

Impact of free trade agreements on Internet domain name arbitration cases: A cross-national comparison of the Uniform Dispute Resolution Policy

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Abstract

This study examined whether the presence of a free trade agreement (FTA) between the United States and a foreign country significantly affected the outcomes of Internet domain name dispute arbitration cases, conducted within the framework of the Uniform Dispute Resolution Policy (UDRP). Data were collected for 2797 arbitration cases filed during the 2001–2019 period from ten countries, five with US FTAs and five without. Logistic regression analysis, with controls for additional variables, found that complainants are less likely to win in FTA countries. The expectation from political economic theories predicting that FTA negotiations are used to obtain favorable legal environments for US businesses and individuals is not supported. This finding suggests that a more complicated and nuanced relationship exists between FTAs and UDRP decisions.

KEYWORDS

cross-national study, FTA, globalization, ICANN, intellectual property rights, Internet governance, UDRP

INTRODUCTION

Bilateral and multilateral trade agreements are widely recognized as a propeller of international trade (Freund & Weinhold, 2002; Gnanon & Iyer, 2018; Kimura & Lee, 2006). As of 2019, the United States has 14 free trade agreements (FTAs) in force with 20 countries. The International Trade Administration (ITA) of the US Department of Commerce estimated that in 2015, 47% of US goods exports valued at over \$710 billion went to FTA partners (International Trade Administration & US Department of Commerce, 2019). While these

FTAs have helped facilitate opening up both American and foreign markets to each other's goods and services, many scholars have also criticized them as tools to broaden US diplomatic power and extend US corporate interests in foreign countries (Campi & Dueñas, 2019; Destler, 2016).

With the global expansion of the Internet, cyberspace regulation too has grown in importance to safeguard intellectual property rights (IPRs), consumer privacy, network security, and a host of other issues. However, an emergent supranational legal framework has often come into conflict with national law, as different jurisdictions have implemented different standards based on their legal traditions and level of development (Anisimov et al., 2015; Singh, 2009; ten Oever, 2019). International trade agreements, among other tools, have been used to reconcile standards of cyberspace and e-commerce regulation (World Summit on the Information Society, 2004, 2005). For example, as Lerman (2015) argued, some governments, particularly of the developed countries, have sought to include stringent IPRs protection into trade agreements, utilizing preferential trading terms as a bargaining chip. In particular, the US government is often criticized for insisting on stringent IPRs protection rules in trade agreements to protect the interests of US businesses (Brown et al., 2010; Lerman, 2015). Indeed, the Office of the United States Trade Representative (USTR) has a specific mandate to improve intellectual property protections in US trade partners (Office of the United States Trade Representative [USTR], n.d.).

Conflicts over Internet domain name is one of the emblematic issues of this new environment. To address conflicts such as cybersquatting, domain names hijacking, etc., the Internet Corporation for Assigned Names and Numbers (ICANN) formulated a Uniform Dispute Resolution Policy (UDRP) (ICANN, 1999; WIPO, 1999). The UDRP provides a low-cost, quick, and efficient means for rival domain name claimants to resolve their conflict outside the formal legal system through a process of arbitration. The US government has often advocated for enforcement of the UDRP during trade negotiations (Helfer, 2001). In several FTAs, the UDRP process has been included as the preferred mechanism for the resolution of domain name conflicts (Brown et al., 2010; Chaisse, 2019; Park, 2007; USTR, n.d.).

Despite claims of its efficiency and speed, the UDRP has been criticized for its bias in favor of corporate and transnational interests under different contexts (Carr, 2015; Kesan & Gallo, 2015; Lee, 2016; Levine, 2016; Simon, 2012). But does the presence of an FTA—signifying a close trading relationship between two countries—affect the UDRP process in any way, since trade agreements are often the vehicle for advocating stronger IPR protections? Relatively few studies have addressed this question, and still fewer empirically. The existing literature provides speculative and theoretical expectations on the effect of an FTA with the United States on domain name arbitration. If a country has an FTA with the United States, argue some scholars, the arbitration process in the country would be more likely to favor international, and particularly US corporate interests over those of domestic domain name owners (Chaisse, 2019; Lerman, 2015). This bias would be manifest as a significantly higher percentage of arbitration outcomes in favor of international and corporate entities in countries with a US FTA.

On the other hand, there is a significant amount of research that argues that the process of negotiating multilateral and bilateral trade treaties has a major impact on partner countries in terms of domestic IPR laws and penalties for infringement (Baccini, 2019; Osgood & Feng, 2018), and on ICT regulation in general (Brown et al., 2010; Oh & Lee, 2011; Park, 2007). This is especially the case when a developing country seeks to obtain preferential trade terms with a developed country (Shadlen, 2005). Specifically on FTAs, research has found that developing countries negotiating trade pacts with the United States were required to improve their protections for US IPRs (Biadgleng & Maur, 2011; Maskus, 2015). Moreover, more stringent IPRs protection could further facilitate the

development of IPR-intensive industries, which gives the government even more incentives to protect IPRs (Dai & Shen, 2016). As a result, domain name violations such as trademark infringement and cybersquatting could become less frequent. This identifies an alternative pathway for the influence of FTAs on arbitration outcomes. As domain name infringement becomes less frequent, complainants may be more hard-pressed to obtain arbitration decisions in their favor.

However, there is no empirical test whether arbitration outcomes are influenced by FTAs in either direction; this is the research objective of this paper. It aims to analyze the effect of an FTA between a country and the United States on the country-code top-level domain (ccTLD) dispute resolution outcomes through a cross-national comparative study.

In the rest of the paper, we start with the literature review, which covers the existing research on Internet domain name conflicts and the UDRP, including studies that examine the impact of FTAs on domain name conflicts. Next, we introduce our data set of 2797 cases, that includes all dispute resolution cases from 10 ccTLDs collected from the archives of the World Intellectual Property Organization (WIPO) and the Canadian Internet Registration Authority (CIRA). A crosstab analysis and a logistic regression are conducted to compare arbitration outcomes. The analysis and results are presented and explained thereafter, followed by a discussion of the main findings and suggestions for future research.

LITERATURE REVIEW

Internet domain name conflicts and the UDRP

In the current globalized trading environment, it is imperative to reconcile global standards with national legal cultures. Internet domain name conflicts such as “cybersquatting” is one of the emblematic issues of the global Internet (Anisimov et al., 2015; Leauffer, 1998; Levine, 2016). Cybersquatting is defined as “registration of a domain name corresponding to another person's trademark for the purpose of resale or unfair use” (Anisimov et al., 2015, p. 104). It confuses consumers and may potentially harm the brand power and value of the trademark owner. In other words, it causes harm to both consumers and trademark holders. Though cybersquatting and other domain name disputes are covered most often under national trademark laws, they have important international ramifications too with the emergence of a global market for goods and services.

To solve the problem, WIPO proposed an arbitration mechanism for cybersquatting disputes and the ICANN adopted it through its UDRP in 1999 (Levine, 2016). The UDRP establishes a new substantive standard to protect the rights of a trademark owner. Under the UDRP, the complainant must prove: (1) that the domain name is identical or confusingly similar to a trademark or service mark in which the complainant has rights, (2) the defendant has no rights or legitimate interests in respect of the domain name, and (3) the domain name has been registered and is being used in bad faith. Disputes alleged to arise from abusive registrations of domain names (e.g., cybersquatting) may be addressed through expedited administrative proceedings that the holder of trademark rights initiates by filing a complaint with an approved dispute resolution service provider (“Uniform Domain-Name Dispute-Resolution Policy—ICANN,” 2019). The UDRP applied this standard globally. Since the first decision was made in January 2000, more than 50,000 disputes including international cases have been resolved under the UDRP standard (see WIPO database). In other words, the UDRP has proven its remarkable capability in resolving domain name disputes globally (Maher, 2002). The UDRP's success is due to a quick, cost-effective, and low-cost resolution of disputes between trademark owners and domain name registrants (Anderson & Cole, 2002).

However, the UDRP has faced a lot of criticisms too. Reconciling a global policy such as the UDRP with a multiplicity of national trademark laws with differing standards for trademark recognition and fair use presents a singular challenge. As one observer remarked, “the Internet is global; trademark law is local” (Leaffer, 1998, p. 141). Another criticism is inconsistencies in arbitrators’ application of the elusive “bad faith” standard (Maher, 2002). An additional critique is the opportunity for “forum shopping”: since complainants have the option of choosing the arbitration panel that will hear the case, they may choose panelists with a track record of favoring trademark owners. Likewise, Levine (2016) critiqued the UDRP’s bias in favor of corporate and transnational interests. Some scholars’ critiques against the UDRP focus on the relationship between ICANN and the US Department of Commerce (DoC) (Froomkin, 2001; Norton, 2012). Even though ICANN is technically a private company, it contracts with the DoC to fulfill a quasi-governmental role. As a result, ICANN has faced criticism that it speaks for the US government, and in the case of the UDRP, seeks to enforce US intellectual property law in foreign countries (Norton, 2012).

Parallel to the UDRP, national registries are required to formulate and implement domain name dispute resolution policies applicable to their jurisdictions. These national dispute resolution policies apply to domain names in the ccTLDs that are managed within each country by the national registries. National authorities may set up systems administered by the national registries, or rely on the WIPO system. With each nation free to set up domain name and dispute resolution policies of their own, a fragmented international system may be the outcome. ICANN has therefore advocated that national arbitration procedures should be set up largely duplicating the UDRP’s terms and processes. Multilateral and bilateral trade treaties have become a vehicle for developed nations to advocate for harmonization of domain name and arbitration policies, and IPR policies in general.

Multilateral trade agreements and IPRs

The protection of IPRs is a well-established provision in international and multilateral agreements. IP protection was first included in international trade rules as a result of the last phase of the Uruguay Round of negotiations between 1989 and 1990. The resulting Agreement on trade-related aspects of intellectual property rights (TRIPS) is by far the most comprehensive agreement on IPRs (Campi & Dueñas, 2019). Since all 164 member countries are bound by the TRIPS, the signing of the agreement ushered in a round of modifications of domestic intellectual property laws within member countries. Particularly, many developing countries have since then strengthened their IPRs protections to meet the minimum standard set by TRIPS (Liu & La Croix, 2015; Park, 2007).

Although the United States drove hard for strict IPR protections in the Uruguay Round negotiations, the TRIPS standard still fell short of the US domestic standard in many aspects (Osgood & Feng, 2018). For example, TRIPS mandates a copyright term of at least 50 years from the publication date, US law protects works for 70 years after the death of the author (US Copyright Office, n.d.). Also, under TRIPS, medical and diagnostic procedures and medical uses of known substances are in general excluded from patentability, while these are generally patentable under US domestic laws (Soyeju & Wabwire, 2018).

As a result, when negotiating FTAs with other countries, the United States often requires the inclusion of an extended IP-related chapter which sets stricter IP protection rules, known as TRIPS-plus provisions (Osgood & Feng, 2018). Campi and Dueñas (2019) categorized the TRIPS-plus provisions into three major areas: the inclusion of new types of IPRs not covered by TRIPS, the requirement for more extensive IPRs protection, and the removal of the exclusion and flexibility clauses in TRIPS. Bilateral trade deals, such as the FTAs

discussed in the next subsection thus become tools for the improvement of the overall IPR environment in foreign trade partners.

FTAs and IPRs

An FTA is an agreement between two or more countries for managing the bilateral trade relationship, including reducing trade barriers. These are negotiated in parallel to the existing international and multinational trade frameworks. Currently, twenty nations have negotiated FTAs with the United States. These nations include Australia, Bahrain, Canada, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Israel, Jordan, Korea, Mexico, Morocco, Nicaragua, Oman, Panama, Peru, and Singapore.¹

FTAs have included IPRs since the TRIPS Agreement was negotiated back in 1995 (Su, 2000). The US Chamber of Commerce (2014) reviewed the FTAs the US signed with South Korea, Australia, Canada, and Chile. Noticeably, all the agreements had IPR protection provisions more stringent than the TRIPS standard. For example, Garcia (1993) noted that the IPR protections in the NAFTA agreement are a significant “improvement” (p. 818) over the TRIPS standard. Given the importance of IP-intensive goods and services in the US export (Antonipillai & Lee, 2016) and the extensive coverage of IPR-related issues in US trade agreements, Kim (2017) has argued that the main driving force behind the US signing of FTAs is the strong demand from domestic firms to protect their IPRs in overseas markets rather than the promotion of export. However, empirical evidence for this claim is at best mixed (Campi & Dueñas, 2019; Osgood & Feng, 2018).

Noticeably, besides an expanded scope of IPRs and more stringent IPR protections, TRIPS-plus provisions also include articles related to copyright and trademark registration, infringement assessment, minimum levels of punishment and even changes in domestic IPR laws in the partner countries (Baccini, 2019; Osgood & Feng, 2018). FTAs also had an impact on information and communication technology (ICT) regulations (Brown et al., 2010; Oh & Lee, 2011; Park, 2007). These provisions, if well implemented, would provide effective protection of US IPRs and at the same time, improve the level of IPR protection in the partner countries. Although it would be difficult to establish direct causality between FTAs and better IPR protection in the partner countries, many studies have observed a strong correlation (Biadgleng & Maur, 2011; Maskus, 2015). For example, Shadlen (2005) evaluated the severity of software piracy in FTA and non-FTA countries and found that the situation was notably better in the former. Although stronger IPR protections are often challenged initially, particularly in developing countries (Dai & Shen, 2016), better protections could significantly increase the innovation abilities of local firms, eventually making them better competitors internationally. As local IPR-intensive industries take off, it could provide even stronger incentives for governments to enforce IPR protection laws.

FTAs, domain names, and the UDRP

Domain names are not treated as a standalone type of IPRs in conventional IPR laws. However, if a domain name contains the trademark of a distinctive business, it will be protected under trademark law (WIPO, n.d.). In the United States, besides the trademark rules, specific laws were enacted against cybersquatting, for example, the Anti-cybersquatting Consumer Protection Act of 1999 (15 US Code § 1125).

In line with stronger trademark-protections for domain names at home, the US government has increasingly included clauses regarding domain name protection in its FTAs. Lerman (2015) reviewed eleven Latin American countries' FTAs with countries

within and outside of the region and found that all FTAs with the United States had specific clauses regarding domain name and anti-cybersquatting issues. Furthermore, the author found that significant changes in local Internet policies occurred in those countries after the signing of the FTAs with the United States, including the framing of domain name dispute resolution mechanisms. More specifically, the FTAs require the adoption of the UDRP procedure as the domestic rule in six out of the ten Latin American countries with US FTAs. One of her core findings is that FTAs have commonly included international intellectual property obligations, of which the adoption of the UDRP procedure is one. Chaisse (2019) also showed that promotion of the UDRP was an element of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). These two studies demonstrated a strong linkage between IPR protections, FTAs, and UDRP.

To cite some specific examples, the Dominican Republic-Central America Free Trade Agreement (DR-CAFTA) includes a section on “Domain Names on the Internet” (Article 15.4) which requires that the parties provide, for their respective ccTLDs “...an appropriate procedure for the settlement of disputes based on the principle established in the Uniform Domain-Name Dispute Resolution Policy.”² Such “UDRP-like” requirements are included in many other FTAs, for example, the US-Singapore, US-Korea and US-Australia FTAs (Brown et al., 2010; USTR, n.d.). The Chile-US FTA has a UDRP requirement in Article 17.3; the Singapore-US in Article 16.3; and the Australia-US in Article 17.3 (Brown et al., 2010). In some cases, UDRP requirements figure in the negotiations leading up to an FTA even if the final text of the agreement does not include an explicit statement. Park (2007) found that a UDRP requirement was adopted in South Korea, after the two countries negotiated an FTA. As a result, United States's FTA partners may need to readjust their internet governance practices to bring them in line with international (or specifically, US) guidelines.

Although it can be argued that the requirement of establishing the UDRP or similar procedure is mainly to serve the interests of multinational corporates, particularly those from the United States in the foreign markets, a strengthening of domain name protection in the trade partner countries could also in effect deter cybersquatting and protect the interests of local businesses in those countries. As a result, over time, cybersquatting and other types of fraudulent domain name registrations might become less common. However, the reforms may also have negative impacts. One is that a reformed UDRP might not satisfy local needs; on the contrary, it could even threaten the rights of local internet users (Lerman, 2015). A second issue is that a reformed domain name arbitration process may not be adequately integrated with other aspects of national Internet regulation. Lerman (2015) identified two consequences: (1) relatively lower usage of ccTLD dispute resolution mechanisms; and (2) the difficulties in implementing intermediary liabilities. In effect, the UDRP and other IPR requirements introduced as a result of an FTA might not be suitable in the local context.

These arguments demonstrate that FTAs with the United States could impact the UDRP arbitration outcomes in many different ways. First, it could bias national arbitration procedures in ways that favor international (specifically, United States) and corporate interests. Also, as Brown et al. (2010) have argued, it could lead to improvements in intellectual property laws in trading partners and consequently lower the incidence of domain name disputes. However, these expectations have not been tested empirically in the literature. Therefore, it is necessary to examine the empirical evidence to determine if indeed, an FTA with the United States impacted the UDRP outcomes. This study aims to analyze the relationship between the presence of a US FTA and the outcomes of domain name disputes by conducting cross-national empirical research. In the next section, we introduce our data and analytical procedures.

DATA AND METHOD

The sample of this study consists of all ccTLD domain name dispute cases arbitrated in five FTA countries and five non-FTA countries, as archived in the WIPO database. To provide sufficient data for analysis, the samples were selected according to the following three criteria. First, only countries with more than 10 years of data were included in our sample. Second, the countries with any missing year data were excluded from our sample. For example, France was ruled out because the WIPO database does not include French cases from 2012 to 2015. Third, all data on other variables that may influence case outcomes need to be accessible. These variables include the sample countries' GDP, governance index, and the IPR protection score—see below for explanations why these variables are included in our models. Only four FTA countries met these criteria in the WIPO case archive. Therefore, a fifth case, Canada, was included using data collected from the CIRA site (Canadian Internet Registration Authority, 2019). For non-FTA countries, seven countries in the WIPO database fulfilled our three criteria. Among them, Iran was excluded due to many missing years of IPRs scores. Of the remaining, the five countries were chosen for which data were available for the highest number of years. All ten countries have adopted UDRP or UDRP-like processes for DNS dispute resolution; therefore, any differences observed in the outcomes are more likely to be attributable to the FTAs. In total, 2797 cases with the decisions clearly indicated were included in the sample. The selected countries and the number of cases in each country are presented in Table 1.

Dependent variable

The dependent variable is the result of the dispute resolution cases. Specifically, for each case there are four possible outcomes:

- *Terminated*: The case is terminated before the start of the UDRP proceeding or during the process. If the case is terminated, no decision is given regarding the ownership of the domain name.

TABLE 1 Selected countries and number of cases

Countries	FTA with the US	No. of cases	Year
Australia	Yes	444	2001–2019
Canada	Yes	371	2002–2019
Colombia	Yes	426	2008–2019
Mexico	Yes	361	2001–2019
Morocco	Yes	24	2009–2019
Ireland	No	64	2003–2019
Romania	No	182	2001–2019
Spain	No	630	2006–2019
Switzerland	No	246	2004–2019
United Arab Emirates	No	49	2006–2019

Abbreviation: FTA, free trade agreement.

- *Complaint rejected*: The complainant's claim on the disputed domain name is not supported by the arbitration panel. The domain name will remain with the respondent.
- *Canceled*: The complainant's claim on the disputed domain name is supported by the arbitration panel. The domain name will be canceled per request of the complainant.
- *Transferred*: The complainant's claim on the disputed domain name is supported by the arbitration panel. The domain name will be transferred from the respondent to the complainant.

Since the result of each case is clearly stated in the case description, recording the outcome did not require any subjective judgment and no inter-coder reliability test was needed. Then, a dummy variable is created (*Complbias*) to indicate whether the decision favors the complainant (*Complbias* = 1 if the decision is “canceled” or “transferred,” *Complbias* = 0 if the decision is “complaint rejected”). Of the 2797 cases with the decisions clearly indicated, 74.3% ($N = 2079$) ended with a decision favoring the complainant, and 11.4% ($N = 318$) ended in favor of the respondent. Given that a terminated case does not have any decision regarding the ownership of the domain name, to code it as not biased toward the complainant might not be accurate. Nevertheless, critical information regarding the identities of the involved parties is missing in all the cases with terminated decisions. Thus, in the regression analysis, the terminated cases were automatically excluded.

Independent variables

Characteristics of the ccTLD-hosting country

The focus of this study is to test whether arbitration cases in countries with US FTAs tend to generate results significantly different from those without. Thus, the main independent variable is whether the country to which the ccTLD belongs has an FTA with the United States ($FTA = 1$ if the country has an FTA with United States, $FTA = 0$ if the country does not). Among the 2797 ccTLDs in dispute, 53.3% ($N = 1492$) belong to countries with an FTA with the United States, and 46.7% ($N = 1305$) to countries without FTAs.

To capture the effects of a country's overall development on the prevalence of IPR infringement and cybersquatting, which could indirectly affect the case decisions, the GDP and the governance index, developed by the World Governance Index Project, are included in the model (mean = 0.82, $SD = 0.78$). In addition, the number of domain names registered per Internet user is used as a rough proxy for how easy it is to obtain a domain name in the country (mean = 0.03, $SD = 0.03$).

A closer examination of the domain name dispute resolution mechanisms in the sampled countries shows that many countries delegate the arbitration to WIPO. Therefore, to control for the potential difference between relying on WIPO for the arbitration or on national systems, a dummy variable is created and included in the model (=1 if the country outsources arbitration to WIPO, =0 if the case was arbitrated by the national system). 85% ($N = 2377$) of the 2797 cases were arbitrated by WIPO, while 15% ($N = 420$) of the cases were arbitrated by national systems. Also, to control for the quality of a country's IPR protection regime, each country's protection of intellectual property rights score (IPRS), published by Property Rights Alliance (International Property Rights Index, 2020), was included in the analysis as a control variable (mean = 6.78, $SD = 1.24$).

Characteristics of the respondent and complainant

Besides the characteristics of the ccTLD-hosting country, the study also examines the potential effects of the characteristics of the two opposing parties in the arbitration. To test whether the UDRP process is biased toward international entities, the nationality of the involved parties, as shown by the address provided, is identified. A dummy variable is created for the complainant and respondent, respectively. Specifically, *Compl_international* (*Resp_international*) = 1 if the complainant (respondent) is an individual or organization in a country different from the ccTLD-hosting country, otherwise *Compl_international* (*Resp_international*) = 0. In addition, we tested whether, as a consequence of an FTA, US entities were treated differently from those of other countries. A dummy variable is created, *Compl_US* (*Resp_US*) = 1 if the complainant (respondent) is a US entity, *Compl_US* (*Resp_US*) = 0 if it is not. Among the 2785 cases where the nationality of the complainant is clearly indicated, 68.4% ($N=1906$) are identified as “international,” while only 32.2% ($N=764$) of the respondents are international among 2372 cases, where the nationality of the respondent is clearly identified. Individuals and organizations from the United States constitute 27% ($N=751$) among the 2785 complainants who were identified, while only 9.5% ($N=223$) among the 2353 respondents are US entities.

Also, we considered if the UDRP process would be more likely to bias toward corporate interest over that of individuals. A dummy variable is created where *Compl_corp* (*Resp_corp*) = 1 if the complainant (respondent) is a business, *Compl_corp* (*Resp_corp*) = 0 if the involved party is an individual. The vast majority of the complainants are corporations ($N=2716$, 98.8%) among 2749 cases. In comparison, 46.4% ($N=1091$) from the 2351 respondents with available information were corporations.

The characteristics of the countries to which the respondents and complainants belong could also affect the case results. However, addresses of many of the involved parties only refer to their corporate headquarters in locations such as Gibraltar and Isle of Man; data for their country's GDP and government index cannot be identified. Therefore, based on World Bank categorization, the countries and regions are coded as developed or developing (=1 if the country belongs to the high-income group, =0 otherwise). Complainants in 2555 cases (91.9%) among the 2779 cases, and respondents in 1930 of the cases (81.4%) from the 2372 cases were based in developed economies.

As previous studies have suggested, having an FTA with the United States could potentially change the domestic legal environment of IPR protection and deter cybersquatting (Dai & Shen, 2016; Lerman, 2015), which would indirectly influence the arbitration decision. Therefore, whether the respondents and complainants are associated with countries having an US FTA are also coded and included in the regression model as a control variable (=1 if the involved party is associated with an FTA country, =0 otherwise). Among the 2779 cases where the base locations of the complainants are given, 503 of the complaints (18.1%) are associated with countries having FTAs with the United States. Among the 2372 cases where the base locations of the respondents are given, 989 of the respondents (41.7%) are from countries having a US FTA.

Time trend

Finally, as the cases examined span from 2001 to 2019, any observed effects of the independent variables on the arbitration results could be spurious, if the potential time trend is not controlled. For example, if the arbitration decisions are, in general, becoming more favorable to the complainants over time and simultaneously the GDP of a country is

increasing, analysis may identify a false positive effect of GDP on case outcomes. A time trend variable T , where $T = 1$ for 2001, $T = 2$ for 2002, and so on, is added to the model.

The empirical strategy

The statistical analyses were conducted using the IBM SPSS 26 software. First, a simple descriptive statistical analysis is conducted. Then, the model is estimated using the logistic regression method to accommodate the binary dependent variable. Three parameters, the result of the Omnibus test of model coefficients, the Nagelkerke R^2 and the Hosmer–Lemeshow test result are used to indicate the goodness-of-fit of the model.

RESULTS

As the first step to investigate whether the ccTLD-hosting country's FTA with the United States influenced the outcomes of the arbitration process, a crosstab analysis is conducted. As shown in Table 2, 968 (88%) of the cases in non-FTA countries had results favoring the complainants and 1111 cases (85.7%) in FTA countries indicated favoring the complainants. Based on the descriptive statistics, it appears that having an FTA with the United States does not influence the results of the domain name dispute arbitrations. Nevertheless, a more rigorous test is needed to control for the effects of other factors that could influence the results.

The logistic regression results

The result of the logistic regression is presented in Table 3. The significant Omnibus test result indicates that the model with the explanatory variables is significantly better than the default model with only the constant, $\chi^2(17) = 214.27$, $p < 0.001$. The insignificant Hosmer–Lemeshow test result shows that the model fits the data very well, $\chi^2(8) = 7.56$, $p = 0.48$. The Nagelkerke R^2 is a rough equivalent of the R^2 in linear regression. Based on the result, about 21% of the variance in the dependent variable can be explained by the independent variables. Nevertheless, the interpretation of the pseudo R^2 reported for logistic regressions is a hotly-debated topic, and several studies have suggested caution when interpreting the pseudo R^2 in the same way as the regular R^2 in linear regressions (Menard, 2000).

The main focus of this study is to examine whether the decision of the arbitration is influenced by the FTA with the United States. According to the logistic regression result (see Table 3), if a country has an FTA with the United States, the arbitration outcomes for domain names in that country's ccTLD would be less likely to favor the complainant ($\beta = -1.69$, $p < 0.01$). This finding suggests that the effect of US FTAs on domain name arbitration may be complicated, which is discussed more thoroughly in the conclusion and discussion section.

TABLE 2 Outcomes in FTA and non-FTA countries

	Favoring the complainant	Not favoring the complainant
Non-FTA countries	968 (88%)	132 (12%)
FTA countries	1111 (85.7%)	186 (14.3%)

Abbreviation: FTA, free trade agreement.

TABLE 3 Logistic regression result

Dependent variable: Logit (<i>Complbias</i>)	Coefficient	SE	e^{β} (odds ratio)
<i>FTA</i>	-1.69**	0.53	0.19
<i>GDP</i>	0.00	0.00	1.00
<i>GOVINDEX</i>	-1.15*	0.47	0.32
<i>DNSPERUSER</i>	-1.45	5.18	0.23
<i>WIPO</i>	-0.25	0.41	0.78
<i>IPRS</i>	-0.00	0.26	1.00
<i>Compl_International</i>	0.95***	0.24	2.58
<i>Compl_US</i>	0.01	0.25	1.01
<i>Compl_Corp</i>	1.68**	0.53	5.34
<i>Compl_Develop</i>	0.94**	0.34	2.57
<i>Compl_FTA</i>	0.04	0.30	1.04
<i>Resp_International</i>	1.79***	0.39	5.96
<i>Resp_US</i>	-0.52	0.56	0.60
<i>Resp_Corp</i>	-0.39*	0.18	0.68
<i>Resp_Develop</i>	0.65	0.38	1.92
<i>Resp_FTA</i>	1.47**	0.56	4.34
<i>T</i>	0.07	0.04	1.07
<i>Constant</i>	-140.14	79.28	0.00
Omnibus test	$\chi^2(17) = 214.27$		
Nagelkerke R^2	0.21		
Howsmer–Limershow test	$\chi^2(8) = 7.56$		

Note: The coefficients represent the effect of the independent variables on the log odds ratio of the dependent variable.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

In addition to the FTA status, the governance quality of the country also has a significant influence on arbitration outcomes. Specifically, cases arbitrated in countries with better governance quality tend to generate results favoring the respondents ($\beta = -1.15$, $p < 0.05$). Other characteristics of the country, the GDP, the number of ccTLD domain names per Internet user, the delegation of arbitration to WIPO, and the protection of IPRS are not significant determinants of the case outcomes.

In terms of the characteristics of complainants, international complainants tend to have higher chance of winning the arbitration ($\beta = 0.95$, $p < 0.001$). In line with previous literature (Carr, 2015; Kesan & Gallo, 2015; Lee, 2016; Levine, 2016; Simon, 2012), the UDRP process tends to protect corporate interests over those of individuals, as corporate complainants are more likely to win the case ($\beta = 1.68$, $p < 0.01$). Also, complainants with a base location in high-income countries are more likely to win ($\beta = 0.94$, $p < 0.01$). Nevertheless, no evidence is found which indicates that the process tends to be biased toward US complainants ($\beta = 0.01$, $p = 0.98$). Whether the complainant is in a country with the US FTA is not significantly associated with the case outcomes ($\beta = 0.04$, $p = 0.89$).

In respect to the characteristics of respondents, international respondents have a high probability of losing the case ($\beta = 1.79, p < 0.001$). The process tends to generate results favoring corporate respondents ($\beta = -0.39, p < 0.05$), which is another evidence that the UDRP process tends to protect corporate interests. Respondents associated with FTA countries are more likely to lose ($\beta = 1.47, p < 0.01$). The analysis does not find a significant association between the respondent being a US entity and the case outcome ($\beta = -0.52, p = 0.36$). Also, respondents' location in high-income countries is not significantly related to case outcomes ($\beta = 0.65, p = 0.09$).

CONCLUSION AND DISCUSSION

The purpose of FTAs is to increase trade opportunities between partners by reducing barriers and increasing cooperation (International Trade Administration & US Department of Commerce, 2019). Existing research about the effect of FTAs, from political economic theory suggests that FTAs, and trade agreements in general, are used to obtain advantageous terms for Western business interests in the developing world (Campi & Dueñas, 2019; Destler, 2016). One of the main areas where FTAs seek to change the business environment in partner countries is IPRs, including domain names and trademarks. In FTAs negotiated by the United States too, the UDRP procedure has been promoted as the preferred mechanism to resolve domain name conflicts (Brown et al., 2010; Chaisse, 2019; Lerman, 2015). However, there has been little empirical testing of what impact an FTA might have on UDRP arbitration decisions. To bridge this gap, this study sought to examine whether FTAs impact domain name arbitration cases through a cross-national comparative study.

Using logistic regression, the study found a significant impact of FTA with the United States on ccTLD dispute decisions. The results suggest that if a country has an FTA with the United States, the complainant is less likely to win the case. The UDRP process in FTA countries is therefore more likely to uphold the registrant's claims to a domain name than the complainant's. Existing literature expected that the inclusion of UDRP into FTAs could threaten the local internet users' rights (Lerman, 2015), because arbitration process under the FTA with United States usually would be more likely to favor international and particularly US corporate interests (Campi & Dueñas, 2019; Osgood & Feng, 2018). However, the result of this study suggests a more complicated and nuanced explanation of the relationship between FTAs and the UDRP decisions. A possible explanation might be that the process of negotiating an FTA moves a country toward implementation of better norms and practices in respect to IPR protections (Biadgleng & Maur, 2011; Maskus, 2015), and consequently a reduction in the incidence of fraudulent practices in domain name registration. With a reduction in the more blatant cases of fraud, the win percentage for complainants on the cases that are brought might be reduced. Although this explanation is plausible, further analysis is required in a future study, possibly by identifying and including of predictors of domain name fraud in the regression analysis.

Despite finding a significant impact of FTA on arbitration cases, more variance is explained by other factors. In other words, some variables have a greater weight on decisions than FTA status. For example, the identity of the party impacts the decision, whereby corporate complainants and corporate respondents are both more likely to win cases. This is in line with previous research which has critiqued UDRP for favoring corporations (Carr, 2015; Kesan & Gallo, 2015; Lee, 2016; Levine, 2016; Simon, 2012). In addition to this, a complicating factor is that FTAs may not be the only process through which nations change their domain name governance mechanisms, nor are FTAs guaranteed to change these practices in all situations. Independent of their impact on IPRs, FTAs also seek to

implement better market access, fair regulatory decision-making, less local protectionism, and due process of law, all of which may influence the factors that lead to ccTLD domain name disputes. Clearly, more research is needed to illuminate a more complicated and nuanced relationship between FTAs and UDRP dispute consequences.

A few limitations, or rather open questions, remain which can be addressed with future research. For instance, a complainant is more likely to file a dispute if they think they are going to win. Within our sample, 86.7% ($N = 2079$) of cases favored the complainant, while only 13.3% ($N = 318$) of cases resulted in a decision that favored the respondent when the terminated cases were not counted. Since our data looks only at cases that have been filed, we need to consider how a complainant's assessment of their probability of winning affect the chances an appeal will be filed in the first place. In addition, while we used a larger sample than in similar studies, this study analyzed five FTA countries, comparing them to other five non-FTA countries depending on the availability of data. The United States currently has agreements with 20 FTA partners. Future research can explore this further as well as look at context-specific relationships. Lastly, our analysis examines the effect of FTA with the United States on the ccTLD arbitration cases through a dummy FTA variable. To analyze the magnitude of the FTA effect on the UDRP arbitration decisions, qualitative aspects that assess the breadth of an FTA may be considered. Although it has these limitations, our study examines the empirical evidence for the impact of FTAs on the ccTLD dispute cases. Ultimately, this study will provide significant implications for policy, e-governance, international, and intercultural scholarship.

ENDNOTES

¹See USTR website at <https://ustr.gov/trade-agreements/free-trade-agreements>.

²See full text of the DR-CAFTA at <https://ustr.gov/trade-agreements/free-trade-agreements/cafta-dr-dominican-republic-central-america-fta/final-text>.

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