses on Daewoo bonds that the trusts had purchased, and investors in the trusts withdrew from the trusts, afraid that the trusts would also fail.²³⁷ To regain liquidity, the trusts began to sell their remaining bond holdings.²³⁸ As the bonds flooded the market, their value fell, and the trusts had to sell additional bonds to recoup the money.²³⁹ The decreasing value of bonds also caused other investors to sell their bonds, and with more bonds for sale, market prices decreased more rapidly.²⁴⁰

B. Dubai

The Dubai investment firm Dubai World sold more bonds than the firm earned revenues to service, but the government created a legal framework that stabilized the risks, and the bond market in Dubai rebounded.²⁴¹ Dubai World had issued bonds to finance real estate development projects, but the bonds matured before the projects had generated profits.²⁴² In response, the Dubai government passed new bankruptcy laws to facilitate the resolution of the claims of investors in the bonds.²⁴³ The new bankruptcy regime seemed to restore confidence in the Dubai bond market.²⁴⁴

Dubai World sought long-term finance for real estate development in Dubai, and the influx of foreign bond finance that resulted contributed to a bubble in the

234. Done He, *The Role of KAMCO in Resolving Nonperforming Loans in the Republic of Korea*, IMF Working Paper, Sep. 2004.

235. U.S. DEPT. OF STATE, DIPLOMACY IN ACTION, 14, <http://www.state.gov/documents/organization/229185.pdf>.

236. See Coe & Kim, *supra* note 230.

237. Kim & Park, *supra* note 217.

238. See, e.g., *Asian Economy and Finance* 134-35 (2005).

239. See Kim & Park, *supra* note 217.

240. *Id.*

241. See *infra* Section III(B).

242. See, e.g., IMF, *United Arab Emirates*, Staff Report for the 2009 Article IV Consultation, Jan. 22, 2010, at 8.

243. DUBAI GOVERNMENT STATEMENT OF 14 DECEMBER 2009, (Dec. 2009), <http://www.nortonrosefulbright.com/knowledge/publications/25604/dubai-world-restructuring-the-legislation-and-how-it-may-work>; see also DUBAI DECREE NO. 57 OF 2009 ESTABLISHING A TRIBUNAL TO DECIDE THE DISPUTES RELATED TO THE SETTLEMENT OF THE FINANCIAL POSITION OF DUBAI WORLD AND ITS SUBSIDIARIES, <http://dubaiworldtribunal.ae/decre-no-57-for-2009-establishing-a-tribunal-to-decide-the-disputes-related-to-the-settlement-of-the-financial-position-of-dubai-world-and-its-subsidiaries/>.

244. Renaud, *Real Estate Bubble and Financial Crisis in Dubai*, 20 J. REAL ESTATE LIT. 51, 74 (2012).

Dubai real estate market.²⁴⁵ After the government allowed foreign investors to participate in the Dubai bond market, speculative investors purchased bonds issued by Dubai World.²⁴⁶ During 2006, the price of office rentals increased by 55%, and during 2007, prices increased an additional 86%.²⁴⁷ Housing prices also rose 65% during the first half of 2008.²⁴⁸

Initial investors in real estate projects traded their bonds with downstream investors in response to the increasing real estate prices, which left the secondary investors vulnerable when real estate prices suddenly decreased.²⁴⁹ While the bonds matured within an average of seven years, typically the underlying real estate projects remained unbuilt.²⁵⁰ The secondary investors gambled on the projects yielding revenues before Dubai World had to make payments on the bonds.²⁵¹ When the global financial services firm Lehman Brothers entered bankruptcy, however, the Dubai real estate market collapsed.²⁵² Between September 2008 and September 2009, residential prices fell by more than 50%.²⁵³ Dubai World could not service its bonds, and the firm announced a standstill on \$26 billion in liabilities on November 25, 2009.²⁵⁴

The Dubai legal system appeared incapable of resolving such a large default.²⁵⁵ To begin with, Dubai World occupied an ambiguous status within the Dubai legal system.²⁵⁶ Because Dubai World had formed under the decree of the ruler of Dubai, rather than under the federal commercial laws of Dubai,²⁵⁷ questions arose regarding whether the firm had access to Dubai bankruptcy law.²⁵⁸ Moreover, even if Dubai law applied to the firm, the law seemed incapable of resolving the firm and stabilizing the bond market.²⁵⁹ The size and global importance of Dubai World necessitated a speedy resolution, but the number of international investors with claims against the firm threatened a contentious,

245. *Id.*

246. *Id.* at 55.

247. Hassler, *Housing and Real Estate Finance in Middle East and North African Countries*, WORLD BANK, 17 (June 2011).

248. *Id.*

249. *See, e.g.*, Renaud, *supra* note 244, at 51, 55-56.

250. *See id.*

251. *See id.* at 56.

252. YOUNG, *THE POLITICAL ECONOMY OF ENERGY, FINANCE AND SECURITY IN THE UNITED ARAB EMIRATES*, 69 (2014).

253. Renaud, *supra* note 244, at 61.

254. Young, *supra* note 252, at 70.

255. Latham & Watkins, *First Test Case for Dubai's Innovative Decree 57 Restructuring Regime*, 1 (July 2, 2012).

256. MOSTROUS ET AL., *THE RISE OF THE STATE*, 33 (2010); T. HAJJIRI & A. COHEN, *GLOBAL INSOLVENCY PRACTICE FOR SUSTAINABLE ECONOMIC DEVELOPMENT*, 228 (2015).

257. Young, *supra* note 252.

258. Smith & Saher, *United Arab Emirates: Commentary Upon the Dubai World Insolvency Code*, MONDAQ (Mar. 11, 2010).

259. *Id.*

costly, and protracted process.²⁶⁰ When creditors met in 2009 to discuss a potential restructuring, ninety-five different banks participated.²⁶¹ The banks commenced negotiations with seventy other lenders.²⁶²

To manage the default of Dubai World with more efficiency, the Dubai government created a new bankruptcy law.²⁶³ The new law allocated losses in a way that seemed transparent and fair to investors,²⁶⁴ and investors regained confidence in the Dubai bond market.²⁶⁵ Known as Decree No. 57, the new bankruptcy legislation blended best practices from the English and American bankruptcy systems.²⁶⁶ Within a year, investors unanimously approved a settlement that imposed on them losses of only 16%.²⁶⁷ By the end of 2010, investors resumed purchasing bonds that Dubai World issued.²⁶⁸

C. Argentina

Argentina issued bonds without a legal foundation to support the risks that the bonds introduced to the economy, and the country eventually entered a cycle of persistent default.²⁶⁹ As investors demanded high interest rates to account for the risks in the Argentinean economy, the country had to issue additional bonds to raise finance with which to service the existing bonds. The additional borrowing triggered additional increases in interest rates, which in turn made it necessary for the country to raise additional finance.

Argentina has defaulted eight times in its history,²⁷⁰ and it has defaulted most recently in 2001 and 2014.²⁷¹ In the lead-up to the 2001 default, bond issues increased substantially the debt that the country held.²⁷² The debt to GDP ratio in Argentina had risen from 35% in 1995 to nearly 65% in 2001.²⁷³

260. Renaud, *supra* note 244, at 64.

261. *Id.* at 67.

262. *Id.* at 68.

263. IMF, *United Arab Emirates*, Staff Report for the 2009 Article IV Consultation, Jan. 22, 2010, at 14.

264. Smith & Saher, *supra* note 258.

265. Renaud, *supra* note 244, at 74.

266. KUWAIT FIN. CENTRE MARKAZ RESEARCH, *DEALING WITH BANKRUPTCY IN THE GCC* 19, http://www.gulfbase.com/ScheduleReports/33f7047f_BankruptcyintheGCC-MarkazResearch.pdf.

267. Renaud, *supra* note 244, at 74.

268. *Id.*

269. *See infra* Section III(C).

270. Rosenheck, *Argentina's Rational Default*, NEW YORKER, Aug. 7, 2014.

271. Roming, *Argentina's Long History of Economic Booms and Busts*, WALL ST. J., Jul. 30, 2014.

272. *See, e.g., A decline without parallel*, ECONOMIST, Feb. 28, 2002; SHAPIRO & PHAM, *DISCREDITED – THE IMPACT OF ARGENTINA'S SOVEREIGN DEBT DEFAULT AND DEBT RESTRUCTURING ON U.S. TAXPAYERS AND INVESTORS*, 8-9 (Oct. 2006).

273. Federal Reserve Bank San Francisco, *Learning from Argentina's Crisis*, Economic Letter No. 2002-31, Oct. 18, 2002, at 2.

Argentina lacked the legal foundation to manage the risks of such extensive borrowing.²⁷⁴ The law in Argentina did not provide mechanisms to ensure transparency, disclosure, and information sharing in the financial market.²⁷⁵ The bankruptcy system also did not maximize returns to investors and instead seemed to insulate bond issuers from the claims of investors.²⁷⁶ In addition, the economy depended on commodities and agricultural products with volatile prices²⁷⁷ and remained vulnerable to inflation.²⁷⁸ The government, moreover, did not impose macroeconomic policies in a stable way.²⁷⁹

Consequently, investors could not easily predict the risks of the bonds with accuracy, and the high interest rates that the investors charged in response to the uncertainty made default almost inevitable.²⁸⁰ As investors grew unsure of their returns,²⁸¹ they raised interest rates on bonds²⁸² to protect themselves against losses.²⁸³ Interest rates rose 20% during 2001.²⁸⁴ The increasing interest rates caused debts levels in Argentina to grow, as more borrowing raised interest rates higher.²⁸⁵ Eventually, Argentina reached a point when it could not repay the debt.²⁸⁶

274. See, e.g., Center for Economic and Policy Research, *Argentina Since Default: The IMF and the Depression*, September 3, 2002 (discussing IMF objections to Argentine Bankruptcy Code).

275. See, e.g., IMF, *The Role of the IMF in Argentina, 1991-2002*, July 2003 (discussing the “poor transparency of fiscal operations”); see also IMF, *Transcript of a Press Conference on the Global Financial Stability Report*, March 14, 2002 (discussing inadequacy of disclosure regime in Argentina to enable retail investors to discriminate in lending decisions);

276. See, e.g., Weisbrot & Sandoval, Center for Economy and Policy Research, *Argentina’s Economic Recovery Policy Choices and Implications*, October 2007, at 12.

277. See, e.g., Reinhart & Rogoff, *Serial Default and Its Remedies*, at 5, 11, available at http://mpira.ub.uni-muenchen.de/7423/1/MPRA_paper_7423.pdf.

278. See, e.g., Nash, *Turmoil, Then Hope in Argentina*, N.Y. TIMES, January 31, 1991 (As a response to inflation, the peso was linked to the U.S. dollar but continued to appreciate against numerous currencies as the dollar gained strength).

279. See, e.g., *Argentina’s Debt Crisis*, TREASURY TODAY, February 2014.

280. See, e.g., Akkerman & Teunissen, *FONDAD, The Crisis That Was Not Prevented*, at 4 (2003).

281. See, e.g., Pouzo & Presno, *Sovereign Default Risk and Uncertainty Premia*, Federal Reserve Bank of Boston Working Paper No. 12-11, 2012, at 2.

282. See, e.g., IMF, *The Role of the IMF in Argentina, 1991-2002*, July 2003, at Figure 2 (showing sharp rise in Argentine bond spreads and discussing “rising country risk premia”).

283. See, e.g., Rambarran, *Argentina’s Sovereign Debt Default and the IMF*, 5-6 (Mar. 12, 2004).

284. See, e.g., Moreno, *Learning from Argentina’s Crisis*, FRBSF Economic Letter, October 18, 2002.

285. See, e.g., Ctr. Econ. & Pol’y. Res., *Argentina Since Default: The IMF and the Depression*, Sept. 3, 2002 (“Argentina got stuck in a debt spiral in which high interest rates increased the debt and the country’s risk premium, which lead to even high interest rates and debt service until its default”).

286. See *id.*

The cycle of default became inescapable.²⁸⁷ The government broke investment contracts,²⁸⁸ and raising finance became even more difficult.²⁸⁹ As investors transitioned from offering bond finance at higher interest rates²⁹⁰ to exiting the bond market entirely, Argentina could not obtain new capital with which to repay its existing debts.²⁹¹

IV.

OTHER MODELS OF INFRASTRUCTURE FINANCE

For economies that lack the legal backstops necessary for maintaining stability in domestic bond markets, what interim financing models exist to facilitate the provision of capital to infrastructure development at a low risk? Can bank finance of infrastructure projects become safer and less expensive, despite the currency and maturity risks and information asymmetries that long-term bank loans introduce? How might nascent bond markets avoid risks that domestic legal systems currently may lack the capacity to manage? This section discusses intermediate financing models that include bank consortia, securitization, covered bonds, government participation in bond markets, and credit default swaps on corporate bonds.²⁹² The section evaluates the level of legal support that each model requires, highlighting the tradeoff between economic stability and the provision of long-term finance.²⁹³ The section draws on India as an example in order to observe the ability of legal systems in emerging economies to support the risks of each financing technique and concludes that, among the techniques analyzed, covered bonds offer the most suitable means for emerging economies to raise capital for infrastructure investment.²⁹⁴

A. Bank-Based Alternative Models

Although intermediate financing models based on bank loans do not eliminate the maturity risk inherent to aggregating short-term deposits into long-term loans, the models contribute various approaches to managing the risk.²⁹⁵ The models also circumvent shortcomings in specific areas of domestic law; however, they continue to require improvements in other areas of law.²⁹⁶ Bank consortia,

287. IMF, *Lessons from the Crisis in Argentina*, October 8, 2003, at 59.

288. See, e.g., Saxton, *Argentina's Economic Crisis: Causes and Cures*, Joint Economic Committee, United States Congress, June 2003.

289. See, e.g., Ctr. Econ. & Pol'y. Res., *supra* note 285 (describing inability of exporters to access credit).

290. See Rambarran, *supra* note 283.

291. See, e.g., Torre et al., *Argentina's Financial Crisis: Floating Money, Sinking Banking*, WORLD BANK, 10 (2002).

292. See *infra* Section IV.

293. *Id.*

294. *Id.*

295. See *infra* Section IV(A).

296. *Id.*

for example, distribute maturity risk among several banks, thereby enabling each bank in the consortium to diversify the maturity risk that it holds.²⁹⁷ Contracts among the banks and other participants in the arrangements can stipulate any national law for enforcement of the contracts supporting the arrangements, but domestic property rights continue to govern enforcement claims against loan collateral.²⁹⁸ Second, securitization enables banks to transfer maturity risk to downstream investors.²⁹⁹ Securitization purports to sidestep domestic bankruptcy law but may introduce moral hazard risks at banks and,³⁰⁰ if problems develop, maintaining economic stability may depend on the availability of a robust resolution mechanism.³⁰¹ Finally, covered bonds retain the maturity risk within banks but ensures liquidity at the banks to manage the risk.³⁰² Like securitization, covered bonds purport to avoid domestic bankruptcy processes; however, they also diminish the moral hazard that securitization may generate.³⁰³ Nevertheless, covered bonds also necessitate legal implementation and management.³⁰⁴ While the models mitigate maturity risk connected to bank loans and may reduce pressure on certain legal backstops, each model poses risks that legal systems must accommodate.³⁰⁵ In addition, because maturity risk continues to constrain the duration of the underlying bank loans, none of the models attracts greater investment from institutional investors, including pension funds, insurance funds, and mutual funds, that could contribute long-term capital to long-term investments.³⁰⁶ In light of the tradeoffs, covered bonds appear to offer emerging economies, such as India, that have deficits in their legal systems, the most benefits relative to their risks.

1. *Bank Consortia*

Pooling arrangements among banks diversify maturity risks³⁰⁷ through contracts among the banks and their borrowers.³⁰⁸ Because the banks can draft the

297. See Comer, *supra* note 84, at 4.

298. See *infra* Section IV(A).

299. *Id.*

300. Segoviano et. al, *Securitization: Lessons Learned and the Road Ahead*, IMF Working Paper WP/13/255, Nov 2013, at 16.

301. See *infra* Section IV(A).

302. *Id.*

303. *Id.*

304. *Id.*

305. *Id.*

306. *Id.*

307. See, e.g., Francis N. Twinamatsiko, *What is the Role of Loan Syndication in Project Financing* at 7 (discussing risk diversification of bank consortia).

308. See, e.g., C. Groobey, John Pierce, M. Faber & G. Broome, *Project Finance Primer for Renewable Energy and Clean Tech Projects*, Wilson Sonsini Goodrich at 4-6; B. Esty & W. Megginson, *Creditor Rights, Enforcement, and Debt Ownership Structure: Evidence from the Global Syndicated Loan Market*, Tuck-JQFA Contemporary Corporate Governance Issues II Conference, June 24, 2002 at 5, available on SSRN (id 320226)

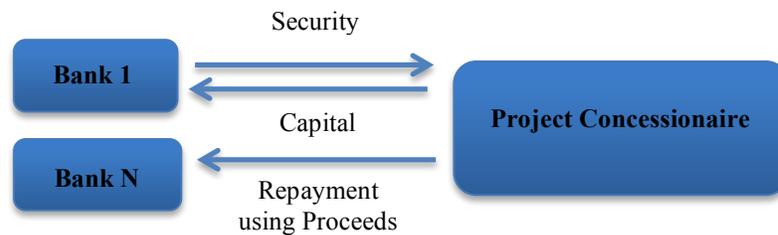
contracts under foreign law, the pooling arrangements can avoid shortfalls in domestic law related to contract enforcement.³⁰⁹ The banks, however, continue to depend on the domestic law of the project to enforce their security rights.³¹⁰ Bank finance through a consortium of banks therefore may require legal reforms to domestic law related to secured credit, and high transaction costs also may negate any reductions in the cost of capital that diversifying risks otherwise could attain.

i. Structure

In bank consortia, groups of banks jointly finance borrowers.³¹¹ The collective arrangements enable the banks to extend larger loans than each participating bank individually could extend.³¹² The banks base the loans on the project revenues they predict.³¹³ Dividing the loans among more than one bank allows each bank to diversify the risks it undertakes and tailor its compliance with lending regulations.³¹⁴

Banks that join consortia cooperate on loans.³¹⁵ The banks share due diligence, drafting, and monitoring tasks.³¹⁶ Each bank retains a portion of each loan on its balance sheet (Figure 5).³¹⁷

Figure 5: Bank Consortia



309. See, e.g., Esty & Megginson, *supra* note 308, at 5.

310. *Id.*

311. See Groobey, *supra* note 308, at 8 (discussing groups of banks taking a portion of a loan and coordinating among themselves).

312. See, e.g., G. Nayak & D. Rajkumar, *Banks Take Syndicated Loan Route to Fund Large Projects*, *Economic Times*, Sept 8, 2010; G. Caporale, S. Lodh & M. Nandy, *How Has the Global Financial Crisis Affected Syndicated Loan Terms in Emerging Markets?*, CESIFO Working Paper No. 5353, May 2015, at 4.

313. See Twinamatsiko, *supra* note 307.

314. See, e.g., Central American Bank for Economic Integration, *Syndicated Loans*, available at <http://www.bcie.org/?cat=1139&title=Syndicated%20Loans&lang=en>.

315. Groobey, *supra* note 308, at 8.

316. See, e.g., Esty & Megginson, *supra* note 308, at 4.

317. See, e.g., BANCO DE ESPAÑA EUROSISTEMA, *THE CRISIS AS A WAKE-UP CALL. DO BANKS TIGHTEN LENDING STANDARDS DURING A FINANCIAL CRISIS?*, 4 (July 2009), <http://www.bde.es/f/webpi/SES/seminars/2009/files/sie0925.pdf>.

Typically, bank consortia offer non-recourse loans, which depend on the revenues of the infrastructure projects rather than the financial position of the companies developing the projects.³¹⁸ When borrowers default, the banks seize their collateral³¹⁹ but do not have access to the borrower's other assets to make up deficiencies.³²⁰ The structuring may be helpful in encouraging relatively new companies, prevalent in less-developed economies, to contribute to infrastructure development.³²¹

The collaboration among the banks also facilitates compliance with concentration and sector limits on banks that regulators including those in India impose.³²² In India, banks may extend only fifteen to twenty percent of their capital to a single borrower,³²³ and they must lend forty percent of their credit to priority sectors, which principally include agriculture, education, housing, and underprivileged groups.³²⁴ Banks in India also must hold a quarter of their deposits in government bonds.³²⁵ By aggregating their unrestricted assets, bank finance through consortia of banks enables each bank to comply with the regulations and also extend a large loan.

ii. Implementation

Some aspects of consortium-based bank lending sidestep common shortcomings in the domestic law of emerging economies while others do not, and overall, the implementation of the consortium structure may be very expensive.³²⁶ Complexities make the contracts supporting the arrangements difficult to draft, and though the contracts may specify foreign contract law and a foreign jurisdiction for enforcement, the banks still must enforce their rights to collateral under domestic law.³²⁷ Nevertheless, the banks retain the ability to monitor borrowers.³²⁸

318. See, e.g., Twinamatsiko, *supra* note 307.

319. See, e.g., Groobey, *supra* note 308, at 10.

320. See, e.g., Christopher L. Culp & J. Paul Forrester, *Structured Financing Techniques in Oil and Gas Project Finance*, in ENERGY AND ENVIRONMENTAL PROJECT FINANCE LAW AND TAXATION 521 (Andrea S. Kramer & Peter C. Fusaro, eds., 2010), <http://www.rmcsinc.com/articles/CLCJPF.pdf>.

321. *Id.*

322. See Twinamatsiko, *supra* note 307, at 8.

323. Lending to a single borrower is limited to 15% of the bank's capital funds (tier 1 and tier 2 capital), which may be extended to 20% in the case of infrastructure projects.

324. The lending target of 40% of adjusted net bank credit (outstanding bank credit minus certain bills and non-SLR bonds) – or the credit equivalent of off-balance sheet exposure (sum of current credit exposure + potential future credit exposure that is calculated using a credit conversion factor), whichever is higher – has been set for domestic commercial banks and foreign banks with greater than 20 branches, while a target of 32% exists for foreign banks with less than 20 branches.

325. *Into Another Country*, ECONOMIST (Sept. 1, 2012), <http://www.economist.com/node/21561953>.

326. Groobey, *supra* note 308, at 3.

327. Esty & Megginson, *supra* note 308, at 5 (acknowledging that typically contracts are written under New York or English law).

328. See, e.g., Twinamatsiko, *supra* note 307 (discussing practice of syndicate agents to organize

Implementing lending by bank consortia carries high transaction costs.³²⁹ The banks must negotiate with individual borrowers and among themselves, and they document the numerous agreements that they make.³³⁰ In some instances, the closing costs of the arrangements nearly have equaled the size of the loans.³³¹

The banks and borrowers, however, may draft the contracts under any law that they choose, which benefits economies with persistent deficiencies in domestic contract law and contract enforcement (Figure 6).³³² India, for example, ranks 186th out of 183 countries in “enforcing contracts,” according to the annual Doing Business Reports issued by the World Bank.³³³ Enforcing a contract in India entails forty-six separate procedures, takes roughly 1,420 days, and costs 39.6 percent of the value of the disputed contract on average.³³⁴

Figure 6: Contract Enforcement by Country

Country	Rank	Time (days)	Cost (percent of claim)	Procedures
India	182	1,420.0	39.6	46
Brazil	Depends on city	731.0	16.5	43
China	35	452.8	16.2	37
Germany	13	394.0	14.4	31
Singapore	1	150	25.8	21
U.S.	Depends on city	370	22.9	32

In addition to diversifying the risks of bank loans and allowing a flexible choice of law, financing infrastructure through bank consortia preserves the monitoring capabilities of banks and the ability of banks to intervene relatively quickly when defaults seem likely.³³⁵ The banks in a consortium have direct relationships with borrowers³³⁶ and may contract for provisions that enable them

site visits for the syndicate).

329. *See id.* at 10.

330. *See, e.g.*, Esty & Megginson, *supra* note 308, at 4-5.

331. Groobey, *supra* note 308, at 3.

332. Esty & Megginson, *supra* note 308, at 5 (acknowledging that typically contracts are written under New York or English law).

333. WORLD BANK GROUP, DOING BUSINESS 2015, at 192 (2014), [http://www.doingbusiness.org/reports/global-reports/~media/WBG/DoingBusiness/Documents/Annual-Reports/English/DB15-Chapters/DB15-Report-Overview.pdf](http://www.doingbusiness.org/reports/global-reports/~/media/WBG/DoingBusiness/Documents/Annual-Reports/English/DB15-Chapters/DB15-Report-Overview.pdf).

334. *Id.*

335. FIN. STABILITY BD., *supra* note 68, at 3.

336. *See, e.g.*, Jim Armstrong, *The Syndicated Loan Market: Developments in the North American Context*, 5 (Bank of Can., Working Paper 2003-15, June 2003).

to assess the on-going position of the borrowers.³³⁷ The banks share information within the consortium and exercise contractual rights to terminate loans or force early repayments.³³⁸ The relatively small number of banks that participate in individual consortia helps facilitate restructuring of the loans.³³⁹

Banks in consortia, however, typically claim security from borrowers to protect themselves against losses, and weaknesses in domestic law related to the enforcement of security therefore may reduce the relevance of consortium-based bank lending in some countries.³⁴⁰ The banks generally demand project assets as collateral so that the banks can assume control of a project if a borrower defaults on a loan.³⁴¹ Domestic law normally governs the enforcement of security, and in some countries, including India,³⁴² security enforcement remains time-consuming and costly (Figure 7).³⁴³ Although the Indian Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act(2002) made the enforcement of security interests easier for banks in India by allowing banks, public financing institutions, and housing financing companies to bypass court enforcement processes by seizing and selling assets themselves,³⁴⁴ appeals of the creditor actions still cause significant delays.³⁴⁵

Figure 7: Out-of-Court Enforcement of Security³⁴⁶

Country	Allowed?
India	Yes
Brazil	Yes
China	No
Germany	Yes
Singapore	Yes
U.S.	Yes

337. See, e.g., Esty & Megginson, *supra* note 308, at 4.

338. See Groobey, *supra* note 308, at 8.

339. See, e.g., Yener Altunbas, Blaise Gadanez & Alper Kara, *The Evolution of Syndicated Loan Markets*, 26 SERV. INDUSTRIES J. 689, 689-690 (2006).

340. Groobey, *supra* note 308, at 10.

341. ASS'N. FOR FIN. MARKETS IN EUR., GUIDE TO INFRASTRUCTURE FINANCING, (16 June, 2015), <https://www.afme.eu/en/reports/publications/guide-to-infrastructure-financing/>.

342. Esty & Megginson, *supra* note 308, at 5 (acknowledging that typically contracts are written under New York or English law).

343. See *id.*

344. These creditors can take over, without court participation, the assets of any debtor that has defaulted on payments for more than six months by giving a notice of 60 days. The debtors can appeal only if they deposit 75% of the defaulted amount.

345. See The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act § 17 (54 of 2002) (Indian Sarfeasi Act).

346. See generally Esty & Megginson, *supra* note 308.

iii. Risks

While financing infrastructure through consortia of banks introduces few new risks not already present in plain bank finance of infrastructure, the financing model also eliminates few of the risks of lending by individual banks, including maturity and liquidity risk.

Although joining a bank consortium reduces the exposure of an individual bank to the risks of a loan, the consortium structure does not eliminate the maturity risk inherent to bank lending.³⁴⁷ Loans made by bank consortia typically average five to ten years.³⁴⁸ The arrangements generally include revolvers to facilitate subsequent rounds of financing, but projects nevertheless may fail to attract additional capital.³⁴⁹

Because of the specificity of the consortium structure, banks in a consortium also must commit to funding projects for the duration of the loans.³⁵⁰ The lack of flexibility and liquidity causes the banks to charge high interest rates.³⁵¹

2. Originate to Distribute Model

Securitization enables banks to shift maturity risk to downstream investors by selling their loans to special purpose vehicles, which pool the loans and resell them. By sheltering assets in bankruptcy-remote structures, securitization may bypass the domestic bankruptcy system, which in some countries may lack a sufficient legal foundation. Most countries also can institute laws relatively easily that respect the formal separation of SPVs and regulations to ensure accurate ratings of the repackaged loans by credit rating agencies. Nevertheless, securitization introduces significant risks that demand bankruptcy and crisis resolution frameworks, as well as protections for depositors, which appear difficult quickly to establish.

i. Structure

When banks securitize infrastructure loans, the banks transfer the right to the payments due on the loans to separate legal entities.³⁵² The separate entities in turn package the payment streams and sell rights to the payments to downstream investors.³⁵³ The downstream investors assume exposure to the risks of the loans from the banks.³⁵⁴

347. Croce & Gatti, *supra* note 54, at 129-30.

348. TURNBULL, *supra* note 42, at 92.

349. *See, e.g.*, Culp & Forrester, *supra* note 325, at 527.

350. *See, e.g.*, Comer, *supra* note 83, at 5.

351. Croce & Gatti, *supra* note 54; Comer, *supra* note 83, at 5.

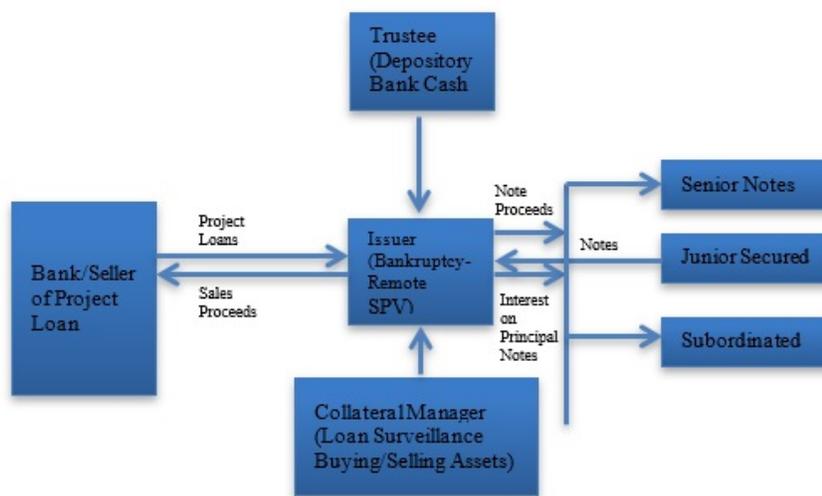
352. *See* Croce & Gatti, *supra* note 54, at 131.

353. Franklin R. Edwards & Edward R. Morrison, *Derivatives and the Bankruptcy Code: Why the Special Treatment?*, 22 YALE J. REG. 91, 113 (2005).

354. *See, e.g.*, JAN JOB DE VRIES ROBBÉ, *SECURITIZATION LAW AND PRACTICE: IN THE FACE OF THE CREDIT CRUNCH*, 334 (2008).

Through securitization, the rights to future loan repayments are separated from the risk that the borrowers might not pay, grouped together, and sold to other investors (Figure 8).³⁵⁵ The securitization of an infrastructure loan in its most basic form involves three principal steps. First, a bank that originates a loan to an infrastructure project transfers assets in the form of future payments on the loan to a separate legal entity, the SPV.³⁵⁶ Second, the SPV sells rights to the assets to outside investors in exchange for capital.³⁵⁷ Third, the bank that originated the loan takes the money that the SPV earned from the sales as compensation for the original transfer of the assets.³⁵⁸

Figure 8: Securitization Structure



Securitization of an infrastructure loan can occur at various stages of loan repayment.³⁵⁹ For example, after a project has been constructed and has begun to perform, an SPV can purchase the original loan from the bank and use it to issue

355. Steven L. Schwarcz, *The 2011 Diane Sanger Memorial Lecture: Protecting Investors in Securitization Transactions: Does Dodd-Brank Help, Or Hurt?*, 72 LA. L. REV. 591, 591 (2012).

356. See, e.g., Ryan Scharar, *The Limits of Securitization: Why Bankruptcy Courts Should Substantively Consolidate Predatory Sub-Prime Mortgage Originators and Their Special Purpose Entities*, 2008 MICH. ST. L. REV. 913, 909 (2008).

357. See, e.g., Gabriella Chiesa, *Bankruptcy Remoteness and Incentive-Compatible Securitization*, 2 (Univ. of Bologna Dep't of Econ. Quaderni Working Paper DSE No. 928, 2014).

358. Lynn LoPucki, *A Team Production Theory of Bankruptcy Reorganization*, 57 VAND. L. REV. 741, 756 (2004).

359. Sarita Bahl, *Emerging Risks in Securitization of Infrastructure and Other Project Financing*, 1 ASIA PACIFIC J. MARKETING & MGMT. REV. 211, 211 (2012).

securities.³⁶⁰ Alternatively, the SPV simply can use the future payments on the loan to refinance the project at a lower rate.³⁶¹ In this instance, the SPV acts as a new borrower and issues new securities.³⁶²

Securitization purports to eliminate dependence on the domestic bankruptcy system,³⁶³ which in many countries, including India, may not operate effectively (Figure 9).³⁶⁴ When a bank that extends a loan to an infrastructure project has securitized the loan and the borrower defaults on the loan, the bank no longer has a claim against the borrower.³⁶⁵ The SPV already has paid the bank, and the risk of the default has shifted to the investors in the securities derived from the loan.³⁶⁶ In India, where the bankruptcy process has appeared lengthy and complex, the ability of the bank to sidestep the bankruptcy process to recoup assets has significance:³⁶⁷ Bankruptcy in India lasts, on average, for more than four years and recovery rates average below thirty percent.³⁶⁸ Because of insufficient staffing, judges in India review only about forty bankruptcy cases per month.³⁶⁹ Managers and employees of bankrupt companies often withhold financial records, refuse to support concessions, and file appeals in order to postpone the loss of their jobs.³⁷⁰ While bankruptcy procedures pend, the costs of the bankruptcy process increase, and the value of assets held by the borrower falls. Currently, investors in India expect no recovery in bankruptcy because of the inefficiencies in the bankruptcy process, and their expectations have driven interest rates to very high levels.³⁷¹

360. *Id.*

361. *Id.*

362. *Id.*

363. Thomas J. Gordon, *Securitization of Executory Future Flows as Bankruptcy-Remote True Sales*, 67 UNIV. CHI. L. REV. 1317, 1317 (2000).

364. Radhika Pandey & Sumathi Chandrashekar, *India's Poor Crisis Resolution Regime*, BUSINESS STANDARD (Apr. 27 2013), http://www.business-standard.com/article/opinion/india-s-poor-crisis-resolution-regime-113042700526_1.html.

365. Gordon, *supra* note 363, at 1318.

366. *Id.*

367. The Companies Act 1956, The Sick Industrial Companies (Special Provisions) Act 1985, and the Recovery of Debts Due to Banks and Financial Institutions Act 1993, as modified by the SARFAESI Act, provide for three separate bankruptcy frameworks.

368. Pandey & Chandrashekar, *supra* note 364.

369. Nimit Kang & Nitin Nayar, *The Evolution of Corporate Bankruptcy Law in India*, ICRA BULLETIN MONEY & FIN. 42 (Oct. 2003).

370. *Id.*

371. Bibek Debroy, *Unshackling India's Manufacturing – The Ingredients of a Strategy*, in INDIA'S ECONOMY: A JOURNEY IN TIME AND SPACE, 263 286 (Raj Kapila & Uma Kapila eds., 2006) See Table 9 (bankruptcy recoveries are lower in India than in most other countries).

Figure 9: Bankruptcy by Country³⁷²

Country	Rank	Time (years)	Cost (percent of claim)	Recovery (claim per dollar)
India	121	4.3	9	25.6
Brazil	135	4.0	12	19.5
China	53	1.7	22	36.0
Germany	13	1.2	8	82.9
Singapore	4	0.8	3	89.4
U.S.	4	1.5	8.2	80.4

ii. *Implementation*

Though ostensibly avoiding domestic bankruptcy law,³⁷³ the introduction of securitization requires other legal supports. To implement securitization, an economy must have rules related to the transfer of assets from banks to separate legal entities and regulations on credit rating agencies that ensure the accurate assessment of the default risk of the original bank loans.

The law must recognize the separate legal status of the SPV and set out clear rules for when courts can reverse the separation.³⁷⁴ In the U.S., for example, court decisions and regulatory rules have supported the ability of banks to make “true sales” of assets to SPVs; if a bank does not meet the conditions of a “true sale,” then the bank retains the assets and their risks on its balance sheet.³⁷⁵ Recognition of the transfer of assets to the SPV requires a statutory or common law legal foundation that generally will be easy to implement, and in India, the Supreme Court ruled in 2010 that banks legally could transfer credit risk to separate entities.³⁷⁶

Because the risk of securities based on bank loans depends on the default risk of the loans, investors in securities rely on credit rating agencies to evaluate the ability of the borrowers to repay the loans.³⁷⁷ The investors base the interest

372. Pandey & Chandrashekar, *supra* note 364.

373. Gordon, *supra* note 363, at 1317.

374. See, e.g., Gary Gorton & Nicholas S. Soules, *Special Purpose Vehicles and Securitization*, in *THE RISKS OF FINANCIAL INSTITUTIONS* 549, 557 (Mark Carey & René M. Stulz eds., 2007).

375. Lois R. Lupica, *Circumvention of the Bankruptcy Process: The Statutory Institutionalization of Securitization*, 33 *CONN. L. REV.* 199, 200, 210 (2000); Kenneth Ayotte & Stav Gaon, *Asset-Backed Securities: The Costs and Benefits of ‘Bankruptcy Remoteness’*, 24 *REV. FIN. STUD.* 1299, 1302, 1304 (2010); See, e.g., Kenneth Kettering, *Securitization and its Discontents*, 29 *CARDOZO L. REV.* 1553, 1581 (2007) (Courts can decide not to recognize the transfer of assets to the special purpose vehicle).

376. K. Gada & R. Agarwal, *ICRA, Update on Indian Securitisation Market*, 7 (May 2012), <http://www.icra.in/Files/Articles/Indian%20Securitisation.pdf>.

377. Segoviano et al., *supra* note 300, at 3.

rates that they charge on the ratings;³⁷⁸ however, in the wake of the recent financial crisis, evidence of inaccurate ratings of mortgage-backed securities emerged.³⁷⁹ Many commentators have faulted the practice of the rating agencies to charge the issuers of the securities for the ratings when the securities sell,³⁸⁰ a practice that Indian rating agencies share.³⁸¹ To discourage domestic rating agencies from increasing the marketability of securities by inflating their ratings, the U.S. Securities and Exchange Commission, the European Commission, and the U.K. House of Lords have considered changes to regulation of the agencies.³⁸² In other economies, however, rating agencies already may operate with greater integrity. In India, for example, regulators have supervised rating agencies aggressively.³⁸³ The Securities and Exchange Board of India has overseen the evaluations by the agencies of most financial products since 1999.³⁸⁴ In the U.S., by comparison, the SEC actively began monitoring the agencies in 2007,³⁸⁵ and the EU recently drafted its first mandatory provisions.³⁸⁶ The Indian agencies must renew their licenses every three years,³⁸⁷ unlike in the U.S., where the SEC grants permanent recognition of the agencies.³⁸⁸ The Indian central bank also supervises ratings of securitized products³⁸⁹ and must consent before agencies can evaluate bank loans.³⁹⁰ In addition, the Indian rating agencies have broadened their sources of revenue, potentially blunting some of the conflicts of interest that

378. Stephane Rousseau, *Enhancing the Accountability of Credit Rating Agencies: the Case for a Disclosure-Based Approach*, 51 MCGILL L. J. 617, 624 (2006).

379. See SEC. EXCHANGE COMMISSION, SUMMARY REPORT OF ISSUES IDENTIFIED IN THE COMMISSION STAFF'S EXAMINATIONS OF SELECT CREDIT RATING AGENCIES, 25 (July 2008), <http://www.sec.gov/news/studies/2008/craexamination070808.pdf> ("Rating agencies do not appear to take steps to prevent considerations of market share and other business interests from the possibility that they could influence ratings or ratings criteria.").

380. See, e.g., Lynne L. Dallas, *Short-Termism, The Financial Crisis, and Corporate Governance*, 37 J. CORP. L. 265, 288 (2012) ("As for credit rating agencies, they had a conflict of interest because the issuers of securities paid their fees").

381. MINISTRY OF FINANCE - CAPITAL MARKETS DIVISION, REPORT OF THE COMMITTEE ON COMPREHENSIVE REGULATION FOR CREDIT RATING AGENCIES, 13 (Dec. 2009), http://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/CCRA030310_R2.pdf

382. Jodie A. Kirshner, *The Indian Anomaly: Rethinking Credit Rating Agency Regulation from the Economic Perspective of Hyman Minsky*, 27 COLUM. J. ASIAN. L. 1, 12–15 (2013).

383. *Id.* at 34–36.

384. Anuradha Guru, *Concerns on the Role of Credit Rating Agencies in the Evolving Financial Regime*, NSE NEWS, 7 (Sept. 2008), <http://ssrn.com/abstract=1439659>; MINISTRY OF FINANCE, *supra* note 381, at 12, 24.

385. Himanshu Bhushan, *Credit Rating Agencies in India*, 11 (Jan. 31, 2012), <http://ssrn.com/abstract=1999886>.

386. Ministry of Finance, *supra* note 381, at 24.

387. T. Jain & R. Sharma, *Credit Rating Agencies in India*, 3 Company L. J. 89, 104 (2008), available at <http://ssrn.com/abstract=1111553>.

388. MINISTRY OF FINANCE, *supra* note 381, at 24.

389. Bhushan, *supra* note 385, at 10.

390. MINISTRY OF FINANCE, *supra* note 381, at 27.

charging the issuers of securities for ratings introduce.³⁹¹ The managing director of the Indian rating agency ICRA, for example, has estimated that less than sixty percent of the revenues of the agency derive from its credit ratings.³⁹²

iii. Risks

The recent financial crisis highlighted the need for regulation surrounding securitization to ensure economic stability and the continuing need for effective bankruptcy law and frameworks for resolving failed banks that appear difficult for countries to implement. Though infrastructure loans in emerging economies differ from the mortgages that played a contributing role in the recent crisis, infrastructure loans may hold more risk than mortgages.³⁹³ Even if domestic financial institutions engaged with securitization differently from financial institutions in developed financial markets prior to the recent crisis, securitization could unleash risks difficult for emerging economies to contain. While current regulations in India, for example, would appear to prevent the exposure of domestic financial institutions to concentrated securities risk and to prevent harm to individual savings, changes to the regulations would leave banks vulnerable to more significant losses and depositors would have few protections.

Securitization seemed to increase economic instability in the lead up to the recent financial crisis in several ways. First, securitization appeared to cause banks to lower their lending standards.³⁹⁴ Banks typically decide to lend based on their evaluations of the likelihood that borrowers will default, but securitization transferred the risk of default from banks to investors in the securities based on the loans, and the banks had less reason for caution in lending.³⁹⁵³⁹⁶ Second, securitization appeared to lead investors in the securities to underestimate risks.³⁹⁷ Investors in the securities assumed the risk of default of the underlying loans, including maturity risk, but the investors had less information than the banks that extended the loans,³⁹⁸ particularly as the securitization structures grew more

391. See, e.g., *id.* at 18.

392. *India's Ratings Agencies Are Thriving—Without a CDO in Sight*, ECONOMIST, (Mar. 17, 2012), <http://www.economist.com/node/21550282>.

393. Segoviano, *supra* note 300, at 12.

394. Steven L. Schwarcz, *Disintermediating Avarice: A Legal Framework for Commercially Sustainable Microfinance*, 4 U. ILL. L. REV. 1165, 1178 (2011) (“Because lenders to subprime borrowers did not have to live with the credit consequences of their loans, the argument goes, their loan underwriting standards fell.”).

395. *Id.*

396. Willem H. Buiter, *Lessons from the Global Financial Crisis for Regulators and Supervisors* (June 13, 2009), http://eprints.lse.ac.uk/29048/1/Lessons_from_the_global_financial_crisis.pdf.

397. See, e.g., FINANCIAL STABILITY OVERSIGHT COUNCIL, MACROECONOMIC EFFECTS OF RISK RETENTION REQUIREMENTS, 9 (Jan. 2011), <http://www.treasury.gov/initiatives/wsr/Documents/Section%20946%20Risk%20Retention%20Study%20%20%28FINAL%29.pdf>.

398. *Id.*

complex.³⁹⁹ Third, securitization seemed to increase the challenges of market regulation.⁴⁰⁰ Attenuated links between banks and investors in the securities made financial markets increasingly opaque.⁴⁰¹ Financial institutions also bought the securities from each other, leaving the risk of the securities within banks and concentrating the vulnerability of the banks to losses in the securities markets.⁴⁰²

Securitization markets, however, entail diverse assets that may not carry the same risks revealed by the crisis.⁴⁰³ Securitized mortgages in Italy, for example, have demonstrated a lower rate of default than non-securitized mortgages in Italy, and asset-backed securities based on American auto loans, credit cards, student loans, and equipment leases performed well during the recent crisis.⁴⁰⁴ In some instances, securitized loans to American companies have performed better than non-securitized loans of equal credit quality.⁴⁰⁵

Regulation also can inhibit some of the practices that contributed to the crisis, but only for as long as the regulation remains in effect. India, for example, strictly regulates its financial markets; however, relaxation of the regulations could allow the practices that contributed to the crisis to begin. Banks in India must comply with the lending rules discussed above in subsection 1, which could reduce the number of loans to infrastructure projects available to securitize.⁴⁰⁶ The Indian central bank also has acted to restrict exposures to concentrated risk.⁴⁰⁷ The central bank, for example, recently imposed limits on the exposure of banks to gold because the central bank had witnessed a “concentration risk” in gold loans.⁴⁰⁸ Other Indian regulations also potentially limit the concentration of investments in securitized assets. Central bank guidelines have restricted banks in India from investing in asset-backed and mortgage-backed securities with low ratings.⁴⁰⁹ And when they have invested in securities with high ratings, they have had to account for the risk by amortizing their profits over the life of the security, rather than recognizing potential profits upfront, when the actual risk remains unknown.⁴¹⁰ U.S. General Accounting Accepted Principles, by contrast,

399. *Id.*

400. See, e.g., Anastasia Nesvetailova, *The Crisis of Invested Money: Liquidity Illusion and the Global Credit Meltdown*, 11 THEORETICAL INQUIRIES L. 125, 133 (2010).

401. *Id.*

402. See, e.g., Hyun Song Shin, *Securitisation and Financial Stability*, ECON. J. 309 (2009).

403. Segoviano, *supra* note 300, at 9.

404. *Id.*

405. *Id.*

406. See *supra*, subsection 1.

407. A. Goyal, *Banks, Policy and Risks*, ICRIER POLICY SERIES, No. 12, Jan. 2012, at 2.

408. Sourav Majumdar, *Gold loan curbs are because of risk concentration: RBI*, FIRSTPOST (Apr. 17, 2012); see also Reserve Bank of India, *Financial Stability Report*, Issue No. 5, June 2012, at 31.

409. Shyamala Gopinath, Deputy Governor of the Bank of India, *Securitisations Markets in India – A Post-Crisis Perspective*, Inaugural address at the Nat'l Inst. of Sec. Markets India Securitisations Summit 2010, Mumbai, Aug. 10, 2010, at 4, <http://www.bis.org/review/r100812e.pdf>.

410. Abhijit Sen Gupta, *The current state of financial and regulatory frameworks in Asian economics: The case of India*, ADBI Working Paper Series, No. 303, Aug. 2011,

authorized the originators of securitized products to account for their projected future cash flows at the time of the sale of the securities, although this approach became illegal in response to the crisis.⁴¹¹ Indian institutional investors also face restrictions on the debt instruments in which they can invest⁴¹² and must devote a portion of their portfolios to investments in government debt.⁴¹³ Finally, in order to invest in securitized debt, foreign institutions have to register as “Qualified Institutional Buyers.”⁴¹⁴ As recently as 2009, foreign private equity funds and venture capital funds were ineligible.⁴¹⁵ The criteria for “Qualified Institutional Buyers” has since expanded to include them, although they still may purchase only listed securities.⁴¹⁶

Nevertheless, the loans that banks have extended to infrastructure projects in India have defaulted at a high rate and may carry greater risks than mortgages.⁴¹⁷ As discussed above in section II, banks in India have had to restructure large volumes of distressed infrastructure loans. In comparison with mortgage loans, infrastructure projects appear idiosyncratic, making the default risk of the projects more difficult to model and predict than the risk posed by individual homebuyers.⁴¹⁸ In some categories of infrastructure projects, such as water systems and electricity plants, lenders cannot foreclose on a project in the way that they can foreclose on a house.⁴¹⁹

If the use of securitization were to propagate large losses among Indian banks, individuals with savings accounts at the banks would have limited protection,⁴²⁰ and neither an effective bankruptcy system nor an effective resolution authority would exist to manage instability among banks. Deposit insurance in India only covers depositors up to 100,000 rupees, the equivalent of about \$2,000.⁴²¹ By comparison, the insured limit in the U.S. is US \$250,000 per person per bank and in Singapore S \$50,000, the equivalent of about US \$39,965 (Figure 10).⁴²² In 2013, the Deposit Insurance and Credit Guarantee Corporation

<http://hdl.handle.net/10419/53577>; Gopinath, *supra* note 409, at 4.

411. INT’L MONETARY FUND, GLOBAL FINANCIAL STABILITY REPORT: NAVIGATING THE FINANCIAL CHALLENGES AHEAD, 100 (Oct. 2009), <http://www.imf.org/external/pubs/ft/gfsr/2011/02/pdf/text.pdf>.

412. Kiatchai Sophastienphong, et al., *South Asian Bond Markets: Developing Long-Term Finance for Growth*, The Int’l Bank for Reconstruction and Dev./The World Bank, 2008, at 15.

413. Vinod Kothari & Abhishek Gupta, Indian Institute of Mgmt. Bangalore, *Development of Rmbs Market in India: Issues and Concerns*, at 32.

414. Nat’l Inst. of Sec. Markets, *White Paper - India Securitization Summit 2009: Improving Indian Securitization Markets*, Nov. 2009, at 18, <http://www.iperitus.com/docs/IndiaSecuritizationSummit2009-WhitePaper.PDF>.

415. *Id.*

416. Sophastienphong, *supra* note 412, at 85.

417. *See* Segoviano, *supra* note 300, at 12.

418. *Id.*

419. Bahl, *supra* note 359, at 219.

420. *See* Figure 10.

421. Reserve Bank of India, *Fin. Stability Report*, Issue No. 5, June 2012, at 49.

422. Fin. Stability Bd., *Thematic Review on Deposit Ins. - Peer Review Report*, at 19,

of India, which runs the deposit insurance program, held assets to compensate only about 1.7% of insured deposits.⁴²³ Moreover, while in the wake of the recent crisis, the U.S. has drawn upon its existing bankruptcy law as a model for a bank resolution authority,⁴²⁴ India does not have effective bankruptcy law,⁴²⁵ and the development of a resolution regime in India would require the creation of an entirely new and untested legal framework. India has proposed a new authority that, though ostensibly aligning the country with international standards, appears in fact to fall short of the standards.⁴²⁶ A report published by the Financial Stability Board, an international body that monitors and makes recommendations about the global financial system, concluded that the planned resolution regime would not have the capacity to resolve a failing bank.⁴²⁷ India, however, successfully drew upon state control of the domestic economy to resolve the Indian bank GTB in 2004.⁴²⁸ The central government issued an order staying actions against GTB and then merged GTB into a state-owned bank.⁴²⁹ The depositors recovered all of the money owed to them,⁴³⁰ and the failure of the bank did not destabilize the economy.⁴³¹

http://www.financialstabilityboard.org/wp-content/uploads/r_120208.pdf?page_moved=1.

423. *RBI Norms May Hit Co-operative Depositors*, ECONOMIC TIMES, Sept. 4, 2014.

424. *See, e.g.*, Jodie A. Kirshner, *The Bankruptcy Safe Harbor in Light of Govt. Bailouts*, 18 NYU J.L. PUB. POL. 795, 796–77 (2015).

425. *See, e.g.*, Karthikeyan Sundaram, *Kingfisher Woes Show Need for Bankruptcy Law: Corporate India*, BLOOMBERG, Nov. 1, 2012.

426. *See, e.g.*, Press Release 21/2016, Fin. Stability Bd., FSB Completes Peer Review of India, (Aug. 17, 2016), at 1-2.

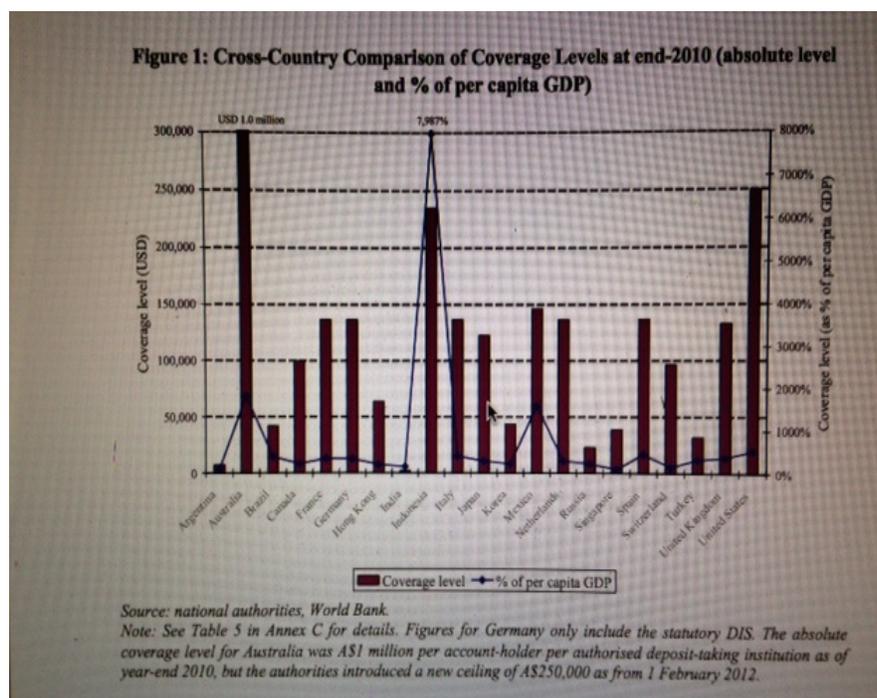
427. *Id.*

428. Vivek Gupta & K. Yamini Aparna, *The Rise and Fall of Global Trust Bank*, IBS Center for Mgmt. Res. (2005).

429. *Id.*

430. Malini Bhupta, *No Trust Bank*, INDIA TODAY, Aug. 9, 2004.

431. *See, e.g.*, *Global Trust Bank is Now Oriental Bank of Com.*, BANKNET INDIA, 2004.

Figure 10: Deposit Insurance by Country⁴³²

3. Originate-to-Hold Model

The originate-to-hold financing model retains the maturity risks inherent to bank loans to infrastructure projects but ring fences assets on bank balance sheets to preserve liquidity within banks to manage the risks.⁴³³ Similar to securitization, the banks sell assets in the form of future payments on loans called “covered bonds” to downstream investors, but unlike securitization, the banks retain a “cover pool” of assets, in which the investors have first priority in the event of default.⁴³⁴ So long as the cover pool provides adequate security to the investors upon a default, like securitization purported to do, the originate-to-hold model bypasses domestic bankruptcy law, but the model also eliminates the risks of securitization that relate to the off-balance sheet treatment of securitized loans.⁴³⁵ The cover pool requires a legal foundation more complicated than securitization

432. FIN. STABILITY BD., *supra* note 68.

433. See, e.g., Schwarcz, *supra* note 78, at 571.

434. See, e.g., M. Sandström, et al., *The Swedish Covered Bond Mkt. and Links to Fin. Stability*, 2013 SVERIGES RIKSBANK ECON. REV. 1, 2 (2013).

435. P. Agboyibor, et al., *Covered Bonds*, Orrick Herrington & Sutcliffe, at 7 (2008); See, e.g., Damerow, *supra* note 41, at 6.

demands, but the legal arrangements appear easy to implement, particularly in light of the overall low risk of the financing model.

i. Structure

The originate-to-hold model enables the pooling of small loans into larger, more liquid securities in order to attract investors, while avoiding some of the risks of securitization.⁴³⁶ Instead of transferring the projected payments on a loan to an SPV that pools the rights to the payments and resells them to investors, the bank retains the projected payments in a cover pool of assets on its balance sheet, and uses the cover pool to secure covered bonds based on the loans.⁴³⁷ The assets in the cover pool remain separate from the rest of the assets of the bank and must be updated continually to ensure that the cover pool will provide adequate collateral for investors in the bonds.⁴³⁸ If the bonds default, the investors have recourse to both the cover pool and the general assets of the bank.⁴³⁹

Maintaining the loans underlying the bonds on the balance sheet of the bank may discourage the bank from relaxing its lending standards in the way that securitization affected mortgage standards in the lead up to the recent crisis.⁴⁴⁰ Because in the originate-to-hold model the bank continues to bear some of the risks of its loans, the bank has greater incentives to extend loans with low probabilities of default.⁴⁴¹ The U.S. and Europe have begun to introduce requirements for banks that securitize loans to retain some of the loans on their balance sheets,⁴⁴² an approach that mimics the basic structure of the originate-to-hold model (Figure 11).⁴⁴³

436. See, e.g., H. Crebo-Rediker & D. Rediker, *Covered Bonds Can Rebuild America*, FORBES, July 28, 2008.

437. *Id.*

438. See, e.g., Schwarcz, *supra* note 78, at 566–67.

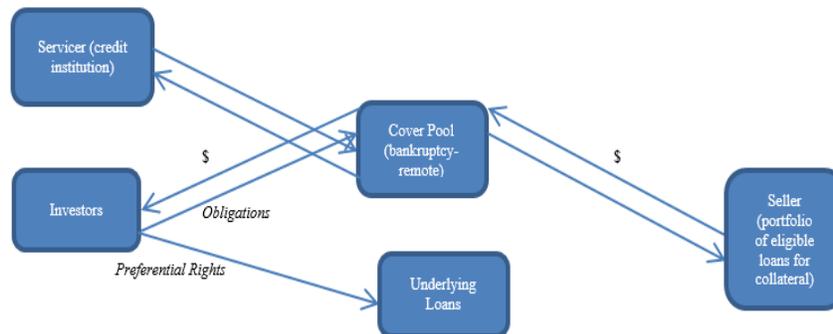
439. See, e.g., Crebo-Rediker, *supra* note 436.

440. See, e.g., Segoviano, *supra* note 300, at 16.

441. See, e.g., Damerow, *supra* note 41, at 6.

442. Jay Grushkin & Dan Bartfeld, *Securitizing Project Fin. Loans*, 19 J. STRUCTURED FIN. (2013), <http://www.milbank.com/images/content/1/4/14883.pdf>.

443. See Crebo-Rediker, *supra* note 436.

Figure 11: Originate-to-Manage Structure

The assets in the cover pool that secure the covered bonds protect investors from losses if the bonds default.⁴⁴⁴ The assets in the cover pool are insulated from claims by general creditors,⁴⁴⁵ and the bank must maintain the value of the cover pool to meet the claims of investors in the covered bonds.⁴⁴⁶ The bank consistently must update the assets in the cover pool to maintain the level of collateral that the bank provides to investors in the covered bonds.⁴⁴⁷

Because the investors have protection against most losses, the investors likely charge low interest rates for the bonds.⁴⁴⁸ If the bonds default, the investors have recourse to the cover pool assets, and, if the cover pool assets become deficient, the investors also have unsecured claims against the general assets of the bank.⁴⁴⁹ Because the assets in the cover pool provide collateral for investors, rather than providing cash flows to repay the investors, investors in covered bonds have no direct exposure to the loans underlying the covered bonds.⁴⁵⁰

ii. Implementation

The implementation of a covered bond program necessitates specific legal support, particularly surrounding the cover pool.⁴⁵¹ The program depends on timely enforcement, robust supervision and disclosure standards, and the insulation of the cover pool assets from bankruptcy.⁴⁵² While some economies

444. Rao, *supra* note 19, at 16.

445. Schwarcz, *supra* note 78, at 566.

446. See, e.g., Sandström, *supra* note 434, at 2.

447. See *id.*, at 3.

448. *Id.*

449. *Id.*

450. See, e.g., Robert Stammers, *Find Security in Covered Bonds*, INVESTOPEDIA, Sept. 19, 2014.

451. See, e.g., Damerow, *supra* note 41, at 1, 8.

452. See *infra*, this section.

may lack such legal foundations, implementing them does not appear likely to pose significant difficulties or to introduce significant delays.⁴⁵³

National legislation has implemented the originate-to-hold model in some countries, while in other countries originate-to-hold takes place through private contracting.⁴⁵⁴ Enforcing either the statutory or the contractual rights supporting the model requires efficient legal processes, and enforcement therefore, may prove challenging in countries like India where delays in the judicial system persist. A case in India may last fifteen years between filing and resolution,⁴⁵⁵ and approximately 38 million cases currently are pending in India.⁴⁵⁶ If every case currently filed in India received a fair trial, it would still take over 300 years to work through the backlog.⁴⁵⁷ India employs about eleven judges per million citizens, among the lowest ratios of judges to population of any country.⁴⁵⁸ The U.S., by comparison, employs more than 100 judges for every million people.⁴⁵⁹ The delays in India have bred corruption, as litigants have resorted to bribes and influence peddling to hasten the resolution of their cases.⁴⁶⁰ In a poll conducted by Transparency International, the non-governmental organization that monitors and publicizes corporate and political corruption, forty-five percent of respondents who had dealt with the judiciary between July 2009 and July 2010 reported that they had paid a bribe, and most commonly, they had paid the bribe to “speed things up.”⁴⁶¹

The establishment of the cover pool depends on regulation,⁴⁶² and also may challenge the legal systems of some countries. Specific regulations must define the assets eligible for the cover pool, how many assets the cover pool must include, the quality of assets required, and the status of the assets in bankruptcy.⁴⁶³ The cover pool also must be managed to ensure that it continues to meet the standards.⁴⁶⁴

In most jurisdictions that have introduced covered bonds, independent monitors supervise the cover pool. Sweden, for example, utilizes independent

453. See *infra*, this section.

454. PWC, *Uncovering Covered Bonds*, June 2012, at 6.

455. Qing-Yun Jiang, COURT DELAY AND LAW ENFORCEMENT IN CHINA, 12 (2008).

456. R Sedhuraman, *CJI blames Centre, states for pending cases*, THE TRIBUNE, Apr. 24, 2016.

457. Prabodh Malhotra, IMPACT OF TRIPS IN INDIA, 92 (2010).

458. Maneesh Chhibber, *Do we need more judges? CJI Thakur's plea to the Government Raises Key Questions*, THE INDIAN EXPRESS, May 1, 2016.

459. Balbir B. Bhasin, ASSESSING AND MITIGATING BUSINESS RISKS IN INDIA, 68 (2012).

460. TRANSPARENCY INTERNATIONAL, INDIA CORRUPTION REPORT - JUDICIAL SYSTEM, <http://www.business-anti-corruption.com/country-profiles/south-asia/india/corruption-levels/judicial-system.aspx>.

461. IMMIGRATION AND REFUGEE BOARD OF CANADA, INDIA: INDEPENDENCE OF AND CORRUPTION WITHIN THE JUDICIAL SYSTEM, INCLUDING THE SCALE OF CORRUPTION AT DIFFERENT LEVELS (2009-APRIL 2013), (Apr. 26, 2013), <http://www.refworld.org/docid/51ab45674.html>.

462. See, e.g., Damerow, *supra* note 41, at 1, 8.

463. See Damerow, *supra* note 41.

464. Schwarcz, *supra* note 78, at 563.

investigators.⁴⁶⁵ In other countries, existing supervisory structures may lack the capacity to manage the cover pool, but the deficiencies may easily be reformed. In India, for example, regulatory agencies with responsibility for different aspects of the financial markets have had difficulty coordinating among each other,⁴⁶⁶ and some government ministers have proposed unifying the regulation of the financial markets within one agency to reduce uncertainty surrounding the responsibilities of the different agencies and the standards for potential regulatory actions.⁴⁶⁷

To maintain collateralization, deteriorating loans in the cover pool must be realized and replaced with assets of greater value.⁴⁶⁸ To accomplish this, many jurisdictions have set out rules for disclosing the assets in the cover pool, and some jurisdictions have required registries of cover pool assets. New Zealand, for example, mandates cover pool registries that report the assets included in a pool.⁴⁶⁹ In Sweden, the independent inspector periodically samples the assets in cover pool registries to ensure the accuracy of reporting.⁴⁷⁰ Other countries, however, would have to institute a disclosure system, and India, for example, has demonstrated a poor record in creating equivalent registries. The Indian Companies Act established a system for registering security interests, but the system has proven complicated, and lenders have had to register security interests at multiple registries.⁴⁷¹ The process of registering a property interest also has consumed excessive time and investment. On average, registering a property interest in India takes sixty-two days and costs 7.7% of the value of the property.⁴⁷² In China, by comparison, registering a property interest in secured collateral takes an average of twenty-nine days and costs only 3.6% of the value of the property.⁴⁷³

To implement the originate-to-hold model, countries like India would have to establish and enforce rules to protect cover pool assets against the claims of general creditors in bankruptcy, but such rules also do not appear difficult to implement. The assets in the cover pool must remain separate from the general assets of the banks, available only to investors in covered bonds, for the assets to protect investors against potential losses and to disincentive banks from extending excessively-risky loans.⁴⁷⁴ Shielding the investors from the general bankruptcy

465. Sandström, *supra* note 434, at 4.

466. See, e.g., Basu, *supra* note 7, at 147.

467. *Id.* at 151.

468. See Sandström, *supra* note 434, at 15.

469. PWC, *Uncovering Covered Bonds*, June 2012, at 10.

470. Sandström, *supra* note 434, at 4.

471. For example, state registries collect information on immovable property, while the federal Registrar of Companies registers charges against equipment.

472. PLANNING COMM'N GOV'T OF INDIA, A HUNDRED SMALL STEPS: REPORT OF THE COMMITTEE ON FINANCIAL SECTOR REFORMS, 152 (2009).

473. *Id.*

474. See, e.g., Schwarcz, *supra* note 78, at 566–67.

process encourages the investors to buy the bonds at low interest rates even in countries with ineffective bankruptcy regimes such as India.⁴⁷⁵

iii. Risks

The treatment of covered bonds by regulators reflects the low overall risks of covered bonds.⁴⁷⁶ Nevertheless, covered bonds may inflict losses on unsecured creditors,⁴⁷⁷ and, if banks invest in the covered bonds of other banks in significant amounts, covered bonds may pose risks to the broader economy.⁴⁷⁸ The risks of using covered bonds, however, appear lower than the risks that other intermediate financing models introduce.

The disclosure requirements surrounding cover pool assets, as well as the supervision of the cover pool, increases transparency,⁴⁷⁹ and regulations have acknowledged the transparency in their treatment of covered bonds. The Solvency II regulations, for example, discourage European insurers from investing in long-term assets by requiring the insurers to back assets with long maturities with additional capital holdings.⁴⁸⁰ The regulations, however, require less capital to back covered bonds than regular bonds of the same issuer.⁴⁸¹ In addition, the Basel III regulations that govern banks incentivize banks to hold covered bonds by assigning covered bonds a higher status in the liquidity coverage ratio than the regulations require than the regulations assign to regular bonds.⁴⁸²

Nevertheless, the ring fencing of the cover pool assets also threatens losses among unsecured creditors of the banks that issue the bonds, in the absence of additional protections.⁴⁸³ Though the assets in the cover pool reduce risk exposures among investors in the covered bonds,⁴⁸⁴ the encumbrance of those assets decreases the assets available to unsecured creditors if the banks default.⁴⁸⁵ To the extent that deposit guarantees do not cover the claims of depositors, depositors fall within this category of creditors.⁴⁸⁶ Many countries that have implemented the originate-to-distribute model have done so to protect unsecured

475. See Rao, *supra* note 19, at 16; Sandström, *supra* note 434, at 3.

476. Crebo-Rediker, *supra* note 462.

477. See, e.g., Damerow, *supra* note 41, at 7.

478. Sandström, *supra* note 434, at 4.

479. Crebo-Rediker, *supra* note 439.

480. PwC, *Impact of other regulatory changes*, UNCOVERING COVERED BONDS, 13 (June 2012).

481. *Id.*

482. *Id.*

483. See, e.g., Damerow, *supra* note 41, at 7.

484. Investors in covered bonds have limited exposure to potential losses and therefore charge low interest rates on the bonds. The investors have recourse both to the assets in the cover pool, which must remain sufficiently collateralized, and they also have general deficiency claims against the bank that issued the bonds when the cover pool fails to secure the investors fully. In addition, the bank has incentives to maintain the quality of the loans underlying the bonds because the bank must keep the loans on its balance sheet.

485. See, e.g., Damerow, *supra* note 41, at 7.

486. See *id.*

creditors by limiting the total issuance of covered bonds.⁴⁸⁷ For example, Canada restricts banks from issuing covered bonds in amounts greater than 4% of the assets of the banks.⁴⁸⁸ Italy, the Netherlands, and Germany tie the permissible amount of covered bonds to the equity held by banks.⁴⁸⁹ India and other countries easily could establish similar restrictions.

In addition, covered bonds still may introduce systemic risks into economies.⁴⁹⁰ If, for example, the value of the loans underlying the bonds falls, the value of the cover pool also will decrease and the cover pool will require additional assets.⁴⁹¹ Investors in the covered bonds, however, may become less certain that they will profit from the bonds, and the cost of the bonds will rise, making it harder for a bank to add assets to the cover pool.⁴⁹² When banks have bought covered bonds from each other, the bank will have to add more assets to its cover pool at the same time that other banks also require more assets.⁴⁹³ If the other banks try to sell additional covered bonds, the simultaneous sales will decrease the value of the bonds, and the banks eventually will need alternative sources of capital.⁴⁹⁴ This scenario occurred in Sweden during the recent financial crisis, but the Swedish government successfully contained the instability that it threatened.⁴⁹⁵ As the value of covered bonds fell, banks sought to sell more covered bonds to generate additional assets for their cover pools.⁴⁹⁶ Some banks served as market makers and had to buy covered bonds from other banks.⁴⁹⁷ The banks that bought the bonds in turn had difficulty selling them on and could not get back the money they spent. The Swedish National Debt Office responded by loaning capital to the banks and taking the covered bonds as collateral for the loans.⁴⁹⁸

B. Bond-Based Alternative Models

Government participation in bond markets and credit default swaps transfer the default risk of bonds onto the government or third parties, which may attract investors into the bond market. Whereas banks could use the previous financing models to manage maturity risk but not eliminate it, which increased the cost and constrained the duration of the finance that the models provided, modifications to funding mechanisms within the capital markets could facilitate the provision of

487. *See id.*

488. *See id.*

489. *See id.*

490. Sandström, *supra* note 434, at 4.

491. *Id.* at 20–22.

492. *Id.*

493. *Id.*

494. *Id.*

495. *Id.* at 22.

496. *Id.*

497. *Id.*

498. *Id.* at 20–22.

low-cost, long-term capital and also increase the amount of capital available by attracting long-term investors, such as pension funds, insurance funds, and mutual funds into the market.⁴⁹⁹ These investors have access to long-term funds⁵⁰⁰ and provide a stable source of investment in long-term projects.⁵⁰¹ Because they do not need immediate returns, these investors could sustain investment during economic downturns.⁵⁰² Many emerging markets including India, however, restrict the participation of institutional investors in the bond market.⁵⁰³ In addition, government bonds and guarantees rely on government fundamentals, difficult for countries quickly to improve,⁵⁰⁴ and may place governmental budgets at risk. Credit default swaps (“CDS”) allow hedging but attract participants only in transparent markets with relatively low risks of default, and their use by speculators can increase economic instability.

1. Government Interventions

Instead of directly financing infrastructure through budget allocations, governments can raise capital for infrastructure through government bonds or can offer guarantees to bolster nascent corporate bond markets. Bond finance offers the long-term finance discussed in Section I, and, when a government has few risks or assumes risks from private investors, the government interventions potentially facilitate low-cost, low-risk finance.⁵⁰⁵ The government interventions, however, depend on fundamentals of the government, which cannot quickly improve, just as developing a corporate bond market entails the gradual creation of a legal foundation for the market.⁵⁰⁶ Moreover, the government may become unable to carry out the obligations that it undertook or may decide to divert capital to other goals.⁵⁰⁷ Placing the faith and credit of a government at risk may sacrifice the future ability of the government to borrow.⁵⁰⁸

499. See, e.g., TURNBULL, *supra* note 42, at 29–30.

500. See, e.g., *Public and Private Financing of Infrastructure*, 15 EUR. INV. BANK PAPERS 2, 80 (2010), http://www.eib.org/attachments/efs/eibpapers/eibpapers_2010_v15_n02_en.pdf.

501. FIN. STABILITY BD., *Financial Regulatory Factors Affecting the Availability of Long-Term Investment Finance, Report to G20 Finance Ministers and Central Bank Governors*, at 9–10 (Feb. 2013).

502. See *id.*

503. See, e.g., Ila Patnaik et al., *Foreign investment in the Indian Government bond market* 8 (SEBI Working Paper No. 126, 2013).

504. C. ACHILLE, M. MEZUI & B. HUNDAL, *STRUCTURED FINANCE: CONDITIONS FOR INFRASTRUCTURE PROJECT BONDS IN AFRICAN MARKETS* 75 (2013).

505. See, e.g., P. Venkatachalam, *Innovative Approaches to Municipal Infrastructure Financing* 10 (LSE Dev. Stud. Inst. Working Paper Series No. 05-68, Nov. 2005).

506. See, e.g., del Valle, *supra* note 120, at 6.

507. See, e.g., Achille, *supra* note 44, at 20.

508. See, e.g., VENU PRASATH, *CREDIT ENHANCED INFRASTRUCTURE BONDS IN EMERGING MARKETS* 18 (2013) (discussing how the faith and trust of the government backs the instruments); See, e.g., Stephany Griffith-Jones & Ana Teresa Fuzzo de Lima, *Alternative Loan Guarantee Mechanisms and Project Finance for Infrastructure in Developing Countries*, INST. OF DEV. STUD. 9, 10 (2005) (discussing exposure of government to risk and expense)

i. Structure

Government bonds may offer long-term finance at a low cost because of the government backing of the bonds, and government guarantees can overcome limits to investment in corporate bonds by providing potential investors with assurances against risks. The development of a government bond market also may provide a foundation for expanding the corporate bond market into a source of long-term finance.⁵⁰⁹ The experience of East Asian countries in the wake of the Asian financial crisis has demonstrated that countries quickly can introduce government bond markets.⁵¹⁰ Alternatively, government guarantees can target specific risks, time periods, or classes of investors, and guarantees have attracted additional investment into less-developed corporate bond markets in several instances.

a. Government Bonds

A government can issue long-term government bonds to supplement existing government revenues. As the government claims to back the bonds, investors may perceive government bonds as low risk and offer capital at a low cost.⁵¹¹ If, however, a government faces a high likelihood of sovereign default, investors may not invest in the bonds, or they may raise the interest rates that they charge.⁵¹²

The bonds suit infrastructure finance⁵¹³ and provide additional benefits.⁵¹⁴ Government bonds raise capital in local currency, and the government can issue bonds of the same duration as a typical infrastructure project.⁵¹⁵ The development of the government bond market also may create a foundation for a corporate bond market by providing market infrastructure⁵¹⁶ and contributing to the establishment of a yield curve.⁵¹⁷

509. See, e.g., del Valle, *supra* note 120, at 4.

510. SORASART SUKCHAROENSIN, *Development of Bond Markets in ASEAN after Asian Financial Crisis*, in PROCEEDINGS OF THE NINTH ASIA-PACIFIC CONFERENCE ON GLOBAL BUSINESS, ECONOMICS, FINANCE AND BANKING 5 (Aug. 11–13, 2016).

511. See, e.g., USAID, FS SERIES NO. 12, DEVELOPMENT GOVERNMENT BONDS MARKETS 3 (Oct. 2010), <https://www.yumpu.com/en/document/view/29992363/fs-series-12-developing-government-bond-markets> (stating that domestic government bonds represent efficient finance because the “amounts are larger, the maturities are longer, the longer term cost is lower, and the government avoids exposure to currency risks”).

512. See, e.g., HELA CHEIKHROUHOU, STRUCTURE FINANCE IN LATIN AMERICA 63 (2007); see also Griffith-Jones, *supra* note 508, at 9.

513. See, e.g., USAID, *supra* note 511.

514. See, e.g., U.N. System Task Team (UNTT), Working Group on Sustainable Development Financing, Challenges in raising private sector resources for financing sustainable development, at 20 (2013) <https://sustainabledevelopment.un.org/content/documents/2106Chapter%203-challenges%20in%20raising%20private%20sector%20resources.pdf>.

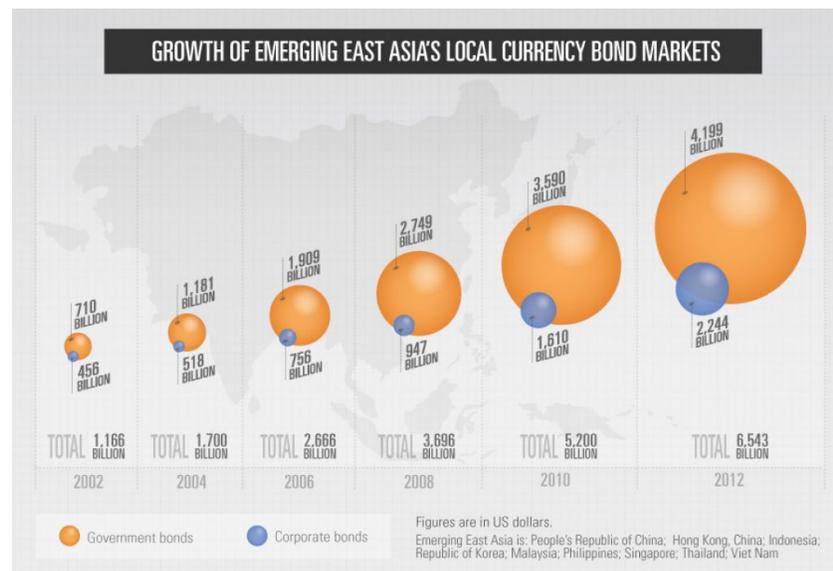
515. See, e.g., USAID, *supra* note 511.

516. See, e.g., del Valle, *supra* note 120, at 4.

517. See, e.g., WORLD BANK, DEVELOPING GOVERNMENT BOND MARKETS: A HANDBOOK 3 (2001), <https://openknowledge.worldbank.org/handle/10986/13865> (stating that government bonds “provide a benchmark yield curve and help establish the overall credit curve.”).

In the wake of the Asian financial crisis in the late 1990s, for example, several East Asian countries sought to develop local bond markets to reduce the reliance of their economies on bank finance and international financial markets.⁵¹⁸ The countries rapidly developed the bond markets. The size of local currency bond markets in East Asian economies excluding Japan, for example, rose to US \$3.88 trillion by June 2008 from \$491 billion in 1997, with growth in the government bond markets driving the increase (Figure 12).⁵¹⁹

Figure 12: Growth in East Asian Government Bond Markets⁵²⁰



b. Government Guarantees

Government guarantees of corporate bonds can help to attract investors into the corporate bond market.⁵²¹ In countries where creditors recover few assets in bankruptcy, including India,⁵²² investors protect themselves against losses by charging interest rates too high⁵²³ for a viable corporate bond market to

518. See, e.g., Kenneth Kang, Geena Kim, & Changyong Rhee, *Developing the Government Bond Market in South Korea: History, Challenges, and Implications for Asian Countries*, 4 ASIAN ECON. PAPERS 91, 91 (2005).

519. *Asian Bond Monitor*, ASIAN DEV. BANK (Mar. 2013), <http://www.adb.org/publications/asia-bond-monitor-march-2013>.

520. *Id.*

521. See T. Irwin, *Government Guarantees*, WORLD BANK, 2 (2007) (For example, Argentina used government guarantees to attract foreign investment in its railways).

522. Pandey & Chandrashekar, *supra* note 364.

523. See, e.g., ASIFMA, INDIA BOND MARKET ROADMAP, 1 (Oct. 2013).

develop.⁵²⁴ If the government, however, guarantees that the bonds will not default, the government may bypass the impediment to investment.⁵²⁵

Guarantees can eliminate a range of risks that discourage potential investors from participating in the bond market.⁵²⁶ Foreign investors in domestic infrastructure bonds, for example, must undertake currency risk because the projects earn revenues in domestic currency and pay bond coupons in domestic currency.⁵²⁷ The government, however, can offer guarantees against fluctuations in exchange rates.⁵²⁸ Guarantees also can protect investors against inflation and interest rate risks, liquidity risk caused by the absence of a secondary market for bonds, regulatory risks from potential changes to regulations that affect companies issuing bonds, and political risk.⁵²⁹

Governments can tailor the guarantees to the needs of investors. They can, for example, calibrate guarantees to periods of high risk, such as the construction period of infrastructure projects.⁵³⁰ To attract investors willing to invest only in high-rated projects, governments can act to increase the ratings of bond offerings.⁵³¹

Many examples exist of the successful use of government guarantees. In the early 1990s, the government of New South Wales extended revenue guarantees to bonds that financed construction of the Sydney Harbor Tunnel Project, a tunnel spanning the Sydney Harbor.⁵³² The cost of constructing the tunnel seemed likely to exceed the future toll revenues from the tunnel, and the government offered to supplement the toll revenues in order to ensure a minimum profit.⁵³³ The Chilean government also has extended revenue guarantees and exchange-rate guarantees to privately financed toll roads.⁵³⁴ A typical revenue guarantee has ensured that the developers of a road would receive revenues equal to seventy percent of the estimated present value of the cost of the road.⁵³⁵ Some of the guarantees have lasted for as long as twenty years, and many have provided a higher percentage

524. See, e.g., ASIA DEV. BANKS, EQUITY INVESTMENT AND LONG-TERM LOAN TO INFRASTRUCTURE DEVELOPMENT FINANCE COMPANY (INDIA), 14 (Dec. 2011).

525. See, e.g., Griffith-Jones, *supra* note 505, at Table 8 (showing guarantee reducing interest rates).

526. See *id.* at 3.

527. Irwin, *supra* note 521, at 71.

528. See *id.* at 73.

529. See Rao, *supra* note 19, at 15.

530. See, e.g., B20 AUSTL. 2014, B20 INFRASTRUCTURE & INVESTMENT TASKFORCE POLICY SUMMARY 6 (2014), <http://www.b20australia.info/Documents/B20%20Financing%20Growth%20Taskforce%20-%20Infrastructure%20Paper.pdf>.

531. See Rao, *supra* note 19, at 15.

532. Irwin, *supra* note 521, at 3.

533. *Id.*

534. *Id.* at 2.

535. *Id.*

of revenues in the early stages of a project and a lower percentage at later stages.⁵³⁶

ii. Implementation

Because economic stability and a sophisticated legal infrastructure underpin government bond markets and guarantees,⁵³⁷ a country cannot easily implement a government bond market or guarantee system before the conditions for them have developed. Government bond markets depend on the trust of investors in government policies and the transparency and predictability of the bond market.⁵³⁸ Government guarantees depend on government credibility⁵³⁹ and also necessitate complicated legal drafting.⁵⁴⁰

a. Government Bonds

Before it can develop a government bond market, a government must have achieved macroeconomic stability, including a sustainable fiscal policy, stable monetary conditions, and a credible and transparent exchange rate regime.⁵⁴¹ If investors perceive the government as unable to manage its debts and expenditures or unable to collect taxes, the investors will anticipate high risks of default on the bonds and raise the interest rates on the bonds or decide not to participate in the government bond market.⁵⁴²

Singapore, for example, has built a government bond market to finance infrastructure, but many other countries have not attained the market fundamentals that have made government finance successful in Singapore.⁵⁴³ The government in Singapore, for example, has maintained a balanced budget, with no external debt.⁵⁴⁴

The legal infrastructure to support a government bond market also takes time to develop. Bond markets rely on accurate financial reporting, a reliable long-term

536. *Id.*

537. *See, e.g.,* WORLD BANK, *supra* note 7 (stating that “government bonds typically are backed by the ‘faith and credit’ of the government”).

538. *See id.* (stating in the context of government bonds that such trust “takes time to acquire, and must be built”).

539. *See, e.g.,* Griffith-Jones, *supra* note 508, at 9.

540. *See, e.g.,* Irwin, *supra* note 521, at 2–3 (discussing clever contracting).

541. *See, e.g.,* WORLD BANK, *supra* note 7 (stating the dependence on investor interest in a “macroeconomic policy framework with a credible commitment to prudent and sustainable fiscal policies, stable monetary conditions, and a credible exchange rate regime”).

542. *See, e.g.,* del Valle, *supra* note 120, at 6.

543. *See, e.g.,* *Is it fiscally sustainable for Singapore to have such a high level of debt?*, GOV'T OF SINGAPORE (Aug. 31, 2012), <https://www.gov.sg/factually/content/is-it-fiscally-sustainable-for-singapore-to-have-such-a-high-level-of-debt>.

544. *See id.*

yield curve,⁵⁴⁵ and liquidity.⁵⁴⁶ The law must protect the rights of investors and provide for the fair resolution of disputes.⁵⁴⁷ Investors in many countries, however, may lack confidence in disclosure standards,⁵⁴⁸ and, without greater liquidity, yields may be difficult to predict.⁵⁴⁹ In India, for example, bond trades often are not reported.⁵⁵⁰ Trading of government bonds also has concentrated in bonds with ten-year maturities, which has prevented the development of benchmarks for pricing government bonds at a full range of maturities.⁵⁵¹

b. Government Guarantees

Although the implementation of a government guarantee program does not seem to depend on significant legal supports, the law that the implementation does require also seems difficult quickly to establish. To issue guarantees, governments must achieve high sovereign ratings⁵⁵² and must have access to agents with the skills to draft suitable contracts.⁵⁵³

For investors to trust in government guarantees, governments must maintain a high national credit standing.⁵⁵⁴ Governments that appear to have low credit quality cannot share credibly in the credit risk of private projects.⁵⁵⁵ Many emerging economies, however, have sovereign ratings below BBB,⁵⁵⁶ and India currently has a rating of BBB-.⁵⁵⁷

The language of the guarantees also must be tailored to specific risks, and the guarantees must not introduce improper incentives.⁵⁵⁸ When Turkey, for example, offered revenue guarantees on some railroad lines but not others, railroad operators diverted traffic from guaranteed to unguaranteed lines.⁵⁵⁹ South

545. See, e.g., Irving, *supra* note 521, at 51 (describing shortfalls in these areas).

546. See, e.g., JORGE CASTELLANOS, DEVELOPING GOVERNMENT BOND MARKETS 4 (1998).

547. See *id.* at 7.

548. See, e.g., del Valle, *supra* note 120, at 7.

549. See, e.g., Kanad Chaudhari, Meenal Raje & Charan Singh, *Corporate Bond Markets in India* 22 (Indian Inst. of Mgmt. Bangalore Working Paper No. 450, Feb. 2014).

550. See, e.g., Sanjana Juneja, *Evaluation of various government policies in strengthening the secondary Money Market and Debt Market*, 5 INTL RES. J. MAN. SOC. & HUM., at 717 (2014).

551. See, e.g., Chaudhari, *supra* note 549.

552. See, e.g., Griffith-Jones, *supra* note 508, at 9 (stating that the credit standing of developing countries may render government guarantees impossible).

553. See, e.g., Irwin, *supra* note 521, at 2–3 (discussing clever contracting).

554. See, e.g., HELA CHEIKHROUHO ET AL., STRUCTURE FINANCE IN LATIN AMERICA: CHANNELING PENSION FUNDS TO HOUSING, INFRASTRUCTURE, AND SMALL BUSINESSES 63 (2007).

555. See, e.g., Griffith-Jones, *supra* note 508, at 9 (stating that the credit standing of developing countries may render government guarantees impossible).

556. See, e.g., VENU PRASATH, CREDIT ENHANCED INFRASTRUCTURE BONDS IN EMERGING MARKETS, 84 (2013).

557. See, e.g., INDIA RATING, TRADING ECON. (Nov. 8, 2017), <http://www.tradingeconomics.com/india/rating>.

558. See, e.g., Irwin, *supra* note 521, at 20–30.

559. *Id.* at 29.

Africa, by contrast, has constrained such actions by offering revenue guarantees that compensate only 50% of revenue shortfalls.⁵⁶⁰

iii. Risks

Both forms of government intervention threaten to place national budgets in jeopardy and may depend on governments following through on what they merely promised to do, or what they lack the ability to do.⁵⁶¹ Government intervention ultimately may sacrifice the ability of governments to borrow.⁵⁶²

a. Government Bonds

The involvement of the government in government bond markets carries potential risks both for the government and for investors. If participants in a government bond market perceive rising risks, the participants will increase interest rates.⁵⁶³ Eventually, it may become difficult for the government to borrow to service its debts.⁵⁶⁴ In addition, though government bonds may purport to raise money to fund investment in infrastructure, the government may spend bond revenues on other objectives.⁵⁶⁵ The assets underlying government bonds do not generate income streams, and the government pays investors in government bonds from its tax revenues.⁵⁶⁶ As a result, the government can channel the capital that it raises through the bonds to any activity that it chooses.⁵⁶⁷

b. Government Guarantees

Government guarantees may increase the availability of long-term capital at the expense of the stability and reputation of the government. Opening the government budget to payments on guarantees may lead to costly financial obligations, causing hardships for taxpayers and negatively affecting the national budget.⁵⁶⁸ Governments in developing countries may not have the financial capacity to meet their commitments. Argentina, for example, attracted investment to its railway system by guaranteeing returns of 6-7%.⁵⁶⁹ The government, however, did not budget accurately for claims on the guarantee.⁵⁷⁰ Because the

560. *Id.* at 26.

561. *See, e.g.,* Achille, *supra* note 44, at 20.

562. *See, e.g.,* Irwin, *supra* note 521, at 18.

563. *See, e.g.,* del Valle, *supra* note 120, at 6.

564. *See, e.g.,* Irwin, *supra* note 521, at 18.

565. *See, e.g.,* Achille, *supra* note 44, at 20.

566. *Id.*

567. *Id.*

568. *See, e.g.,* Griffith-Jones, *supra* note 508, at 9.

569. *See, e.g.,* Irwin, *supra* note 521, at 2.

570. *Id.*

government could not meet the claims, eventually the guarantee contributed to the sovereign default of Argentina.⁵⁷¹

Often guarantees become due when a government has less ability to pay for them.⁵⁷² If a government, for example, guarantees bonds to support the construction of a toll road, traffic on the road may decrease during an economic recession, triggering the guarantee at a time when tax revenues have fallen.⁵⁷³

Governments may have difficulty forecasting and planning for their liabilities under guarantees.⁵⁷⁴ In the 1990s, for example, the government of the Republic of Korea guaranteed up to 90% of the revenues of a privately-financed road linking Seoul to a new airport at Incheon for a period of twenty years.⁵⁷⁵ The government retained the right to keep any revenues that exceeded the volume of revenues forecast.⁵⁷⁶ In fact, however, the revenues amounted to less than half of the volume of revenues forecast, and the government has had to pay a substantial amount of money every year since the road opened.⁵⁷⁷ The government remains uncertain of the total amount of money it will become responsible for paying over the duration of the guarantee.⁵⁷⁸

Finally, guarantees may encourage investment in high-risk projects and also incentivize insufficient monitoring.⁵⁷⁹ When the burden of failed projects falls on the government, investors may support projects with possibilities for earning high profits but high probabilities of failure.⁵⁸⁰ The companies responsible for the projects also may undertake excessive debt, since the government will become responsible if the companies default.⁵⁸¹ In addition, the guarantees shift responsibility for monitoring projects from investors to the government.⁵⁸² The investors have certain returns, while government bureaucrats may have no personal stake in project outcomes, and therefore the bureaucrats may fail to influence, anticipate, or respond to risks.⁵⁸³

571. *Id.*

572. *Id.* at 3.

573. *Id.*

574. *See, e.g.*, INT'L MONETARY FUND, GOVERNMENT GUARANTEES AND FISCAL RISK, 3 (Apr. 1, 2005).

575. Irwin, *supra* note 521, at 1.

576. *Id.*

577. *Id.* at 1-2.

578. *Id.* at 2.

579. B. Eichengreen, *Financing Infrastructure in Developing Countries*, 10 WORLD BANK RES. OBSERVER 75, 78 (1995).

580. *See, e.g.*, Griffith-Jones, *supra* note 508, at 9.

581. *See, e.g.*, Eichengreen, *supra* note 579, at 78 (discussing firms that exhaust the resources available to them because the government, and in turn the taxpayers, will bear the ultimate burden in bankruptcy).

582. *Id.*

583. Irwin, *supra* note 521, at 69.

2. Credit Default Swap Market

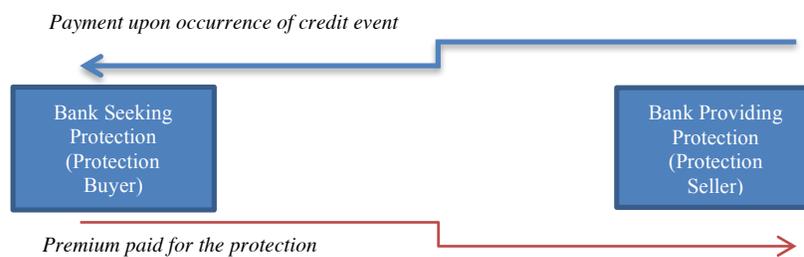
Credit default swaps transfer the default risks of bonds to third parties,⁵⁸⁴ but the CDS rely on efficient pricing in an active bond market,⁵⁸⁵ and do not eliminate risks from the financial system.⁵⁸⁶ While relatively easy to implement, CDS may threaten the stability of the financial system in ways that appear difficult to contain.⁵⁸⁷

i. Structure

Credit default swaps enable hedging of the default risks of bonds.⁵⁸⁸ The hedging facilitates increased liquidity and lower interest rates on bonds.⁵⁸⁹ CDS therefore may increase participation in corporate bond markets.⁵⁹⁰

CDS insure investors in bonds against the risk of the bonds defaulting.⁵⁹¹ In return for fees to protection sellers, investors in the underlying bonds receive payouts if the bonds default. (See Figure 13).⁵⁹²

Figure 13: Credit Default Swaps



CDS therefore redistribute the risk that bonds will default to third parties, which facilitates finance of infrastructure projects in two ways. First, transferring the risk of default allows investors in the bonds of infrastructure companies to

584. INT'L MONETARY FUND, SELECTED TOPIC: THE ROLE OF FINANCIAL DERIVATIVES IN EMERGING MARKETS, 63, <https://www.imf.org/External/Pubs/FT/GFSR/2002/04/pdf/chp4.pdf>.

585. See, e.g., B. Gerard Dages, Damon Palmer & Shad Turney, Federal Reserve Bank of New York, *An Overview of the Emerging Market Credit Derivatives Market*, (May 2005), <https://www.bis.org/publ/cgfs22fedny4.pdf> (discussing problem of insufficient data on risk to facilitate the pricing of derivatives).

586. See, e.g., INT'L MONETARY FUND, *supra* note 584, at 67.

587. See *infra* this section.

588. INT'L MONETARY FUND, *supra* note 584, at 63.

589. IOSCO, *Credit Default Swap Market*, FR05/12, at 31 (June 2012).

590. See, e.g., Iuliana Ismailescu & Blake Phillips, *Credit Default Swaps and the Market for Sovereign Debt*, 52 J. BANKING & FIN, 43, 45 (2015).

591. N. Narayan, *Credit Default Swaps*, 2010 CORP. L. CASES J. 295, 296 (2010).

592. *Id.*

hedge their exposure to the bonds.⁵⁹³ Because hedging reduces the risk of the bonds for investors in the bonds, hedging enables the investors to charge lower interest rates. Second, the ability to transfer the risk of default attracts investors and increases the liquidity of the bonds.⁵⁹⁴ More frequent trading of the bonds reduces information asymmetries and improves the price discovery process, and the increased liquidity of the bonds⁵⁹⁵ also enables investors to charge lower interest rates, because the investors have more ability to sell the bonds if the risk of the bonds fluctuates.⁵⁹⁶

The benefits of using CDS have particular significance in emerging economies such as India, where corporate bond markets have not attracted many investors⁵⁹⁷ and investors recover few assets when bonds default.⁵⁹⁸ As discussed above in section II, the secondary market for corporate bonds in India has a small investor base, due to restrictions on institutional investors and high taxes and stamp duties that hamper secondary trading.⁵⁹⁹ Section IV.A.2 set out the reasons that investor recoveries in bankruptcy in India remain low.⁶⁰⁰

ii. Implementation

The implementation of credit default swaps markets can occur quickly, though some economies may have difficulty attaining the transparency necessary in underlying bond markets to attract participants. If the risks to potential protection sellers appear too high, CDS markets may not develop.

CDS amount to contracts that establish the obligations of protection sellers and protection buyers.⁶⁰¹ The contractual arrangements increasingly have become standardized.⁶⁰² The International Swaps and Derivatives Association, for example, publishes master agreements that set out prevailing terms.⁶⁰³

CDS typically do not receive credit ratings,⁶⁰⁴ and consequently the assessment of default risks in CDS markets depends on disclosure and auditing

593. IOSCO, *supra* note 589, at 31.

594. *Id.*

595. See, e.g., *Why Would Anyone Want to Restart the Credit Default Swaps Market?*, BLOOMBERG, May 11, 2015.

596. IOSCO, *supra* note 589.

597. See, e.g., Anjali Sharma, *India's Corporate Bond Market Puzzle*, LIVEMINT, (Mar. 11, 2017); Vaibhav Anand & Rajeswari Sengupta, *The Corporate Debt Market in India*, IDEAS FOR INDIA (May 19, 2014).

598. See generally *id.*

599. See *supra* Section II.

600. See *supra* Section IV.A.2.

601. See, e.g., PATRICK AUGUSTIN, ET. AL., CREDIT DEFAULT SWAPS: A SURVEY, 7, <http://people.stern.nyu.edu/msubrahm/papers/CDS%20Survey.pdf>; see also Suresh Sundaresan, *Fixed Income Markets and Their Derivatives*, 377 (2009).

602. See, e.g., Hung-gay Fung & Yiuman Tse, *International Financial Markets*, 93 (2013).

603. Narayan, *supra* note 591, at 297.

604. See, e.g., Mary Watkins & Nicole Bullock, *Banks Face Swaps Threat After Ratings Cuts*, FINANCIAL TIMES, (July 11, 2012) (stating that swaps “themselves are not rated”).

practices that some emerging economies, including India, have not yet perfected.⁶⁰⁵ When public companies file complete financial reports that are well audited, CDS on corporate bonds reference a transparent underlying market.⁶⁰⁶ In India, however, the quality of the financial reports,⁶⁰⁷ as well as access to the reports, remains problematic.⁶⁰⁸ Indian companies have faced few sanctions for noncompliance with reporting requirements.⁶⁰⁹ A study by the World Bank also has exposed accounting problems that survived auditing undetected, and some have advocated for an independent entity to supervise the auditing industry, in order to improve standards and enhance the credibility of financial reports.⁶¹⁰ Although the Indian Department of Company Affairs and the Registrar of Companies collect company information, these agencies actively maintain the confidentiality of the information.⁶¹¹ The law in India also has prevented independent third parties from publishing company data in an organized way.⁶¹²

Moreover, potential protection sellers likely participate in CDS markets only if they perceive accurate bond pricing and some participate only if they perceive low risks of bond defaults.⁶¹³ Less developed bond markets may lack sufficient liquidity to allow for dynamic pricing of default risk into bonds.⁶¹⁴ In India, for example, as discussed in Section II, the bonds of only a handful of companies dominate secondary trading.⁶¹⁵ The Indian bond market also has not offered reliable benchmarks from which investors can estimate the value of the bonds.⁶¹⁶ Generally, a yield curve based on the government bond market provides a credible reference for the price of corporate bonds of different maturities,⁶¹⁷ but the yield curve in India remains incomplete.⁶¹⁸ As discussed earlier in this section, most

605. See, e.g., SANKATHA SINGH, *CORPORATE GOVERNANCE: GLOBAL CONCEPTS AND PRACTICES*, 1 (2005).

606. R. Anderson, *Credit Default Swaps: What are the Social Benefits and Costs?*, Banque de France, 14 FIN. STABILITY REV. 1, 5 (2010).

607. See, e.g., INDIA RATINGS & RESEARCH, *QUALITY OF FINANCIAL REPORTING OF LARGE CORPORATES*, 1 (July 23, 2014).

608. See, e.g., Sen, *supra* note 168, at 9.

609. See *id.*

610. See, e.g., World Bank, *Report on the Observance of Standards and Codes (ROSC) India*, 4, 10, 15, 17, 19-20 (Dec. 20, 2004).

611. See, e.g., Sen, *supra* note 168, at 9.

612. *Id.*

613. See, e.g., PAUL FERRARA & SEYED ALI NEZZAMODDINI, *INTEREST RATE SWAPS – AN EXPOSURE ANALYSIS*, SOCIETY OF ACTUARIES’ COMMITTEE ON FINANCE RESEARCH, 10 (July 2013).

614. See, e.g., B. Gerard Dages, Damon Palmer & Shad Turney, Federal Reserve Bank of New York, *An Overview of the Emerging Market Credit Derivatives Market*, (May 2005), <https://www.bis.org/publ/cgfs22fedny4.pdf> (discussing problem of insufficient data on risk to facilitate the pricing of derivatives).

615. See *supra* Section II.

616. Basu, *supra* note 7, at 147.

617. See, e.g., WORLD ECONOMIC FORUM, *ACCELERATING EMERGING CAPITAL MARKETS DEVELOPMENT CORPORATE BOND MARKETS*, 25 (Apr. 2015) at 25.

618. Basu, *supra* note 7, at 147.

investment in Indian government bonds has concentrated in bonds of ten-year maturities. The clustering around a single maturity has constrained the development of benchmarks for pricing corporate bonds at a full range of maturities.⁶¹⁹

Even when protection remains available at high levels of default risk, the protection may become very expensive.⁶²⁰ In many countries including India, infrastructure projects frequently have failed.⁶²¹ Some potential protection sellers therefore may have insufficient assurances of the stability of the bonds of the project development companies. In countries similar to India a viable CDS market may not develop.

iii. Risks

Although credit default swaps allow investors to unbundle and redistribute default risks, encouraging investment in corporate bonds, CDS also allow market participants to speculate, push companies into bankruptcy, and propagate economic vulnerabilities.⁶²²

Rather than using CDS to hedge default risks, investors can use CDS to speculate.⁶²³ While those that use CDS to hedge seek to limit the risk of the underlying bonds, those that use CDS to speculate seek to profit from fluctuations in the risk of the underlying bonds.⁶²⁴ Speculators bet against the credit quality of the bonds for which they buy protection and receive payments if the bonds default.

Such investors may profit from forcing distressed firms into bankruptcy even when debt restructuring would lead to better outcomes or cost less.⁶²⁵ The gains to investors that have bought CDS protection may outweigh the losses on the bonds for the investors.⁶²⁶

In addition to destroying value in companies,⁶²⁷ speculation using CDS can introduce vulnerabilities into the financial system.⁶²⁸ When banks invest in bonds

619. *Id.*

620. *See, e.g.,* M. Hünseler, *Credit Portfolio Management* (2013) (“high default risk borrowers tend to trade with a higher short end risk premium”).

621. *See, e.g.,* Ryan Orr & Barry Metzger, *The Legacy of Failed Global Projects*, Proceedings of the General Counsels’ Roundtable, Stanford University, California, Jan. 21-22, 2005 at 3–4, 12, 18 (discussing reasons for frequency of distressed infrastructure project in emerging markets); *see also* Anto Antony & Anoop Agrawal, *Macquarie Sees Ticking Bomb for India as Restructured Loans Fail*, BLOOMBERG, May 28, 2015.

622. *See, e.g.,* IOSCO, *supra* note 589.

623. Narayan, *supra* note 591, at 296.

624. *Id.*

625. IOSCO, *supra* note 589.

626. *Id.*

627. Forcing a company into bankruptcy rather than restructuring the company potentially destroys value in the company. It also may, however, produce some benefits: by raising the bargaining power of the investors in the bonds, CDS may prevent the companies that issued the bonds from renegotiating their payments to the investors, which may reduce the cost of credit for the companies.

628. INT’L MONETARY FUND, *supra* note 584, at 67.

and then buy CDS protection, the CDS can magnify maturity risk in ways that regulators may have difficulty detecting.⁶²⁹ Moreover, although the CDS protect investors in bonds against losses if the bonds default,⁶³⁰ CDS do not remove the underlying risk of default from the financial system.⁶³¹ Because buyers of CDS protection do not have to pay for the protection until a default occurs,⁶³² investors in bonds have the ability to establish leveraged positions that amplify volatility.⁶³³ If, for example, a bank invests in a bond and hedges its exposure to the bond by buying CDS protection from another bank, in cases where the seller of the CDS protection defaults and the bond also defaults, the bank that invested in the bond no longer has protection against the losses.⁶³⁴ When banks enter into chains of interlinked CDS transactions, the inability of the protection seller to pay the protection buyer upon the default of the underlying bond threatens to spread losses through the market.⁶³⁵

Regulatory changes in the wake of the crisis reflect the recognition of this risk, and other countries easily could implement similar reforms. Many countries, including the U.S., Denmark, and South Korea, have undertaken efforts to establish multilateral settlement of CDS through central counterparties (“CCPs”).⁶³⁶ When a CDS is agreed between a protection buyer and protection seller, the CCP clears the trade, becoming the counterparty to each leg of the trade.⁶³⁷ If the protection seller defaults, the CCP absorbs the loss and honors the obligation to the protection buyer.⁶³⁸ The CCP thus cushions the risk of defaults.⁶³⁹ Currently, India limits CDS trades to: 1) transactions that reference Indian entities; 2) Indian protection buyers and sellers; and 3) rated reference entities, and the CDS market remains very small.⁶⁴⁰ If, however, Indian

629. *Id.*

630. Pimco, *Bond Basics: What Are Credit Default Swaps and How Do They Work?*, 1 (June 2006), <http://www.econ.tcu.edu/quinn/econfinmkt/Credit%20Default%20Swaps%20US.pdf>.

631. See, e.g., Matthew Philips, *How Credit Default Swaps Became a Time Bomb*, NEWSWEEK (Sept. 26, 2008) (describing how losses at Lehman Brothers spread to AIG through swaps transactions).

632. Pimco, *supra* note 630.

633. INT’L MONETARY FUND, GLOBAL FINANCIAL STABILITY REPORT—MARKET DEVELOPMENTS AND ISSUES, CHAPTER IV, 67 (Dec. 2002), <https://www.imf.org/External/Pubs/FT/GFSR/2002/04/pdf/chp4.pdf>.

634. Philips, *supra* note 631.

635. *Id.*

636. See, e.g., Cyril Monnet, *Let’s Make it Clear*, Federal Reserve of Philadelphia, Business Review, Q1, at 1 (2010); INT’L MONETARY FUND, *Denmark: Financial Sector Assessment Program*, 20 (2014); BIS, *Payment, Clearing and Settlement Systems in Korea*, Red Book, 211 (2011), https://www.bis.org/cpmi/publ/d97_kr.pdf.

637. R. Anderson, *Credit Default Swaps: What are the Social Benefits and Costs?*, Banque de France, 14 FIN. STABILITY REV. 1, 6 (2010).

638. *Id.*

639. *Id.*

640. Reserve Bank of India, circular IDMD.PCD.No. 5053 /14.03.04/2010-11, (May 23, 2011), *as amended by* Reserve Bank of India, circular IDMD.PCD.No.10 /14.03.04/2012-13, (Jan. 7, 2013).

regulations and similar regulations in other countries liberalized and the markets grew, multilateral settlement immediately would become important.⁶⁴¹

Finally, current reforms are examining the contribution to the recent crisis of exemptions for derivatives including CDS from the bankruptcy code.⁶⁴² If domestic banks in other countries like India began to tether themselves to each other through CDS trades, such evaluations also would become necessary, along with the establishment of adequate resolution authorities. Most bankruptcy codes exempt CDS from the bankruptcy process,⁶⁴³ which led to unpredictable and rapid unwinding of CDS positions during the recent crisis.⁶⁴⁴ Unwinding of the positions destroyed value at companies and banks and propagated vulnerabilities through economies.⁶⁴⁵ In the U.S., for example, a statutory exemption has extended special treatment to investors in CDS and permitted the investors to terminate their CDS agreements, liquidate their positions, net their contracts, and seize their collateral, without participating in the traditional bankruptcy process.⁶⁴⁶ During the crisis, the unrestricted right that investors in CDS have to close out their trading positions weakened entities already approaching bankruptcy.⁶⁴⁷ As the CDS investors seized assets that might otherwise have supported restructuring,⁶⁴⁸ coordinated resolution in bankruptcy became impossible.⁶⁴⁹ When the same assets backed the CDS trades of other entities, the selling of those assets by one entity reduced the liquidity of the others holding them, creating conditions for other protection sellers also to begin calling on their protection buyers to post additional collateral.⁶⁵⁰ As the protection sellers jettisoned their CDS, the protection buyers had to sell more collateral to meet their obligations.⁶⁵¹ This, in turn, caused the protection sellers to rush to close out their trades, before the price of the collateral assets fell further.⁶⁵² Lehman Brothers,

641. See, e.g., Bank for Int'l Settlements, *The Macrofinancial Implications of Alternative Configurations for Access to Central Counterparties in OTC Derivatives Markets*, 1 (Committee on the Global Financial System, CGFS Papers No. 46, Nov. 2011) (discussing the importance of multilateral settlement).

642. See, e.g., Kirshner, *supra* note 424, at 827–832.

643. Morrison, *supra* note 353, at 113.

644. Kirshner, *supra* note 424, at 821–822.

645. See, e.g., *id.* at 821.

646. T. Sullivan, *Swapped Disincentives: Will Clearinghouses Mitigate the Unintended Effects of the Bankruptcy Code's Swap Exemptions?*, 80 FORDHAM L. REV. 1491, 1511 (2011).

647. See, e.g., Kirshner, *supra* note 424, at 821–822.

648. See, e.g., Lois R. Lupica, *Asset Securitization: The Unsecured Creditor's Perspective*, 76 TEX. L. REV. 595, 634 (1998); Dov Solomon, *The Rise of a Giant: Securitization and the Global Financial Crisis*, 49 AM. BUS. L.J. 859, 873 (2012); Lois R. Lupica, *Circumvention of the Bankruptcy Process: The Statutory Institutionalization of Securitization*, 33 CONN. L. REV. 199, 235 (2000).

649. See, e.g., Statement of Mark Roe before the Subcommittee on Regulatory Reform, Commercial and Antitrust Law, Dec. 3, 2013, *The Bankruptcy Code and Financial Institution Insolvencies*, 1 (2013).

650. See, e.g., Randall D. Guynn, *Are Bailouts Inevitable?*, 29 YALE J. REG. 121, 127 (2012).

651. See, e.g., Kenneth Ayotte & David A. Skeel, Jr., *Bankruptcy or Bailouts?*, 35 J. CORP. L. 469, 484, 495 (2010).

652. See, e.g., Testimony of Sheila Bair Before the S. Comm. on Banking, Hous. & Urban

for example, had to terminate nearly 800,000 of its 1.5 million derivatives trades within five weeks of filing for bankruptcy.⁶⁵³ Countries with nascent bond markets could legislate to force parties to CDS contracts to participate in bankruptcy.⁶⁵⁴ Otherwise, countries such as India might risk having to rely on crisis resolution authorities to maintain stability, which could threaten the problems discussed in section IV.A.2.

CONCLUSION

Transitioning to intermediate financing models can increase the availability of private finance for infrastructure projects in economies in which legal reforms remain ongoing. In light of the tradeoff between the provision of long-term capital and managing its risks, raising finance through covered bonds seems best suited to countries at the equivalent level of legal development as India. Covered bonds mitigate the maturity risk of plain bank finance, and legal systems have the capacity to introduce protections against many of the countervailing risks that covered bonds introduce.

Affairs 111th Cong., *Regulation and Resolving Institutions Considered "Too Big to Fail"* 51, at 53.

653. K. Summe, *Misconceptions About Lehman Brothers' Bankruptcy and the Role Derivatives Played*, 64 STAN. L. REV. 16, 18-19 (2011).

654. See, e.g., Bradford J. Sandler & Kari Coniglio, "Decoupling" Issues in Bankruptcy, AMERICAN BAR ASSOCIATION BUSINESS BANKRUPTCY NEWSLETTER, 3-5 (2008), www.abanet.org/buslaw/newsletter/0078/materials/pp4.pdf (discussing the implications of a system where the parties do not have to participate in bankruptcy); see also Kirshner, *supra* note 424, at 819.

Energy and Security, This for That

Matthew Neely*

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INTRODUCTION

Without using cyber attacks or even little green men, Russia could devastate European North Atlantic Treaty Organization (NATO) allies by simply turning off the gas. NATO allies, and particularly Eastern European NATO allies, are dependent on Russia to supply their oil and gas. "A cut in gas supply [to NATO]

would generate enormous economic costs . . . And even the lucky ones who would get gas would have to deal with dizzying price spikes.”¹ A Russian disruption to German supply, for example, could cause German industries to lose electricity, supply chains to collapse, decreased production, and increased layoffs.² Russia has a demonstrated willingness and capability to exploit this European dependency on Russian oil and gas exports. As NATO increasingly finds itself at odds with Russia, how can NATO defend against this threat?³

This paper argues that NATO should use Articles 2 and 3 authority, rather than Article 5, to protect the alliance from the Russian threat. Specifically, NATO should use these authorities to tailor its current Article 5-centric guideline that allies spend 2% of their Gross Domestic Product (GDP) on defense and instead require allies to either spend 2% of their GDP on defense or .4% of their GDP on European energy security initiatives under Articles 2 and 3 authority. NATO allies that opt to spend .4% of their GDP on energy security would be encouraged to spend 1.6% of their GDP on defense. To enforce this new requirement, any NATO ally that fails to spend .4% of their GDP on energy security or 2% on defense in any three of the last five years would forfeit their right to invoke Article 5 of the NATO Treaty (hereinafter the “revised spending requirement”).

Tailoring NATO’s current spending guideline in such a manner would have two benefits. First, NATO would reduce Russia’s capacity to finance its military. Second, NATO would be better positioned to guard against a Russian disruption to energy supplies by both having reduced NATO dependency on Russian gas exports and having improved its ability to respond to supply disruptions. In support of this position, Part I of this article examines how Russian oil and gas export policies threaten the European NATO allies. Part II examines NATO’s 2% spending guideline, the unrealized potential of NATO Treaty Articles 2 and 3, and proposes specific language to promulgate the revised spending requirement. Part III examines the European Union (EU) energy policy, and more particularly its energy security strategy. Part IV identifies projects that are part of the EU energy security strategy that NATO should fund pursuant to the revised spending requirement. Following Part IV is a conclusion.

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1. *LEAKED: What Happens to Germany if Russia Turns off the Gas*, WOLF STREET (Oct. 21, 2014), <http://wolfstreet.com/2014/10/21/leaked-what-happens-to-germany-if-russia-turns-off-the-gas/>.
2. *Id.*
3. North Atlantic Treaty, Apr. 4, 1949, 63 Stat. 2241, 34 U.N.T.S. 243 (NATO).

I.
THE RUSSIAN THREAT

Following the Cold War, a spirit of cooperation existed between NATO and Russia.⁴ In 1994, Russia joined NATO's "Partnership for Peace" program that encourages "practical bilateral cooperation between individual Euro-Atlantic partner countries and NATO."⁵ It allows partners to build up an individual relationship with NATO, choosing their own priorities for cooperation."⁶ The relationship has since soured. In 2007, Russian President Vladimir Putin began openly challenging NATO and eventually executed a foreign policy in congruence with his challenges.⁷ President Putin's foreign policy appears particularly concerned with challenging NATO influence in Eastern Europe.⁸ As General Sir Richard Shirreff, former Deputy Supreme Allied Commander Europe, bluntly stated "Putin's strategic aim is clear: to re-establish Russia's status as one of the world's great powers and to dominate the former republics of the Soviet Union."⁹

Part I.A of this section illustrates how a key tenet of President Putin's strategy is exploiting European dependence on Russian oil and gas exports. Part I.B examines the broader threat President Putin's strategy poses to NATO physical security. Part I.C discusses the revenues Russia receives from its oil and gas exports and how they affect Russia's ability to finance its military.

A. *Russian Threat to European Energy Security*

"Today, the EU imports 53% of the energy it consumes" including almost 90% of its crude oil and 66% of its natural gas.¹⁰ The dependency on energy supply imports presents a EU "security of supply" issue that is even more acute in countries that are largely dependent upon a single exporter.¹¹ Because the EU's "prosperity and security hinges on a stable and abundant supply of energy,"¹² energy security should be of paramount concern to the EU.

4. *Towards a Grand Strategy for an Uncertain World*, VOLTAIRENET.ORG, http://www.bing.com/cr?IG=B47DD6E15C724216BFCEB989D2E399BD&CID=2F033A91E54D6C70271E337AE47C6D27&rd=1&h=qAB87c4zSAuNvAjM_uU7WR-qUcoKGY9WCdG-7BahSBg&v=1&r=http://www.voltairenet.org/IMG/pdf/NATO_new_Strategy-2.pdf&p=DevEx,5082.1 (last visited Dec. 13, 2016).

5. Signatures, http://www.nato.int/cps/en/natolive/topics_82584.htm.

6. *Partnership for Peace programme*, http://www.nato.int/cps/en/natohq/topics_50349.htm.

7. Thom Shanker & Mark Landler, *Putin Says U.S. Is Undermining Global Stability*, N.Y. TIMES, (Feb. 11, 2007) <http://www.nytimes.com/2007/02/11/world/europe/11munich.html>.

8. See Richard Shirreff, *Putin's Aggression in Europe Should Worry the US*, CNN (Oct. 21, 2016), <http://www.cnn.com/2016/10/21/opinions/russia-aggression-nato-shirreff-opinion/index.html>.

9. *Id.*

10. European Commission, *European Energy Security Strategy*, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014DC0330&from=EN> (last visited Dec. 14, 2016).

11. *Id.*

12. *Id.*

NATO allies Poland, Slovakia and Hungary receive over 90% of their crude oil from Russia.¹³ Other NATO allies such as Slovakia, the Czech Republic, and Hungary are completely reliant on Russian oil pipelines.¹⁴ NATO allies Poland, Lithuania, Hungary, and Bulgaria are almost entirely dependent upon Russia for their natural gas imports. More specifically, in 2013 Poland imported 77% of its natural gas from Russia; all of Lithuania's gas is imported from Russia through a single pipeline; Hungary imports 80% of its gas from Russia; and 92% of Bulgaria's gas is imported from Russia.¹⁵ In short, NATO countries are susceptible to Russian disruptions to their oil and gas supply.

Russia has demonstrated its willingness to exploit this vulnerability for its own political or strategic purposes. For example, in 2007 Russia halted exports of "oil products to Estonia . . . in a move that coincided with protests in Moscow over the Baltic state's relocation of a Soviet war memorial."¹⁶ In 2006, "the Druzhba ("Friendship" in Russian) oil pipeline was shut down by Russia for so-called 'technical repairs' after Lithuania refused to sell its oil refinery to a Russian-led consortium."¹⁷ In 2003, a year prior to Latvia joining NATO, the Russians stopped oil exports to Latvia because of Latvian resistance to Russian corporations having ownership of Latvian oil trade infrastructure.¹⁸

Russia also exploits non-NATO Eastern European countries' dependence upon Russian oil and gas exports to influence their domestic politics in favor of Russian interests. An example is Russian pressure on Moldova in 2013 as Moldova publicly debated whether it should be politically allied with Russia or Western Europe.¹⁹ Amid this debate, "a senior Russian envoy . . . told Moldovans that 'energy supplies are important in the run-up to winter—I hope you won't freeze.'"²⁰ Another example of exploitation is Russia's fluctuating gas export

13. CAMBRIDGE ECONOMETRICS, A STUDY ON OIL DEPENDENCY IN THE EU, A REPORT FOR TRANSPORT AND ENVIRONMENT (2016),

https://www.transportenvironment.org/sites/te/files/publications/2016_07_Study_EU_oil_dependency.pdf (last visited Dec. 14, 2016).

14. *Id.*

15. This was true as of 2013, the most recent data available. Brenda Shaffer, *Europe's Natural Gas Security of Supply: Policy Tools for Single-Supplied States*, 36 ENERGY L.J. 179, 187, 190, 193, 196 (2015).

16. Dmitry Zhdannikov, *Russia Halts Estonia Fuel Transit Amid Statue Row*, REUTERS (May 2, 2007), <http://www.reuters.com/article/us-russia-estonia-energy-idUSL0264696120070502>.

17. Zygimantas Pavilionisk, *Lithuanian Energy Freedom: Will the US Help?*, WORLD AFFAIRS J. (Mar./Apr. 2015), <http://www.worldaffairsjournal.org/article/lithuanian-energy-freedom-will-us-help>.

18. Sabrina Tavernise, *International Business; Latvia's Oil Routes Dry Up as Russia Alters Flow*, N.Y. TIMES (Jan. 21, 2003), <http://www.nytimes.com/2003/01/21/business/international-business-latvia-s-oil-routes-dry-up-as-russia-alters-flow.html>.

19. Vladimir Socor, *Ethnic Factors Affecting Moldova's Debate on Association With the European Union*, 11 EURASIA DAILY MONITOR (Feb. 20, 2014), <https://jamestown.org/program/ethnic-factors-affecting-moldovas-debate-on-association-with-the-european-union/>.

20. Laurence Peter, *Armenia rift over trade deal fuels EU-Russia tension*, BBC NEWS (Sep. 5, 2013), <http://www.bbc.co.uk/news/world-europe-23975951>.

prices to Ukraine. In the early 2000s, Ukraine was “rewarded by the Kremlin with subsidized oil and gas sales.”²¹ Specifically, between 2000 and 2005 the average price of Russian gas exports to the rest of Europe rose from \$103.2 per 1,000 cubic meters (mcm) to \$192.5 per mcm, while the price of Russian gas to Ukraine held steady at \$50/mcm.²² In the December 2004 “Orange Revolution,” a Russian-backed Ukrainian presidential candidate lost the election to a Western-backed candidate.²³ Following the election, Russia raised Ukrainian gas export prices to \$230 per mcm.²⁴ In 2010, a pro-Russian leaning candidate won the presidential election.²⁵ Soon thereafter, Russia instituted an “export duty-exemption” that lowered the price of oil and gas exports to Ukraine.²⁶ In February 2014, the pro-Russian President of Ukraine was the subject of a coup and fled office.²⁷ In April 2014, after Russia annexed Crimea from Ukraine (discussed below in Part I.B), Russia annulled the export duty-exemption raising the price of its natural gas exports to Ukraine by 81%, “reaching a level higher than for any European Union nation.”²⁸ Russia has also gone beyond simply manipulating prices by suspending gas exports to Ukraine altogether in 2006 and 2009.²⁹ In response to the 2009 stoppage, Ukraine was forced to reverse the flow of gas in its pipelines so that it “transport[ed] gas from Ukraine’s storage facilities . . . to major consuming areas. This reversal of one of the world’s largest gas transit systems was unprecedented.”³⁰

21. Randall Newnham, *Oil, Carrots, and Sticks: Russia’s Energy Resources as a Foreign Policy Tool*, 2

J. EURASIAN STUD. 134, 138 (2011).

22. Simon Pirani, *Ukraine’s Gas Sector*, 29 OXFORD INST. ENERGY STUD. (2007), <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2010/11/NG21-UkrainesGasSector-SimonPirani-2007.pdf>.

23. Adrian Karatnycky, *Ukraine’s Orange Revolution*, FOREIGN AFFAIRS (Mar./Apr. 2005), <https://www.foreignaffairs.com/articles/russia-fsu/2005-03-01/ukraines-orange-revolution>; Victor Yasmann, *Russia: Moscow Uses Different Lever Of Influence, Same Message*, RADIOFREEEUROPE/RADIOLIBERTY (Jan. 3, 2006) <http://www.rferl.org/a/1064385.html>.

24. Tom Parfitt, *Russia Turns Off Supplies to Ukraine In Payment Row, and EU Feels the Chill*, THE GUARDIAN (Jan. 2, 2006), <https://www.theguardian.com/world/2006/jan/02/russia.ukraine>.

25. *Final Tally Shows Yanukovich Wins Ukraine Election*, CNN (Feb. 10, 2010), <http://www.cnn.com/2010/WORLD/europe/02/10/ukraine.elections/>.

26. *Gazprom Faces \$800 Million in Taxes as Ukraine Rejects Gas Price*, BLOOMBERG, (May 26, 2014), <https://www.bloomberg.com/news/articles/2014-05-26/gazprom-faces-800-million-in-taxes-as-ukraine-rejects-gas-price>.

27. *Ukraine Crisis: Timeline*, BBC NEWS (Nov. 13, 2014), <http://www.bbc.com/news/world-middle-east-26248275>.

28. *Russia to Charge Ukraine More Than Germany as Gas Discounts End*, BLOOMBERG (Apr. 3, 2014), <https://www.bloomberg.com/news/articles/2014-04-03/russia-to-charge-ukraine-more-than-germany-as-gas-discounts-end>.

29. Randall E. Newnham, *supra* note 21; Parfitt, *supra* note 24.

30. Simon Pirani, Jonathan Stern & Katja Yafimava, *The Russo-Ukrainian Gas Dispute of January 2009: A Comprehensive Assessment*, OXFORD INST. ENERGY STUD. (Feb. 2009), <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2010/11/NG27-TheRussoUkrainianGasDisputeofJanuary2009AComprehensiveAssessment-JonathanSternSimonPiraniKatjaYafimava-2009.pdf>.

Manipulating and twice suspending gas exports to Ukraine was clearly part of a strategy to keep Ukraine within the Russian orbit of influence and out of NATO's. As one Kremlin consultant stated "[i]n reality, Ukraine [was] choosing not between politicians or electoral blocs, but between NATO and the Single Economic Space with Russia."³¹ A leader of a Ukrainian pro-Russian political organization stated, "what else but gas could convince the people of Ukraine that it's better to be a friend of Russia than the European Union and NATO."³²

B. Russian Strategic Aims as a Threat to NATO Physical Security

Russia is attempting to increase its military capabilities as tensions grow between it and NATO.³³ Russian expenditures on new missiles, bombers, submarines, helicopters, armored vehicles, and air-defense systems are all evidence of this strategic goal,³⁴ as are alarming reports that Russia is attempting to modernize its nuclear arsenal.³⁵ Most concerning is Russia's demonstrated willingness to put these military investments to use. In 2008, after separatists in South Ossetia began fighting with the Georgian military, Russia invaded Georgia in support of the separatists. In 2014, as noted above, the Russian military interfered in the Ukrainian Civil War and ultimately annexed Crimea from Ukraine.³⁶ Most recently, Russia has engaged in extensive military operations in support of the Syrian government in its civil war.³⁷

Further, recent Russian statements and actions indicate their willingness to engage the Russian military in actions hostile to NATO. For instance, a "revised military doctrine signed by Mr. Putin in December [2014] identified 'reinforcement of NATO's offensive capacities directly on Russia's borders, and measures taken to deploy a global antimissile defence [*sic*] system' in central Europe as the greatest threats Russia faces."³⁸ On October 26, 2016, NATO Secretary General Jens Stoltenberg reported that Russia is "conducting large-scale, no-notice exercises close to NATO borders."³⁹ One of these exercises "was

31. Victor Yasmann, *supra* note 23.

32. *Id.*

33. See *Russia Overhauls Nuclear Missile Forces as Tensions With West Flare*, MOSCOW TIMES, (Sep. 22, 2014) <https://themoscowtimes.com/articles/russia-overhauls-nuclear-missile-forces-as-tensions-with-west-flare-39636> (last visited Dec. 15, 2016).

34. *What Russia wants: From Cold War to Hot War*, THE ECONOMIST (Feb. 12, 2015) <http://www.economist.com/news/briefing/21643220-russias-aggression-ukraine-part-broader-and-more-dangerous-confrontation>.

35. MOSCOW TIMES, *supra* note 33.

36. Luke Harding, *Ukraine Ceasefire Leaves Frontline Counting Cost of War in Uneasy Calm*, THE GUARDIAN (Dec. 17, 2014), <https://www.theguardian.com/world/2014/dec/17/ukraine-ceasefire-frontline-counting-cost-war-uneasy-calm>; *Putin Admits Russian Forces Were Deployed to Crimea*, REUTERS (Apr. 17, 2014), <http://uk.reuters.com/article/russia-putin-crimea-idUKL6N0N921H20140417>.

37. Kathy Gilsinan, *A Who's Who Guide to the Syrian Civil War*, DEFENSE ONE (Oct. 29, 2015), <http://www.defenseone.com/threats/2015/10/whos-who-guide-syrian-civil-war/123240/>.

38. *What Russia wants: From Cold War to Hot War*, *supra* note 34.

39. James Masters, *NATO Bolsters Presence in Eastern Europe as Russia Tension Rises*, CNN

based on a scenario of invasion and occupation of the Baltic states.”⁴⁰ Given this information, NATO must conclude that Russia is serious about challenging NATO influence in Eastern Europe and willing to use its military in pursuit of its strategic aims.

C. Russian Federal Government Revenues⁴¹

Revenues from oil and gas exports accounted for an estimated 40% of the Russian federal budget revenues in 2015.⁴² The World Bank does not parse how much of the federal budget revenues are from oils and how much are from gas. It is possible, however, to estimate that between 2012 and 2015 Russia exported \$598 billion worth of crude oil,⁴³ \$396 billion of oils other than crude,⁴⁴ and \$253 billion of natural gas.⁴⁵ The sum estimated revenue for these oil and gas exports

(Oct. 27, 2016), <http://www.cnn.com/2016/10/27/europe/nato-russia-troops/index.html>.

40. Shirreff, *supra* note 8.

41. United Nations International Trade Statistics Database, Department of Economic and Social Affairs/Statistics Division (UN Comtrade, DESA/UNSD) is the source of all export data. The trade classification scheme used was the Harmonized System (HS), meaning the data is as reported. This is the suggested default on UN Comtrade’s website. UN Comtrade, DESA/UNSD is considered the most comprehensive trade database available with more than 1 billion records. There are several disclaimed limitations, however: (1) The values of the reported detailed commodity data do not necessarily sum up to the total trade value for a given country dataset; (2) Data are made available in several commodity classifications, but not all countries necessarily report in the most recent commodity classification; (3) When data are converted from a more recent to an older classification it may occur that some of the converted commodity codes contain more (or less) products than what is implied by the official commodity heading; (5) Imports reported by one country do not coincide with exports reported by its trading partner. Differences are due to various factors including valuation (imports CIF, exports FOB), differences in inclusions/ exclusions of particular commodities, timing etc.; (6) Almost all countries report as partner country for imports the country of origin which is determined by the rules of origin established by each country hence, the term ‘partner country’ in the case of imports does not necessarily imply any direct trading relationship; and (7) Countries (or areas) do not necessarily report their trade statistics for each and every year. This means that aggregations of data into groups of countries may involve countries with no reported data for a specific year.

42. *Russian Economic Report: The Long Journey to Recovery*, WORLD BANK GROUP (Apr. 2016), <http://documents.worldbank.org/curated/en/657991467989516696/pdf/104825-NWP-P156290-PUBLIC-WB-RER-No-35-FINAL-ENG.pdf>.

43. UN COMTRADE, <http://comtrade.un.org/db/dqBasicQueryResults.aspx?px=HS&cc=2709&r=643&p=0&rg=2&y=2015,2014,2013,2012,2011&so=8> (Last visited Apr. 2, 2017) (Russian exports to the world of UN Commodities List Code 2709: \$180,929,707,639 (2012); \$173,669,617,054 (2013); \$153,887,932,499 (2014); \$89,576,493,234 (2015); \$598,063,750,426 (SUM)).

44. UN COMTRADE, <http://comtrade.un.org/db/dqBasicQueryResults.aspx?px=HS&cc=2710&r=643&p=0&rg=2&y=2015,2014,2013,2012,2011&so=8> (Russian exports to the world of UN Commodities List Code 2710: \$103,624,225,856 (2012); \$109,415,419,578 (2013); \$115,807,733,882 (2014); \$67,403,070,633 (2015); \$396,250,449,949 (SUM)).

45. UN COMTRADE, <http://comtrade.un.org/db/dqBasicQueryResults.aspx?px=HS&cc=2711,271111,271112,271113,271114,271119,271121,271129&r=643&p=0&rg=2&y=2015,2014,2013,2012,2011&so=8> (Russian exports to the world of UN Commodities List Code 2711 - \$68,834,575,435 (2012); \$74,639,149,258 (2013); \$62,647,852,136 (2014); \$47,517,699,095 (2015); \$253,639,275,924 (SUM)).

between 2012 and 2015 is \$1.2 trillion, which is nearly two-thirds of all Russian export revenues over the same period.

The largest share of these federal budget revenues come from European NATO allies importing Russian oil and gas. From 2012 through 2015, the NATO allies imported \$365 billion worth of Russian crude oil, \$264 billion worth of Russian petroleum oils, and \$83 billion worth of Russian natural gases.⁴⁶ This is an average of 57% of all Russian oil and gas exports, or more specifically 61% total Russian crude oil export revenues, 67% Russian petroleum oils export revenues, and 33% of Russian natural gas export revenues over that same period.

It is important to note that these revenue figures are skewed because the 2015 Russian oil and gas export revenues were significantly lower than the 2012-2014 oil and gas export revenues. This is a result of several factors that are worth studying because they provide insight into how NATO might approach the Russian threat. The reduced revenues are not a result of a decline in the volume of oil and gas Russia exported. In 2014, Russia exported 223.4 billion kg of crude oil, 165.2 billion kg of other oils other than crude, and 98.5 billion kg of natural gas.⁴⁷ In 2015, Russia exported 244.4 billion kg of crude oil, 171.5 billion kg of oils other than crude, and 99 billion kg of natural gases.⁴⁸

The precipitous drop in Russian oil and gas export revenues in 2015 can instead be attributed to plummeting oil prices.⁴⁹ The “protracted drop in oil prices reflects a combination of supply- and demand-side factors.”⁵⁰ On the supply side, there was an oil production boom resultant from United States shale and fracking and OPEC’s December 2014 decision to not reduce its own production of oil.⁵¹ On the demand side, warmer winters and slowing growth amongst major oil importers worked in tandem to reduce demand for oil.⁵² Compounding these problems is Russia’s concentrated oil and gas trade profile that is dependent upon a single market.⁵³

46. UN COMTRADE, <https://comtrade.un.org/data/> (In the “periods” field enter 2015, in “Reporters” enter Russian Federation, in “Partners” enter each of the NATO allies (you can only do five at a time), in “Trade Flows” enter export, in “HS (as reported) commodity codes” enter 2709, 2710, and 2711) (The petroleum gases and other gaseous hydrocarbons are reported via the different NATO countries reporters rather than the Russian reporter. This is the only export/import stat in which this paper uses the importers’ reporters rather than the exporter. The Russian reporter recorded only \$4,943,174,238 in Russian petroleum gases and other gaseous hydrocarbons from 2012-2015).

47. UN COMTRADE, <https://comtrade.un.org/data/> (In the “periods” field enter 2014, in “Reporters” enter Russian Federation, in “Partners” leave it as the world, in “Trade Flows” enter export, in “HS (as reported) commodity codes” enter 2709, 2710, and 2711).

48. UN COMTRADE, <https://comtrade.un.org/data/> (In the “periods” field enter 2015, in “Reporters” enter Russian Federation, in “Partners” leave it as the world, in “Trade Flows” enter export, in “HS (as reported) commodity codes” enter 2709, 2710, and 2711).

49. *Russian Economic Report: The Long Journey to Recovery*, *supra* note 42.

50. *Id.*

51. *Id.*

52. *Id.*

53. *Id.*

Another factor is the sanctions imposed on Russia in response to Russian aggression in Ukraine.⁵⁴ The sanctions work to generally prohibit Russian financial institutions from raising capital in the West, and they have forced the Russian government to use its own money to shore up its financial institutions.⁵⁵ The “sanctions are generally assessed to have helped exacerbate the macroeconomic challenges [Russia] was already facing, notably the rapid and pronounced fall in oil prices”⁵⁶

The loss of oil and gas export revenues has had a direct effect on the Russian federal budget revenues. Oil and gas federal budget revenues in 2014 and 2015 were \$196.08 billion and \$102.45 billion respectively.⁵⁷ In December 2015, the Russian Finance Ministry estimated that total Russian federal budget revenues in 2016 would be \$204 billion.⁵⁸ Using the World Bank’s estimate that revenue from oil and gas exports account for 40% of the Russian federal budget revenues, it is reasonable to conclude that the Russian federal government budgeted on \$81.6 billion in oil and gas revenues in 2016.⁵⁹

The loss of revenues resulted in Russian federal government expenditure reductions. The Russian Finance Minister explained that the expenditure cuts are the only way to solve Russia’s budget crisis.⁶⁰ The cuts began with a modest 5% expenditure reduction in 2015.⁶¹ In January 2016, the Russian government cut another 10% of expenditures.⁶² Russian defense expenditures have not escaped these cuts. In 2014 the Stockholm International Peace Research Institute recorded Russian military expenditures as \$84.5 billion.⁶³ In 2015 the defense expenditures

54. Alanna Petroff, *Russia Throws Lifeline to Companies Starved for Cash by Sanctions*, CNN MONEY (Jan. 2, 2015), <http://money.cnn.com/2015/01/02/news/economy/russia-rescues-companies/index.html>.

55. *Id.*

56. *Sanctions After Crimea: Have they worked?*, NATO REV., <http://www.nato.int/docu/review/2015/Russia/sanctions-after-crimea-have-they-worked/EN/index.htm> (last visited Dec 14, 2016).

57. *Russian Economic Report: The Long Journey to Recovery*, *supra* note 42 (Oil and gas federal budget revenues were 9.5% of the GDP and 7.3% of the GDP respectively); *Russian Federation*, WORLD BANK, <http://data.worldbank.org/country/russian-federation> (last visited Dec. 15, 2016) (In 2014 the Russian GDP was \$2.064 trillion, and in 2015 it was \$1.366 trillion).

58. *Russia’s Budget Deficit to Reach \$21Bn in 2016 – Finance Ministry*, MOSCOW TIMES (Dec. 11, 2015), <https://themoscowtimes.com/articles/russias-budget-deficit-to-reach-21bn-in-2016-finance-ministry-51200>.

59. *Russian Economic Report: The Long Journey to Recovery*, *supra* note 42.

60. Ivana Kottasova, *Russian Official Calls for 10% Spending Cuts as Revenue Plummets*, CNN MONEY (Jan. 14, 2015), <http://money.cnn.com/2015/01/14/news/economy/russia-spending-cuts/index.html>.

61. *Id.*

62. *UPDATE 1-Hit by oil price, Russia Imposes 10 Percent Cuts on Government Again*, REUTERS (Jan. 12, 2016), <http://www.reuters.com/article/russia-economy-budget-idUSL8N14W2E620160112>.

63. Sam Perlo-Freeman, Aude Fleurant, Pieter D. Wezeman, & Siemon T. Wezeman, *Trends In World Military Expenditures*, STOCKHOLM INT’L PEACE RESEARCH INST. (Apr. 2015), <http://books.sipri.org/files/FS/SIPRIFS1504.pdf>.

were reported by another source as \$51.5 billion.⁶⁴ In 2016 the Russian defense budget was reduced to an estimated \$49.2 billion dollars.⁶⁵ According to a released Russian draft budget for 2017, Russian military expenditures will drop further to \$45.8 billion.⁶⁶ NATO must conclude that its imports of Russian oil and gas are a significant contributor to Russian federal budget revenues and, as a corollary, support Russia's ability to finance military expenditures.

II.

NATO'S 2% SPENDING GUIDELINE⁶⁷

This section examines the continued relevance of the current NATO 2% spending guideline. Part II.A of this section discusses the current state of the 2% spending guideline, Part II.B scrutinizes the 2% guideline's relevance, and Part II.C investigates the unrealized potential of Articles 2 and 3 of the NATO Treaty. These parts will support the conclusion that the revised spending requirement is more effective than the current spending guideline. In order to promulgate this conclusion, Part II.D proposes specific language for the revised spending requirement that could be used as a NATO Summit declaration.

A. *The Current State of the 2% Guideline*

In 2006, NATO held a summit to discuss the future of the alliance in Riga, Latvia.⁶⁸ At the Riga Summit, the 2% spending guideline was included as part of a summit declaration for the first time in NATO's history, giving what had previously been an "unofficial floor" on defense spending "increased political relevance" to the military alliance.⁶⁹ The 2014 Russian annexation of Crimea prompted NATO to again address the 2% guideline. On September 5, 2014, NATO held a summit in Wales and affirmed their collective view concerning the

64. Ivana Kottasova, *Oil Crunch Bites: Russia and Saudi Arabia Cut Defense Budgets*, CNN (March 31, 2016), <http://money.cnn.com/2016/03/31/news/saudi-arabia-russia-military-spending/index.html>.

65. *Id.*

66. Kathrin Hille, *Russia prepares for deep budget cuts that may even hit defence*, FINANCIAL TIMES (Oct. 30, 2016), <https://www.ft.com/content/806400be-9e94-11e6-891e-abe238dee8e2>.

67. Member countries make direct and indirect contributions to the costs of running NATO. Direct contributions are made to finance requirements of the Alliance that serve the interests of all 28 members, and are not the responsibility of any single member (e.g., supporting the Brussels headquarters and civilian staff). Direct contributions are determined by the principle of common funding in that all 28 members contribute according to an agreed cost-share formula. Indirect contributions, on the other hand, are the largest source of NATO funding which is the individual NATO states providing their own funding for the deployment of troops in support of military operations. The 2% spending guideline pertains to indirect funding, and is the exclusive focus of this paper.

68. Martin Butcher, *NATO, Riga and Beyond*, ACRONYM FOR DISARMAMENT DIPLOMACY (Apr. 30, 2007), <http://www.acronym.org.uk/old/dd/dd84/84nato.htm>.

69. Jan Techau, *The Politics of 2 Percent: NATO and the Security Vacuum in Europe*, CARNEGIE EUROPE (Sep. 2, 2015), <http://carnegieeurope.eu/2015/09/02/politics-of-2-percent-nato-and-security-vacuum-in-europe-pub-61139>.

importance of NATO's commitment to a self-defense alliance in light of the recent Russian aggression.⁷⁰ In the Wales declaration, NATO pledged that:

Allies currently meeting the NATO guideline to spend a minimum of 2% of their Gross Domestic Product (GDP) on defence will aim to continue to do so . . . Allies whose current proportion of GDP spent on defence is below this level will: halt any decline in defence expenditure; aim to increase defence expenditure in real terms as GDP grows; aim to move towards the 2% guideline within a decade . . .⁷¹

NATO further recognized that "overall security and defence depend both on how much we spend and how we spend it."⁷² This declaration signals that NATO recognizes it must spend in congruence with a common design to meet the Russian threat.

NATO defense spending has long been a problem for the Alliance. European NATO allies have chronically reduced defense funding since the end of the Cold War, membership in the Organization has nearly doubled.⁷³ From 1990-1994 the European NATO allies averaged 2.5% spending, from 1995-1999 they averaged 2.1%, from 2000-2004 they averaged 1.9%, and from 2005-2009 they averaged 1.8%.⁷⁴ During the same time periods, the United States defense spending averaged respectively 4.6%, 3.3%, 3.4%, and 4.5% of its GDP.⁷⁵ This trend continued into the present decade. From 2010 to 2015, the European allies averaged 1.53% spending on defense as a percentage of GDP whereas the United States averaged 4.24%.⁷⁶

In addition to 'how much we spend,' the Wales Summit declaration directed defense expenditures "towards meeting our capability priorities."⁷⁷ Directing the increased investments on defense capabilities is misguided, unrealistic, and ultimately fails to best marshal the collective NATO allies' instruments of power towards its common objective of guarding against Russian aggression. Instead, the recent Russian federal budget crisis should inform NATO that Russia's continued ability to rise as a great power and threaten NATO is intrinsically tied to the continued strength of the Russian energy export market. Therefore, rather

70. *Wales Summit Declaration: Issued by the Heads of State and Government Participating in the Meeting of the North Atlantic Council in Wales*, NATO, http://www.nato.int/cps/en/natohq/official_texts_112964.htm (last visited Dec. 15, 2016).

71. *Id.*

72. *Id.*

73. FINANCIAL AND ECONOMIC DATA RELATING TO NATO DEFENSE - DEFENSE EXPENDITURES OF NATO COUNTRIES (1985-2009), NATO (Oct. 29, 2010), http://www.nato.int/cps/en/natohq/news_64221.htm.

74. FINANCIAL AND ECONOMIC DATA RELATING TO NATO DEFENSE - DEFENSE EXPENDITURES OF NATO COUNTRIES (1990-2010), NATO (Mar. 10, 2011) http://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2011_03/20110309_PR_CP_2011_027.pdf.

75. *Id.*

76. DEFENSE EXPENDITURES OF NATO COUNTRIES (2009-2016), NATO, http://www.nato.int/cps/en/natohq/news_132934.htm (last visited Dec. 15, 2016).

77. *Id.*

than exclusively investing in collective defense military capabilities, NATO should invest in collective measures to mitigate the strength of Russian energy exports.

B. The Relevance of the 2% Guideline to NATO

The above detailed history of European NATO allies failing to meet the 2% spending guideline offers little hope that the European NATO allies will meet the current 2% guideline. NATO allies Belgium and Germany have already indicated that they will fail to meet the 2% goal for the foreseeable future.⁷⁸ The Wales Summit declaration's true significance is discerned by examining the spending decreases of NATO European allies following the 2006 Riga Summit where the European NATO allies' average military expenditures decreased rather than increased to meet the 2% spending guideline (as noted in Part II.A, from 2000-2004 they averaged 1.9% and from 2005-2009 they averaged 1.8%).

NATO's website describes the Riga Summit's 2% guideline as "an indicator of a country's political will to contribute to the Alliance's common defense efforts."⁷⁹ The soft language of the Wales Summit declaration (e.g., "aim" to "move towards" the "guideline")⁸⁰ suggests that this view of the 2% guideline as only an indicator of political will is still prevailing within NATO. At least some NATO observers accept that, despite the Wales Summit declaration, the 2% guideline remains—as it was after Riga—a mere political tool.⁸¹ It is reasonable to conclude that NATO is comfortable with their collective military failing to meet the 2% guideline.

A comparison between NATO's military expenditures and Russia's military expenditures support this conclusion. The Stockholm International Peace Research Institute records international defense expenditures of 170 different countries. In 2014, the most recent data available, the United States spent \$610 billion.⁸² In addition to the United States, four other NATO allies are in the top fifteen spenders on defense in the world (France, Germany, the United Kingdom, and Italy).⁸³ These four countries collectively spent an estimated \$200.2 billion on defense in 2014.⁸⁴ As noted in Part I.C, the Russians spent \$84.5 billion on defense in 2014, which is \$725.7 billion less than the top five spending NATO allies.⁸⁵

78. Techau, *supra* note 69.

79. FUNDING NATO, http://www.nato.int/cps/en/natohq/topics_67655.htm (last visited Dec. 14, 2016) (select "Indirect funding of NATO").

80. Wales Summit Declaration, *supra* note 70.

81. Techau, *supra* note 69.

82. Sam Perlo-Freeman et al., *supra* note 63.

83. *Id.*

84. *Id.*

85. *Id.*

C. *The Unrealized Utility of Articles 2 and 3 of the NATO Treaty*

The NATO Treaty is the founding document of the NATO alliance that affirms the alliance's commitment to peace and stability.⁸⁶ Article 2 of the NATO treaty states, in relevant part: "The Parties will . . . encourage economic collaboration between any or all of them."⁸⁷ Article 3 states: "In more effectively to achieve the objectives of this Treaty, the Parties, separately and jointly, by means of continuous and effective self-help and mutual aid, will maintain and develop their individual and collective capacity to resist armed attack."⁸⁸ Articles 2 and 3 taken together provide an affirmative requirement (e.g., "The Parties will contribute," "will encourage economic collaboration," "will maintain and develop") for NATO members to engage in what might be called a 'whole of government' approach (i.e., integrating each allies collective diplomatic, informational, military or economic instruments of power) to the Russian threat.

The Vienna Convention on the Law of Treaties (VCLT) supports the interpretation that Articles 2 and 3 provide an affirmative requirement for a 'whole of government' NATO approach. Article 31(1) of the VCLT states that treaties are "interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose."⁸⁹ Article 31(2) of the VCLT states the "context for the purpose of the interpretation of a treaty shall . . . include[e] its preamble."⁹⁰ The NATO Treaty's preamble states that the alliance seeks to "promote stability" and is "resolved to unite their efforts for collective defence and for the preservation of peace and security."⁹¹ A good faith interpretation of Article 3's authority to develop a collective capacity to resist against an armed attack, therefore, includes the authority to develop a collective capacity to resist against the lesser, but still hostile, threat of energy disruptions. This is necessarily so because a Russian disruption to NATO's energy supply would have a negative effect on NATO's stability, peace and security commensurate with a limited conventional military attack. This interpretation fits with the axiom "*qui potest plus (maius), potest minus,*" or the authority to do more is authority to do less. Article 3's mandate operating in conjunction with Article 2's focus on promoting "conditions of stability and well-being" through "economic collaboration," legally supports a NATO "whole of government" approach to the Russian threat.

However, NATO has failed to adopt a "whole of government" approach to threats. This is shown by the NATO press office describing Article 2 as "significant," but being unable to provide any examples of initiatives that exist

86. NATO *supra* note 3 at preamble.

87. *Id.* at art. 2.

88. *Id.* at art. 3.

89. Vienna Convention on the Law of Treaties art. 31(1), opened for signature May 23, 1969, 1155 U.N.T.S. 331. (the United States signed the treaty on April 24, 1970 but has not ratified it).

90. *Id.* at art. 31(2)

91. NATO, *supra* note 3 at preamble.

under the auspice of Article 2 authority.⁹² Examples of NATO Article 3 programs, on the other hand, include the United States furnishing \$24 million in field radio equipment to Lithuania⁹³ and \$23 million in anti-tank missiles to Estonia.⁹⁴ These programs positively contribute to Estonia and Lithuania's ability to engage in self-defense but remain in the traditional NATO paradigm of approaching threats with a military solution.⁹⁵

NATO's failure to adopt "whole of government" strategic solutions is likely owed to its existence as primarily a military alliance. NATO has, however, recognized the importance of energy security as potentially impacting its Article 5 military mission. For example, NATO has a stated goal of enhancing "its strategic awareness of energy developments with security implications."⁹⁶ NATO cites its recognition that energy "supply disruptions would have far reaching security implications" and its development of a consultation process to discuss energy security developments as an example of its pursuit of this goal.⁹⁷ In other words, this military-centric approach to threats has resulted in little more than conversations about energy security within the NATO alliance. NATO should abandon this limited approach to energy security and use Article 2 and 3 to embrace a "whole of government" approach.

In addition to the legal basis under Articles 2 and 3 of the NATO treat, NATO has other legal and political motivations to take such action. For instance, every NATO member has ratified the Paris Agreement, which came into force on November 4, 2016, although the United States has announced that it is pulling out of the treaty.⁹⁸ This agreement requires governments to set more ambitious targets on carbon emissions every five years, with the goal of keeping the increase in global average temperature below 2°C above pre-industrial levels. As discussed below in Part IV.A, the revised spending requirement would cause NATO allies to spend on energy efficiency initiatives that simultaneously meet their obligations under the Paris Agreement. Politically, President Trump has indicated his dissatisfaction with the other NATO allies' financial contributions to the

92. E-mail from Rehanna Jones-Boutaleb, NATO Press Office, to author (Nov. 3, 2016, 07:08) (on file with author).

93. *Lithuania Upgrades Radio Communications Equipment*, U.S. MISSION TO NATO, <https://nato.usmission.gov/lithuania-upgrades-radio-communications-equipment/> (last visited Dec. 15, 2016).

94. *Estonia Takes Delivery of Javelin Anti-Tank Missiles*, U.S. MISSION TO NATO, <https://nato.usmission.gov/estonia-takes-delivery-of-javelin-anti-tank-missiles/> (last visited Dec. 15, 2016).

95. See NATO, *supra* note 3, at art. 5.

96. Energy Security, NATO, http://www.nato.int/cps/en/natohq/topics_49208.htm (last visited Dec. 15, 2016).

97. NATO's Energy Security Agenda, NATO, <http://www.nato.int/docu/review/2014/NATO-Energy-security-running-on-empty/NATO-energy-security-agenda/EN/index.htm> (last visited Dec. 15, 2016).

98. PARIS AGREEMENT, STATUS OF RATIFICATION, U.N., http://unfccc.int/paris_agreement/items/9444.php (last visited Dec. 15, 2016).

alliance, and a willingness to re-examine the United States' role in the alliance.⁹⁹ The revised spending requirement offers the European NATO allies an opportunity to demonstrate an increased commitment to NATO and avoid President Trump's consideration of leaving the alliance. For the United States and the other NATO allies already meeting the current 2% spending guideline the revised spending requirement would not impact their status quo and therefore should be politically agreeable.

D. The Proposed Revised Spending Requirement

In consideration of the above, a NATO Summit declaration should be made with words to the effect of:

"We, the Heads of State and Government of the member countries of the North Atlantic Alliance, have gathered at a pivotal moment in Euro-Atlantic security. Russia's aggressive actions have challenged our vision of a Europe at peace. It has become increasingly apparent that our peace is intrinsically tied to our energy security. It is therefore no longer an acceptable risk to be as dependent upon Russian oil and gas exports to the degree that NATO members presently are.

To ensure our alliance is more fully guarded against the Russian threat, and under the Auspice of Articles 2 and 3 of the NATO Treaty, the NATO allies agree to the following as legally binding:

Allies that fail to meet the NATO guideline to spend a minimum of 2% of their GDP on defense are required to spend at least .4% of their GDP on energy security measures as coordinated through NATO headquarters.

To enforce this spending requirement, and beginning in five years from the date of this declaration, any Ally failing to spend .4% of their GDP on appropriately coordinated energy security projects in any three of the last five years forfeits their right to invoke Article 5 of the treaty.

The forfeiture of Article 5 privileges is not permanent. The right to invoke Article 5 will be restored to any NATO ally when, to the satisfaction of NATO headquarters, that Ally demonstrates it has either (i) met the 2% spending guideline in the past year as measured from the date it requests restoration of Article 5 privileges; or (ii) has spent .4% of its GDP in any three of the last five years as measured from the date it requests restoration of Article 5 privileges.

The Allies agree to revisit this revised spending requirement annually to review its progress and modify or rescind it as appropriate.

III.

THE EU ENERGY POLICY

Before examining how to implement a "whole of government" approach for NATO, this section discusses the EU's energy policy with a focus on the policy's

99. Krishnadev Calamur, *NATO Shmato?*, THE ATLANTIC, <http://www.theatlantic.com/news/archive/2016/07/trump-nato/492341/> (last visited Dec. 14, 2016).

energy security strategy. The EU's energy policy has three main goals: (1) security of supply, (2) competitiveness, and (3) sustainability.¹⁰⁰ To assist in realizing these three goals, the EU chartered the European Energy Union in February 2015. The Energy Union builds on existing EU energy policy including the Energy Security Strategy.¹⁰¹ The Energy Security Strategy was formulated after studying the results of an "energy security stress test" system in response to two hypothetical scenarios in 2014: (1) a complete halt of Russian gas imports to the EU, and (2) a disruption of Russian gas imports through Ukraine.¹⁰² The energy security strategy that was formulated in response to this stress test includes proposals for increasing energy efficiency and the diversity of energy supply routes.¹⁰³

The execution of this strategy is conducted "primarily on two levels: the [EU] institutions and the member states."¹⁰⁴ Between the two, the "national institutions have the largest say."¹⁰⁵ Within this construct, the EU primarily influences member states and investors to build projects that are congruent with the EU's overarching energy policy.¹⁰⁶ This arrangement has made the EU's energy policy subsidiary to national interests. For example, according to an advisor in the Directorate General For Energy, European Commission, many of the EU member states most at risk to energy supply disruptions are poorer states, and consequently, these states invest in energy proposals that prioritize income generation over energy security.¹⁰⁷ The European Commission advisor further explains that having "optionality" (an increased diversity of supply routes so that no single actor can turn off the supply of energy) contributes tremendously to energy security. The tradeoff for "optionality" is redundant infrastructure. It is difficult to persuade investors to construct redundant infrastructure, however, because it often sits idle it is therefore unlikely to offer an attractive return on investment.¹⁰⁸ The current market-based system is unable to adequately address security threats because the investor's incentives are not congruent with proper energy security. Security requires redundancy, whereas profits require efficiency.¹⁰⁹

100. Energy European Union, https://europa.eu/european-union/topics/energy_en (last visited Dec. 14, 2016).

101. Building the Energy Union, <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/building-energy-union> (last visited Dec. 14, 2016).

102. ENERGY SECURITY STRATEGY, EUROPEAN COMMISSION, <https://ec.europa.eu/energy/en/topics/energy-strategy/energy-security-strategy> (last visited Dec. 14, 2016).

103. *Id.*

104. Shaffer, *supra* note 15.

105. *Id.*

106. Telephone Interview with anonymous, Advisor, Directorate General for Energy, European Commission (Nov. 22, 2016) (on file with author).

107. *Id.*

108. *Id.*

109. *See* Shaffer, *supra* note 15.

IV.

HOW NATO SHOULD USE A “WHOLE OF GOVERNMENT” APPROACH IN SUPPORT OF ENERGY SECURITY

The execution of the EU’s energy security strategy could be improved by removing “market forces” as a motivating factor for its implementation. NATO’s shared interest in European energy security provides an incentive for the Alliance to assist in implementing the energy security strategy. NATO has already taken steps in partnership with the EU to further regional energy security. Per the NATO press office, “EU and NATO officials regularly discuss energy security developments in staff-to-staff talks. EU officials, including EU Commission Vice President, Ambassador Maros Sefcovic, have also briefed the North Atlantic Council on global energy developments and their security implications.”¹¹⁰

This dialogue is a positive first step; however, there is plenty of room for increased NATO involvement. This section of the paper discusses actionable projects to increase both energy efficiency and the diversity of energy supply routes that, if completed, would reduce Russian leverage over NATO and increase NATO’s ability to respond to a Russian disruption of gas supply. Part IV.A of this section will examine the utility to NATO of increasing European energy efficiency to reduce the Russian export revenues and reduce its leverage Russia can exert over NATO and the EU at large. Part IV.B will examine the benefit to NATO of diversifying energy supply routes to guard against a Russian supply disruption. Part IV.C will discuss the immediate focus on gas security rather than oil security. Part IV.D will examine why the .4% figure is appropriate. Part IV.E will examine Russia’s likely response to this initiative. Part IV.F will examine a possible accounting mechanism to ensure there is fidelity to this spending requirement.

A. *Increasing Energy Efficiency*

To increase energy efficiency the EU must focus on buildings and industry, “which use 40% and 25% of total EU energy respectively.”¹¹¹ The EU has thus far been unsuccessful at pursuing these energy efficiency actions because there is little financial incentive for investment in energy efficient industrial buildings.¹¹² Nonetheless, the EU identified energy efficiency initiatives as one of several ways to implement the Paris Agreement.¹¹³ The European Commission advisor stated

110. Jones-Boutaleb, *supra* note 92.

111. Energy Security Strategy, *supra* note 102.

112. Anonymous, EU, *supra* note 106.

113. *The Road from Paris: Assessing the implications of the Paris Agreement and accompanying the proposal for a Council decision on the signing, on behalf of the European Union, of the Paris agreement adopted under the United Nations Framework Convention on Climate Change*, EUROPEAN COMMISSION, <https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-110-EN-F1-1.PDF> (last visited Dec. 15, 2016).

that a 1% increase in energy efficiency results in a 2% reduction in gas imports.¹¹⁴ Additionally, other estimates predict a reduction in gas imports as high as 2.6%.¹¹⁵

The Energy Efficiency Financial Institution Group (EEFIG), an expert group set-up by the European Commission and United Nations Environment Programme Finance Initiative, reports that Europe can save “10 to 15% of energy by 2030 with appropriate energy efficiency measures.”¹¹⁶ NATO would benefit from such measures because European gas imports could be reduced anywhere between 20-39%, thereby reducing the leverage Russia could apply through its gas exports. Furthermore, assuming NATO targeted gas imports from Russia for reduction, and using the 2012-2015 natural gas import values, this could result in anywhere between \$16.6 billion and \$32.37 billion in lost Russian natural gas export revenues over a four year period.¹¹⁷ This loss of gas export revenues would cause Russia to either find new markets, new revenue streams, or cope with a new status quo by offsetting the losses through reduced expenditures as it has recently been forced to do.¹¹⁸

Estimates of how much investment is needed to achieve energy efficiency savings vary by source and target date for completion (i.e., 2020, 2030, 2040, 2050); however, the EFFIG reports that European energy efficiency action requires investing “\$1.3 trillion in energy efficiency in buildings from 2014-2035 and \$154 billion in energy efficiency in industry – almost doubling current investment trends.”¹¹⁹ This is an annual expenditure requirement of \$62 billion for the next nineteen years. NATO should conclude that targeted funding of these projects for the dual purposes of fulfilling the Paris Agreement requirements while simultaneously reducing Russian federal budget revenues is a worthwhile endeavor.

B. Increase the Diversity of Energy Supply Routes

“In European energy security, geography matters. States located in the center of Europe have access to more supply options . . . than those located on Europe’s

114. Anonymous, *supra* note 106.

115. Energy Efficiency Saving Energy, Saving Money, European Commission, <https://ec.europa.eu/energy/en/topics/energy-efficiency> (last visited Dec. 15, 2016); *Energy Efficiency and its contribution to energy security and the 2030 Framework for climate and energy policy*, EUROPEAN COMMISSION, https://ec.europa.eu/energy/sites/ener/files/documents/2014_eeec_communication_adopted_0.pdf.

116. *Energy Efficiency – The First Fuel for the EU Economy*, ENERGY EFFICIENCY FINANCIAL INSTITUTIONS GROUP, <https://ec.europa.eu/energy/sites/ener/files/documents/Final%20Report%20EEFIG%20v%209.1%2024022015%20clean%20FINAL%20sent.pdf> (last visited Dec. 15, 2016).

117. As discussed in Part I.C the Russian revenues from exporting NATO natural gases to NATO allies from 2012-2015 were \$83 billion. A 20% reduction of revenue is \$16.6 billion. A 39% reduction is \$32.37 billion.

118. See, e.g., Part I.C (Russia has been forced to reduce its federal expenditures by 5% and 10% in 2014 and 2016 respectively as a result of, at least in part, reduced oil and gas export revenues).

119. Efficiency Financial Institutions Group, *supra* note 116.

periphery.”¹²⁰ As noted in Part III, optionality significantly reduces threats to the energy security of these peripheral states.¹²¹ The EU energy security strategy has identified several still pending natural gas projects that would create optionality for NATO allies.¹²² These projects, unlike the energy efficiency projects, are eligible to receive funding grants from the EU agency Connecting Europe Facility (CEF). CEF is an EU funding instrument that targets, among other things, trans-European energy infrastructure for investment.¹²³ CEF estimates the European gas transmission infrastructure requires €70 billion (or about \$73.9 billion) of investments.¹²⁴

CEF’s targeted funding grants for developing gas transmission infrastructure demonstrate that the EU, which shares twenty-two members in common with NATO, believes energy security cannot be left exclusively to market forces. CEF funding does not, however, pre-empt the need for NATO financing of energy security projects for two reasons. First, CEF funding will not entirely finance the development of gas transmission infrastructure required for optionality. CEF’s total budget for all energy projects (e.g., electricity and gas) is €5.35 billion for 2014-2020, but it estimates the total required investments for all these energy projects is at least €210 billion.¹²⁵ Second, as noted above, CEF financing is done with an eye towards promoting growth, jobs and competitiveness rather than how to best protect NATO allies from abusive Russian energy export policies. In contrast, NATO financing can be targeted to ensure completion of projects that will create optionality and reduce Russian leverage over a NATO allies.

One example of such a project is the Gas Interconnection Poland–Lithuania (GIPL).¹²⁶ This interconnector would “integrate the gas systems of the Baltic Sea region into the internal EU gas markets.”¹²⁷ The benefit of this for NATO is that it would end the gas isolation of NATO allies Estonia, Latvia, Lithuania and Poland, by further diversifying their gas sources and would increase their energy security.¹²⁸ The total cost of construction is estimated to be €558 million; however, CEF has agreed to provide a grant for €295 million leaving €263 million (or about \$314.3 million) left for financing.¹²⁹

120. Shaffer, *supra* note 15, at 184.

121. Anonymous, *supra* note 106.

122. European Commission, *supra* note 10.

123. CONNECTING EUROPE FACILITY (CEF)–EUROPEAN COMMISSION, INNOVATION AND NETWORKS EXECUTIVE AGENCY, <https://ec.europa.eu/inea/en/connecting-europe-facility> (last visited Dec 14, 2016).

124. CEF–Energy, <https://ec.europa.eu/inea/en/connecting-europe-facility/cef-energy> (last visited Dec 14, 2016).

125. *Id.*

126. European Commission, *supra* note 10.

127. *End of Energy Isolation in the Baltics: How the Gas Interconnector Poland-Lithuania (GIPL) Works*, EUROPEAN COMMISSION, http://europa.eu/rapid/press-release_MEMO-15-5845_en.htm (last visited Dec. 14, 2016).

128. *Id.*

129. *Id.*

Another example is the Czech Republic-Poland Interconnector.¹³⁰ This project (currently known as “Stork II”) would provide optionality for the Czech Republic and Poland NATO allies.¹³¹ Its estimated cost is €3 million with an anticipated CEF grant of €1.5 million leaving €1.5 million (or about \$1.6 million) left for financing.¹³²

Yet a third project is the Poland-Slovakia interconnector.¹³³ This interconnector between two NATO allies—along with the Czech Republic-Poland interconnector—will enable gas flows not only between the Baltic and Adriatic, but also from the NATO allies Denmark, Netherlands, and Germany.¹³⁴ This drastically increased optionality for regional allies will directly benefit NATO.¹³⁵ The estimated cost of the Poland-Slovakia interconnect is €9.2 million with an anticipated CEF grant of €4.6 million leaving €4.6 million (or about \$4.9 million) left for financing.¹³⁶

A final example is the trans-Anatolian Natural Gas Pipeline Project (TANAP) pipeline that interconnects the NATO ally Turkey with Azerbaijan in order to allow Turkey to import natural gas from the Caspian Sea.¹³⁷ This natural gas will then be available to the rest of the EU through the “Trans-Adriatic Pipeline” (TAP).¹³⁸ The TAP pipeline, already under construction, will connect NATO allies Greece and Italy to the TANAP pipeline.¹³⁹ The benefit of TANAP, as it will work in conjunction with TAP, to NATO is that it will create optionality for three NATO allies and diversify their suppliers of natural gas by connecting their energy market to Azerbaijan natural gas exports.¹⁴⁰ The TANAP project is estimated to cost €5.2 million with an estimated CEF grant of €2.6 million leaving €2.6 (or about \$2.8 million) for financing.¹⁴¹

130. European Commission, *supra* note 10.

131. European Commission, *Preparatory studies for the Poland-Czech Republic interconnection Libhošť (CZ)–Hať (CZ-PL)–Kędzierzyn (PL) (Stork II)*, INNOVATION AND NETWORKS EXECUTIVE AGENCY, <https://ec.europa.eu/inea/en/connecting-europe-facility/cef-energy/projects-by-country/multi-country/6.1.1-0054-czpl-s-m-14> (last visited Dec. 14, 2016).

132. *Id.*

133. European Commission, *supra* note 10.

134. *Id.*

135. *See id.*

136. Connecting Europe Facility, *Preparatory Studies and Engineering Works for the Poland - Slovakia Gas Interconnection*, https://ec.europa.eu/inea/sites/inea/files/fiche_6.2.1-0065-plsk-s-m-14_final_0.pdf (last visited Dec. 15, 2016).

137. European Commission, *supra* note 10.

138. TRANS ADRIATIC PIPELINE, <https://www.tap-ag.com/the-pipeline> (last visited Dec. 15, 2016).

139. EUROPEAN COMMISSION, GAS INTERCONNECTION, SOUTHERN AS CORRIDOR, https://ec.europa.eu/energy/sites/ener/files/documents/pci_7_1_3_en_2015.pdf (last visited Dec. 15, 2016).

140. European Commission, *supra* note 10.

141. European Commission, *Engineering studies for TANAP SCADA System and Crossings under Dardanelle Strait and Evros River*, INNOVATION AND NETWORKS EXECUTIVE AGENCY, <https://ec.europa.eu/inea/en/connecting-europe-facility/cef-energy/projects-by-country/turkey/7.1.1-0014-tr-s-m-15> (last visited Dec. 14, 2016).

The net effect of these projects would considerably increase optionality for NATO allies, thereby degrading Russia's ability to unilaterally disrupt the gas supply to a specific country. As noted in Part III, a large issue for finding financing for these optionality projects is that these pipelines lack sufficient potential to provide attractive returns on investments because they will often be idle. NATO should fill the void and provide the required funding. After all, NATO defense expenditures often procure weapons that sit idle but nonetheless serve as a deterrent to aggression, such as nuclear weapons. NATO should now spend on pipelines that very well may sit idle but provide an effective response to abusive Russian energy export practices.

C. Oil Dependency

Noticeably absent from the proposals are projects concerning dependency on Russian oil exports. There are several reasons for their omission. First, the advisor to the European Commission believes gas security is a more pressing concern than oil security because the oil infrastructure is presently better suited to respond to supply disruptions than the natural gas infrastructure.¹⁴² Second, it might be disastrous to "short" the Russian economy completely. By focusing first on gas NATO would mitigate the risk of weakening Russia to such a degree that it suffers from an only intensified the nationalistic desire to become more powerful. Finally, by maintaining the status quo vis-à-vis Russian oil exports, NATO leaves itself an opportunity, should the need arise, to punish Russia (e.g., sanctions on oil exports) in a significant manner as evidenced by the current sanctions discussed in Part I.C.

D. Why .4%

The .4% figure is appropriate for two reasons. First, as discussed in Part IV.A, the lion's share of proposed spending will be on energy efficiency at an annual estimated cost of \$62 billion. An additional estimated \$73.9 billion of total investment is required for improvement of gas transmission infrastructures as discussed in Part IV.B. If the revised spending requirement had been implemented and adhered to in 2012 through 2015, NATO would have expended the following sums on energy security in each respective year: \$63.9 billion, \$64.1 billion, \$65 billion, and \$63.8 billion.¹⁴³ Using these historic figures it is fair to conclude that the .4% spending requirement would enable NATO to annually spend \$62 billion on energy efficiency with a reasonable balance to spend annually on optional projects. Second, as noted in Part II.B, it is apparent that the current 2% spending guideline serves a greater role as an indicator of political will among the NATO allies than as a benchmark grounded in some measure of NATO allies' military effectiveness. The .4% spending requirement still serves as an indicator of political will, while having the additional benefit of being grounded

142. Anonymous, *supra* note 106.

143. NATO, *supra* note 76 (data extrapolated by author).

in the underlying reality that NATO allies are in need of an energy security strategy. Therefore, and in consideration of the related Paris Agreement requirements, if allies are unwilling to spend .4%, then their political will to positively contribute to the alliance while retaining the benefits of being a NATO ally must certainly be questioned.

E. Russia's Likely Response

The World Bank reports that “Russian exports, especially oil and gas, have [already] been gradually shifting away from Europe and toward China and the rest of Asia” and these initiatives would likely hasten that development.¹⁴⁴ Despite this conclusion, the current Russian exports to Asia are predominantly concerned with oil.¹⁴⁵ Furthermore, investors have questioned Russia’s ability to construct adequate infrastructure to make a larger market shift to Asia in light of Russia’s current financial crisis discussed in Part I.C.¹⁴⁶ Therefore it is unlikely that Russia would be able to replace the revenue lost from decreased exports to NATO in the immediate future. Russia’s most likely response is, accordingly, to adapt to the new status quo and offset revenue losses with reduced expenditures until or unless it can enter into new export markets.

A more concerning possibility is that by reducing the financial ties between Russia and NATO, these initiatives make armed conflict between the two more likely. Although this is the most dangerous response, it is also the least likely. Part I.C explained that oil and gas trade between Russia and NATO from 2012 through 2015 provided Russia with \$712 billion in revenues. Part IV.A explained that, by the most aggressive estimate, the proposed energy security initiatives would have reduced those revenues by a comparatively modest \$32.37 billion. As discussed in the preceding paragraph, it is unlikely that Russia could quickly replace these revenues in the event they were lost as a result of an armed conflict with NATO. The financial disincentives for an armed conflict between NATO and Russia would thus remain a strong deterrence to a breach of the peace between Russia and NATO.

F. Accounting Mechanism

To ensure this the revised spending requirement is satisfied, NATO allies should coordinate their spending on energy security projects with the EU through NATO headquarters. NATO headquarters would also record NATO members that continue to spend on defense expenditures at or above the 2% guideline. NATO headquarters would then serve as the gate keeper through which a given NATO

144. *Russian Economic Report: The Long Journey to Recovery*, *supra* note 42.

145. Eric Yep, *Russia to Pump Up Oil Exports to Asia*, WALL STREET JOURNAL, <http://www.wsj.com/articles/russia-to-pump-up-oil-exports-to-asia-1417676709> (last visited Dec. 15, 2016).

146. *Id.*

ally could (or could not) invoke Article 5 of the NATO treaty pursuant to the proposed spending requirement enforcement mechanism.

CONCLUSION

NATO has an opportunity to peacefully and effectively respond to recent Russian aggression. Doing so requires NATO to recognize that, as a large purchaser of Russian oil and gas exports, it is well positioned to utilize a “whole of government” approach to the Russian threat. NATO should adopt the revised spending requirement in order to give effect to a “whole of government” response to Russian aggression. The revised spending requirement would reduce the amount of money flowing from NATO countries to the Russian government and ultimately to the Russian military. The revised spending requirement would further increase NATO’s resiliency to Russia’s abusive energy export policies, and would have the additional positive effect of assisting in realizing the Paris Agreement’s requirements.