# When It Is Not "Business as Usual": Petro-states and International Conflict\*

Anita R. Kellogg

Department of Political Science University of California, Los Angeles arkellogg@ucla.edu

July 28, 2017

<sup>\*</sup>Earlier version of this paper were presented at ISA 2016, APSA 2016, and Emerging Scholars in Grand Strategy 2017.

Abstract While there is increasing recognition that petrostates are more militaristic than their counterparts, it remains unclear why economic dependence on oil revenue leads to such belligerence. In this paper, I argue that one important cause of petrostate aggression can be explained in a two-level theoretical framework of the commercial peace, which asserts that the extent to which economic interdependence reduces militarized conflict depends on the degree of business influence on foreign policymaking. My research reveals that petrostates have significantly smaller private sectors than other states. Therefore, these countries are not constrained by the effect of economic interdependence in contrast to their non-petrostate counterparts. Quantitative analyses show that the pacific effects of economic interdependence are nullified for dyads containing at least one petrostate. This paper also provides a process tracing study of Colombia-Venezuela relations illustrating the link between oil dependence and business influence on dispute resolution.

#### Acknowledgements

My thanks to Ronald Rogowski, Erik Gartzke, Michael L. Ross, Dale Copeland, David Gill, Paasha Mahdavi, Sara Sievers, Sean Braniff and the participants at ISA 2016, APSA 2016, and Emerging Scholars in Grand Strategy 2017 for their helpful comments on earlier drafts of this paper.

# 1 Introduction

Russia's hostilities against Georgia in 2008 and the Ukraine in 2014, as well as Venezuela's mobilization for war against Colombia in 2008–2010, highlight the significance of petrostates nations that are 20% or more economically dependent on oil and gas revenues<sup>1</sup>—as a source of global instability. Table 1 demonstrates the importance of this issue to the international system by showing that dyads that include at least one petrostate are 44% more likely to be involved in interstate conflicts with fatalities than their counterparts. Yet research investigating why these dyads are more likely to engage militarily is nascent. This paper contributes to the literature on petrostate aggressiveness by focusing on the financial incentives of interstate dispute resolution.

Given the consequences of these interstate conflicts, it is surprising that before 2010, scholars largely ignored the relationship between oil dependence and interstate conflict.<sup>2</sup> Despite a lack of empirical testing, the conventional argument presumes that natural resource abundance increases a petrostate's vulnerability to attacks by its neighbors.<sup>3</sup> Recent studies, however, have challenged this assumption by showing petrostates to be the primary initiators of conflict and that these disputes are not over oil resources.<sup>4</sup>

A striking fact of petrostate conflicts is that they often occur between economically interdependent countries. Recently, John Muller argued that Russia's seizure of Ukrainian territory in 2014 challenged the notion of the commercial peace as Putin's "foray in an area of deep economic interdependence doesn't seem to have been waylaid by potential economic cost considerations."<sup>5</sup> Like many proponents and critics of economic interdependence, Mueller

<sup>&</sup>lt;sup>1</sup>This paper's references to oil revenues includes both oil and gas.

 $<sup>^{2}</sup>$ Koubi, Spilker, Böhmelt et al. (2014) echo these sentiments in their review of the natural resource curse literature.

<sup>&</sup>lt;sup>3</sup>Meierding (2016).

 $<sup>^{4}</sup>$ Colgan (2010, 2013); Ross and Voeten (2015); Schultz (2015); Meierding (2016).

 $<sup>^{5}</sup>$ Mueller (2014).

makes the mistake of assuming that economic interdependence should have a uniform effect on interstate conflict. Yet the causal mechanism of the commercial peace — that state leaders are constrained in resolving disputes by military force by businesses with financial interests in interstate trade — predicts that the pacific effects of economic interdependence should vary according to the degree of business influence on policymaking.

I argue that one substantial cause of petrostates' increased willingness to use military force is that they are not restrained by the economic consequences of conflict. This is the result of oil dependence reducing the size and influence of the private sector; thus, economic interdependence does not incentivize the peaceful resolution of disputes as it does with nonpetrostate dyads. I test this theory using two statistical models. The first model uses a fully specified commercial peace equation to test whether petrostate dyads impact the effectiveness of bilateral trade to reduce the likelihood of militarized disputes with fatalities. I also use a two-part model (2 PM) as described by Vance and Ritter (2014) to assess these interactive effects on dispute severity. The appeal of this model over the standard logit is that it includes more information by evaluating all MIDs while capturing the effects on the probability that these disputes include the actual use of military force.

Although the available quantitative data assesses the observable effects of my theory, it is unable to directly evaluate the argument's causal logic. Therefore, I provide an in-depth casestudy of Venezuela's public-private sector relations and their consequences on the Colombia-Venezuela rivalry. This study illustrates how the relative degree of business influence within each nation affected the foreign policy measures used to resolve their frequent interstate disputes. These combined analyses support the hypothesis that petrostates are aggressive international actors because they are undeterred by the economic consequences from militarizing disputes.

	Odds Ratio	95% Confid	lence Interval
Petrostate Dyads	1.437138	1.212497	1.703399
N	547773		

Table 1: Odds of a Fatal Militarized Dispute

All Dyads 1970-2007

## 2 Existing Literature

Dyadic relationships that include at least one petrostate are almost twice as likely to engage in a fatal militarized dispute. The conventional view assumes that petrostates have a greater risk of being targeted by their neighbors seeking control over resource rich territory due both to the strategic nature of these resources and the economic benefits derived from them. The following section reviews recent literature challenging this conventional narrative by showing petrostates to be initiators of disputes and the difficulty of benefiting from conflict over oil. It also describes the current arguments explaining petro-aggression and the need for further research into this topic.

### 2.1 Targets or Aggressors?

Rather than viewing petrostates as targets in the international system, Jeff Colgan explored the possibility that resource-backed aggression explained why petrostates are involved in a disproportionate number of militarized disputes.<sup>6</sup> Both Colgan and Cullen Hendrix employ analyses of directed dyads, finding that petrostates are much more likely to initiate militarized disputes than to be the target of aggression.<sup>7</sup> Complementing these studies, Emily Meierding's in-depth qualitative research reveals the flaws in the logic that states can benefit from oil wars. She identifies four overlooked "impediments to exploiting foreign oil: invasion costs, occupation costs, international costs, and investment costs."<sup>8</sup> Moreover, her research shows that the most common historical examples used to back the "petrostate as target" claim were not directly about oil. For example, her case studies of "Japan's invasion of the Dutch East Indies (1941– 42), [and] Iraq's invasion of Kuwait (1990)" find that these were wars for survival. She also demonstrates that "the Iran–Iraq War (1980–88) and the Chaco

<sup>&</sup>lt;sup>6</sup>Colgan (2010, p.676).

<sup>&</sup>lt;sup>7</sup>Colgan (2010); Hendrix (2015).

<sup>&</sup>lt;sup>8</sup>Meierding (2016, p. 262).

War between Bolivia and Paraguay (1932–35)," were not even connected to oil interests.<sup>9</sup>

The strongest rebuttal to the arguments put forth by Colgan and Meierding is from Francesco Caselli et al. who find a high risk of conflict "where only one country of the pair has oil and this oil is close to the border."<sup>10</sup> Kenneth Schultz, however, shows that the result in Caselli et al. is "driven by a number of false positives: dyads in which the disputed territory does not encompass the oil near the border."<sup>11</sup> For example, he finds that within Caselli et al.'s own data "many of the most conflict-prone dyads with oil near the border were not, in fact, fighting about oil: for example, India–Pakistan, Israel–Egypt, Israel–Syria, Russia–Japan, and Armenia–Azerbaijan. Indeed, in some of these cases, the disputed territory does not overlap with the oil deposits."<sup>12</sup> Instead, Schultz finds "disaggregating territory into fiftykilometer square grid cells reveals that cells that provide access to oil are, if anything, less likely to be part of dispute than cells without oil."<sup>13</sup> Evidence from several multinomial models support Schultz's conclusion "that that the grid cells located on top of onshore deposits are associated with a lower probability of a dispute, while grid cells that give access to offshore oil or that sit on a path to oil are neither more nor less likely to be implicated in a claim than those that do not."<sup>14</sup>

Apart from the study by Caselli et al., the above works call into question the logic that it would be in a sovereign nation's interest to attack its territorial rivals to gain control over oil resources. Colgan finds that the petrostates initiate interstate conflicts at "a rate 94 percent higher than that of nonpetrostates."<sup>15</sup> Meierding provides in depth qualitative evidence that the four wars most commonly thought to be over petroleum resources were instead about security needs and national survival. Finally, Schultz points out that conflict

<sup>&</sup>lt;sup>9</sup>Ibid.

<sup>&</sup>lt;sup>10</sup>Caselli, Morelli, and Rohner (2015, p. 304)

<sup>&</sup>lt;sup>11</sup>Schultz (2015, p. 3).

 $<sup>^{12}</sup>$ Ibid, p. 17.

<sup>&</sup>lt;sup>13</sup>Ibid, p. 3.

 $<sup>^{14}</sup>$ Ibid, p. 19.

 $<sup>^{15}</sup>$ Colgan (2010, p. 664).

over disputed territories usually only encompass a small portion of that area of land. He finds that territories that contain oil are less likely to be the target of an interstate dispute. Through a combination of quantitative and qualitative analyses, these studies convincingly argue that petrostates are rarely, if at all, targets of military aggression for control over their oil resources in the modern era. In doing so, they have reinitiated the question — why are petrostates involved in a significantly higher number of militarized conflicts?

### 2.2 Existing Theories of Petro-State Conflict

To date, there have been two theories proffered to explain petrostate aggression: (1) oil wealth in revolutionary regimes increases the tendency of these leaders to initiate military conflict (Colgan, 2010, 2013), and (2) high oil prices lead to increased willingness of petrostates to initiate military conflict (Hendrix, 2015). The following briefly summarizes these arguments while demonstrating their insufficiency to fully address the problem of petrostates and international conflict.

Colgan explains the aggressiveness of petrostates by looking at the effect of oil revenue on states with revolutionary governments. He focuses on these regimes because they tend to be substantially more aggressive than their counterparts due to the type of leadership that emerges from these governments. These leaders are "likely to have greater risk acceptance for achieving their desired political outcomes."<sup>16</sup> Revolutionary governments also result in "the removal of domestic political and institutional constraints."<sup>17</sup> Oil income increases the revolutionary leader's autonomy and reduces the possibility of being removed from office for foreign policy decisions.<sup>18</sup>

While an important contribution to the literature, Colgan's theory does not fully address

<sup>&</sup>lt;sup>16</sup>Colgan (2010, p. 666).

<sup>&</sup>lt;sup>17</sup>Ibid, p. 676.

<sup>&</sup>lt;sup>18</sup>Ibid, p. 670.

why petrostates are involved in a greater number of dyadic militarized disputes. He cannot assert that the effect of oil on conflict is limited to revolutionary governments. Indeed, he admits that his classification of revolutionary governments does not entirely encapsulate the aggressive leadership he theorizes about. In particular, Russia is a significant outlier. Colgan notes "Russia's democratizing revolution under President Boris Yeltsin in 1990–91 did not generate an overly aggressive government."<sup>19</sup> Moreover, he also notes that willingness to initiate conflict by Putin's Russia demonstrates that revolutionary governments are "not a necessary condition for having aggressive preferences."<sup>20</sup>

Hendrix offers an alternative explanation by asserting that oil exporters are more conflictprone when oil prices are high.<sup>21</sup> The record high prices and conflictual events of 2008, particularly Russia's invasion of Georgia and Chávez's military aggression towards Colombia, have led many to intuitively support this hypothesis. Yet, many have also noted that Russia's invasion of the Ukraine may be due to a counter phenomenon; the economic challenges of low prices possibly incentivized Putin to pursue a "rally-around-the-flag" strategy. Although Hendrix concludes that the data supports his explanation, his empirical results produce mixed support for the argument. While MID initiations by petrostates do seem price contingent in the directed dyads regression, the reverse is true at the monadic level. When it comes to relative bellicosity of petrostates, however, his results show the exact opposite. He does not offer an explanation for the contrasting results of these analyses.

Both Colgan and Hendrix use directed dyadic tests to assess whether their independent variables explain the initiation—whether State A was the first to take a codeable action—of a militarized dispute by a petrostate. The authors of this dataset, however, have repeatedly stated that this variable "should not be interpreted to be the states that "started" the conflict, or that are responsible for the conflict."<sup>22</sup> Thus, while Colgan and Hendrix find

 $<sup>^{19}</sup>$ Ibid, p. 683.

 $<sup>^{20}</sup>$ Colgan (2014).

 $<sup>^{21}</sup>$ Hendrix (2015).

<sup>&</sup>lt;sup>22</sup>Ghosn, Palmer, and Bremer (2004, p. 139).

support for petrostate initiation, they do so within the context of these limitations.

## 3 Theory

I argue that a significant cause of petro-aggression is that oil dependent states are less likely to be deterred by economic interests from using military force to resolve interstate disputes. Economies dependent on oil revenue tend to be characterized by a domestic political economy in which the size and influence of the business community—the group that typically bears the costs of lost trade due to conflict— has little impact on the policymaking process. This is most clearly seen between economically dependent dyads, which are less likely to resolve their disputes militarily. In petrostate dyads, however, the pacific effects of economic interdependence are nullified. For example, even though Venezuela's businesses suffered from militarizing conflict with Colombia, they were excluded from the decision-making process. The rentier politics of the resource curse not only made the commercial sector dependent on state for their survival, but they also were vulnerable to exclusion from the government's winning coalition; therefore, Venezuelan businesses had no voice in domestic and international policymaking.

This theory rests on three core assumptions. First, oil dependent countries typically have a smaller and less influential private sector relative to the government. As the following section will detail, the smaller private sector is commonly acknowledged to be a consequence of the resource curse. To my knowledge, this is the first paper to apply this finding to the foreign policy making process. Second, larger private sectors in non-petrostates will act to influence policy affecting their financial interests. In these cases, the business community will have a pacific influence on dispute resolution corresponding to the degree of trade that is at stake. Finally, economic interdependence will reduce militarized conflict between states relative to the influence of business on policymaking. Each of these assumptions will be assessed in the

following section.

### 3.1 Oil and the Private Sector

The well-known phenomena of the Dutch Disease and the rentier politics that result from natural resource abundance explain why oil dependent economies have smaller and less influential private sectors. The Dutch Disease shifts resources and industry away from private enterprises and expands the state's role in the economy. Abundance in natural resource production causes a decline in the manufacturing and agricultural sectors. One reason is due to the 'resource movement effect': "as the resource sector booms, it draws labor and capital away from the agricultural and manufacturing sectors and raises their production costs."<sup>23</sup> The decline of these sectors is also the result of the 'spending effect': "as money from the booming resource sector enters the economy, it raises the real exchange rate. A higher real exchange rate makes it cheaper to import agricultural and manufactured goods than to produce them domestically."<sup>24</sup>

Since the 1970s, "virtually all oil-exporting countries in the developing world" have nationalized oil industries.<sup>25</sup> As a result, oil dependence increases the size of the government as a fraction of the national economy. Ross explains, "since agricultural and manufacturing sectors are typically in private hands, their declining profitability will reduce the size of the private sector."<sup>26</sup> What remains of the private sector are services which provide "the economy with things that cannot be easily imported—like construction services, health care, and retail stores."<sup>27</sup> Given that the Dutch Disease concentrates national wealth to the state treasury, the state is the largest client for services. As a result, financial success depends on

 $<sup>^{23}</sup>$ Ross (2012, Kindle Locations 1148–1149).

 $<sup>^{24}</sup>$ Ibid, Kindle Locations 1149–1151.

<sup>&</sup>lt;sup>25</sup>Ibid, Kindle Locations 441.

<sup>&</sup>lt;sup>26</sup>Ibid, Kindle Locations 1171.

<sup>&</sup>lt;sup>27</sup>Ibid, Kindle Locations 1174.

access to government to obtain lucrative contracts rather than being determined by market competition.<sup>28</sup>

Oil dependent countries are also known for their rentier politics. Terry Lynn Karl explains that the resource curse effect on the merchant class is more extreme in oil dependent countries "because domestic capitalist economic groups, notoriously concentrated in monopolies or oligopolies, are dependent on oil rents and the political power arrangements that distribute them through patronage."<sup>29</sup> Moreover, as "this wealth is the result of a windfall and privileged links to the state and ... largely independent of merit-based efforts made by citizens, this pattern of wealthy-creation encourages rent-seeking as well as a tendency to live beyond one's means."<sup>30</sup>

Another consequence of oil wealth is that governments are less dependent on taxes to generate revenue. Patrick J. McDonald argues that states that tax the population very little are more likely to engage in military conflict than governments overseeing more privatized economies.<sup>(31</sup> The financial autonomy gained by public assets "enables governments to redistribute publicly owned wealth within the economy toward political supporters (members of the winning coalition), tie significant portions of society to their survival in office and prevent the emergence of active opposition to its policies.<sup>(32</sup> Reducing the size of the private sector is critical as "domestic economic sectors capable of surviving open competition from foreign producers generally support restrained national interests and cooperative foreign policies."<sup>33</sup>

Petrostates use the rents from oil revenue to eliminate any existing opposition group and prevent the formation of new movements that could challenge the regime. This explains the

<sup>&</sup>lt;sup>28</sup>Author interview with Gabriela Febres-Cordero, former Venezuelan Minister of Trade from 1989–1992.
<sup>29</sup>Karl (2007, p. 11).

<sup>&</sup>lt;sup>30</sup>Ibid, p. 12.

 <sup>&</sup>lt;sup>31</sup>McDonald (2009, p. 17).
 <sup>32</sup>Ibid, p. 57.
 <sup>33</sup>Ibid, p. 48.

well documented correlation between oil wealth and regime stability.<sup>34</sup> While this applies to all civil society groups, private enterprises are particularly singled out. For example, Karl notes that in Kuwait and Qatar, "the political distribution of oil rents eliminated the influence of the merchant class in decision making, leaving the rulers with no real political opponents that could base themselves in a social class."<sup>35</sup> Consequently, the regime's political survival is not vulnerable to economic downturns in the short to medium term, such as those caused by lower oil prices.

Although the business community is small and lacks influence in petrostates, it is commonly argued that the direct beneficiaries from the nation's oil wealth should also be less likely to support militarized conflict that might adversely affect their own pockets.<sup>36</sup> Solomon W. Polachek directly challenged this argument through findings that Saudi Arabia is more likely to initiate conflict with the countries it trades with.<sup>37</sup> Moreover, there are two logical issues with the argument that direct beneficiaries of oil revenue constrain decisions to use military force. First, state leaders conscientiously prevent oil entrepreneurs from transforming their wealth or economic position into political power. Often this requires strategic demonstrations that these individuals owe their status to the state, and as a consequence, their wealth and personal freedom can be taken away at anytime. In Russia, for example, when the nation's wealthiest businessman and head of the oil group Yukos, Mikhail Khodorkovsky, challenged Putin politically, Khodorkovsky was imprisoned. Yukos's assets were seized by the Russian government and later auctioned off to bogus companies that were then acquired by the state-owned gas company, Gazprom.<sup>38</sup> Another illustration comes from Venezuela, when the workers and managers of the state-owned oil company, Petróleos de Venezuela, S.A. (PDVSA) went on strike to protest changes to the constitution, President Hugo Chávez, fired more than half of PDVSA's 40.000-person workforce, making loyalty the key characteristic

<sup>&</sup>lt;sup>34</sup>Karl (2007); Ross (2015); Wright, Frantz, and Geddes (2013).

<sup>&</sup>lt;sup>35</sup>Karl (2007, p. 21).

 $<sup>^{36}</sup>$ Colgan (2013, See for example:).

<sup>&</sup>lt;sup>37</sup>Polachek (1980, p. 80).

 $<sup>^{38}</sup>$ Dixon (2008).

for employment.

Second, there is no empirical evidence linking a decrease in oil profits to a decline in the personal income of the state leader(s) due to massive corruption and the fact that revenue losses are easily shifted to other parts of the economy.<sup>39</sup> For example, after Chávez broke the PDVSA strike, he "radically shifted its orientation towards meeting government objectives."<sup>40</sup> PDVSA's primary goal became providing "large and easily adjustable revenues to the Venezuelan government. For 2005 and 2006, PDVSA paid the government 71.1% and 74.6%, respectively, of the revenues it obtained from Venezuelan operations."<sup>41</sup> The higher percentage in 2006 reflects \$11 billion in lost profits "because of state-mandated actions."<sup>42</sup> The Venezuelan government also gained discretion over extrabudgetary revenue, such as widely expanded social programs known as *misiones*. Not only did the state establish the funding rates of these *misiones*, but there was also no oversight to ensure that the revenue was spent as allocated. In another example:

The 2008 [Venezuelan] budget projected revenue based on \$ 35 per barrel of oil, but for three weeks in 2008, the Venezuelan oil basket sold for at least \$ 116 a barrel, which was 233 percent higher than the budgeted amount. Finance Minister Rodrigo Cabezas reportedly justified this underestimate by stating that it was a way to "minimize the risk" of an external shock; he promised to channel any surpluses for the benefit "of the people and only for the people." Such systematic underestimation generated an average revenue surplus of 20 percent each year— basically an amount that Chávez was free to use unaccountably.<sup>43</sup>

In sum, petrostates can risk the economic losses of international conflict because there are no opposition groups to hold the government accountable and any decline in oil revenue can

 $<sup>^{39}{\</sup>rm Hults}$  (2007, p. 11).

<sup>&</sup>lt;sup>40</sup>Ibid, p. 14.

<sup>&</sup>lt;sup>41</sup>Ibid, p. 21.

 $<sup>^{42}</sup>$ Ibid.

<sup>&</sup>lt;sup>43</sup>Corrales and Penfold-Becerra (2015, Kindle Locations 1214–1219).

be shifted onto other parts of the economy rather than affecting the personal income of state leaders.

A rare study measures the private sector size of 50 African countries.<sup>44</sup> Stampini et al. do so "by calculating the ratio between private and total consumption, investment and credit."<sup>45</sup> They find that the private sector is substantially smaller in petrostates. Since most of their data comes from African national accounts, I make small adjustments in these measures based on the data available in the World Development Indicators (WDI) to assess relative private sector size between petrostates and their counterparts for all countries. Table 2 shows the results for government consumption, tax revenue, and the amount of credit available to the private sector as a percentage of GDP. I also examine the ratio between investment by the private sector and total investment normalized by GDP. I find that oil dependent countries collect less tax revenue as expected. They also have significantly smaller private sectors as measured by the availability of credit to the private sector and the private sector's share of investment. These results support this section's theoretical explanation as to why the private sector is smaller and less influential in petrostates than in other nations.

<sup>&</sup>lt;sup>44</sup>The author is not aware of other research on private sector size.

<sup>&</sup>lt;sup>45</sup>Stampini, Leung, Diarra et al. (2013, p. 143).

	(1)	(2)	(3)	(4)
	Government Consumption	Tax Revenue	Investment	Credit
Petrostates	1.649	-0.537*	-2.130**	-12.502***
	(1.190)	(0.235)	(0.687)	(3.489)
Observations	5354	2815	2565	5382
Countries	177	148	122	178

Table 2: Private Sector Size of Oil Dependent Countries

Clustered standard errors in parentheses

Years 1970 - 2007

\* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

### 3.2 Business Power

The potential of the private sector to influence policy on interstate conflict is not simply a matter of size but is also a function of its inclusion in the decision-making process. A plethora of studies have found that conflict substantially reduces economic exchanges.<sup>46</sup> Consequentially, one would expect that affected businesses would be highly motivated to participate in policy decisions regarding interstate dispute resolution. Despite its significance to the understanding of policymaking, the study of business and political power remains an understudied topic.<sup>47</sup>

Pepper Culpepper explains that the concept of business power goes beyond the identification of interest groups to the study "of the mechanisms by which business converts its interests into policy."<sup>48</sup> Business has multiple direct and indirect channels to influence public policy. Firms or business associations may lobby decision makers to represent their interests. They may choose to invest in political campaigns and can play a significant role in the selection of candidates. Prominent business leaders may be appointed to key roles within the government. Economic elites may have privileged access to the media and direct engagement with policymakers. In many instances, business will directly participate in policymaking. For example, governments will "institutionalize business input into policy making or oversight councils."<sup>49</sup> Finally, personal networks linking public and commercial elites may also shape policy outcomes by producing a shared world view so that broad commercial interests become internalized objectives of government policy. As such, many have argued that they are the most important means of business influence. For example, Haggard et al. note for all the studies in their edited volume, *Business and the State in Developing Countries*, "business influence over government came not through distant lobbying but through a shared world

<sup>&</sup>lt;sup>46</sup>Anderton and Carter (2001); Glick and Taylor (2010); Lee and Pyun (2016).

<sup>&</sup>lt;sup>47</sup>As far back as 1959, Robert Dahl complained about the lack of political science studies on the issue of business and power. Dahl (1959). See also Culpepper (2011).

 $<sup>{}^{48}</sup>$ Culpepper (2011, p. 186).

 $<sup>^{49}</sup>$ Schneider (2010, p. 224).

view, informal personal networks, and overlapping roles."<sup>50</sup>

These channels of influence are particularly difficult to study, however, since "business's political engagement often takes place out of the public eye, and accessible, quantifiable indicators of business influence are rarely available."<sup>51</sup> Thus, studies of business power typically "draw on extensive fieldwork, hundreds of interviews, and documents unavailable outside the studied countries"<sup>52</sup> Therefore, this paper includes an additional analysis using these methods in a process tracing case study of Colombia-Venezuela relations to illustrate the mechanisms and varied effectiveness of the business community to influence government policymaking.

### **3.3** The Commercial Peace

The argument that the business community would seek to limit military conflict with countries with whom they share economic interests draws on the commercial peace thesis. The assertion that the benefits accrued through interstate commerce would increase the costs of war and hence reduce its occurrence can be found as far back as the writings of Kant and Montesquieu. The current body of literature, however, more directly emerges from Solomon W. Polachek's empirical formulation of the opportunity cost argument: "the implicit price of being hostile is the diminution of welfare associated with potential trade losses."<sup>53</sup> John R. Oneal and Bruce Russett extend this argument, explaining that "fearful of the domestic political consequences of losing the benefits of trade, policymakers avoid the use of force against states with which they engage in economically important trade."<sup>54</sup>

On balance, empirical studies have found a strong relationship between economic interde-

<sup>&</sup>lt;sup>50</sup>Haggard, Maxfield, and Schneider (1997, p. 53).

 $<sup>^{51}</sup>$ Fairfield (2015, p. 4).

 $<sup>^{52}</sup>$ Ibid.

<sup>&</sup>lt;sup>53</sup>Polachek (1980, p. 60).

<sup>&</sup>lt;sup>54</sup>Oneal and Russett (1999, p. 5).

pendence and a reduced probability of militarized disputes. It should be noted that a small but significant group of studies produced contradicting results, either that trade increased conflict,<sup>55</sup> had no substantive effect,<sup>56</sup> or ambiguous results.<sup>57</sup> Most agree, however, that these variant findings were an artifact "of the discrepancy to variable construction alone."<sup>58</sup> Instead, one of the striking aspects of the quantitative literature on the commercial peace is that these findings have been quite robust when extended to other forms of economic ties beyond trade, such as FDI (foreign direct investment) and monetary coordination.<sup>59</sup> Similarly, while researchers often employ dyadic models, monadic and network variations have also found a positive relationship between economic interdependence and a reduction in militarized conflict.<sup>60</sup> Other works have confirmed that the pacific effects of economic interdependence are robust to the issue of endogeneity.<sup>61</sup>

One of the most salient critiques of the commercial peace thesis is that it lacks a causal explanation that incorporates domestic level actors, such as the firms doing the trading, foreign policy making, and interstate relations.<sup>62</sup> Most proponents of the theory, however, do assume that the "state is not autonomous [and] leaders must listen to powerful interest groups. Economic interest groups thus are likely to have both the incentive and the capacity to impact policy if their interests are threatened."<sup>63</sup> This study addresses a key gap in the commercial peace literature by developing and testing a two-level theoretical framework in which the effectiveness of economic interdependence to reduce the likelihood of militarized conflict is conditional on the inclusion of business in foreign policy making.

<sup>&</sup>lt;sup>55</sup>Barbieri (2002, 1996).

 $<sup>{}^{56}</sup>$ Gartzke (2007); Gartzke and Li (2003).

 $<sup>^{57}</sup>$ Morrow (1999).

 $<sup>{}^{58}</sup>$ Gartzke and Zhang (2015, p. 429).

<sup>&</sup>lt;sup>59</sup>See for example: Bussmann (2010); Gartzke, Li, and Boehmer (2001); Kim (2013); Lee and Mitchell (2012); Polachek, Seiglie, and Xiang (2012); Rosecrance and Thompson (2003); Suzuki (1994).

 $<sup>^{60}</sup>$ For example: Dorussen and Ward (2010); Kinne (2012); Lupu and Traag (2013); Maoz (2009); Souva and Prins (2006).

<sup>&</sup>lt;sup>61</sup>Hegre, Oneal, and Russett (2010); Robst, Polachek, and Chang (2007); Lee and Pyun (2016).

 $<sup>^{62}</sup>$ ?Simmons (2003); Schneider (2014).

 $<sup>^{63}\</sup>text{Baird}$  and Dixon (2010, p. 9).

My argument that the lack of business constraints on state leaders in petrostates explains the increased tendency to use military force is supported by the evidence that petrostates have smaller private sectors and financial interests are subordinate to the state. The following section tests this hypothesis with a multilevel framework for the commercial peace by which the pacific effect of economic interdependence is mediated by the degree of business influence on policymaking. I show that while bilateral trade substantially reduces the likelihood of militarized disputes for dyads without a petrostate, it has no affect on dyads that include an oil dependent nation.

# 4 Quantitative Analysis

To test the thesis that petrostates are not bound by the financial interests of the private sector from militarizing interstate disputes, I apply the standard empirical strategy of using a dyadic regression model testing the effect of economic interdependence on militarized disputes. The appeal of the commercial peace thesis is that its causal mechanism is the strength of business influence on foreign policymaking. Thus, this provides a means to assess as to whether the smaller private sectors in petrostates reduces the typical influence business has on decision making.

### 4.1 Defining Conflict

The literature on interstate disputes often fails to agree on the meaning of conflict. International conflict can occur on a variety of levels: from low-intensity incidents, including; trade disputes, diplomatic disagreements, and unintentional border violations to high-intensity incidents such as; the mobilization of troops, displays of possible force, or the actual use of the military to resolve a dispute. This distinction is an important theoretical issue as several studies have shown that greater interaction through commercial exchanges may increase the probability of low-level conflicts.<sup>64</sup> Failing to take this variation into account hampers understanding the effect of economic interdependence on the likelihood of militarized disputes.

While scholars of the liberal peace began with the quest to understand the determinants of war and peace, the rarity of full-scale wars led them to shift their focus to the militarization of disputes that could develop into war. The use of military force is a necessary threshold in international relations as it is at this point that "diplomacy becomes more actively coercive... there is a perception of a heightened risk of war, and the emotional climate of decision-making becomes increasingly clouded by hostility and fear."<sup>65</sup> Thus, the concern is that conflicts involving the threat or use of force are the most likely to escalate into war, inflict the most damage on the countries involved, and undermine the stability of the international system.

The distinction between low and high-intensity conflicts, however, is somewhat of a conundrum for users of the Correlates of War (COW) Militarized Interstate Disputes (MIDs) dataset.<sup>66</sup> The advantage of this measure is that it is the most commonly used and comprehensive dataset of interstate conflicts, and the use of it allows for direct comparison to other studies on militarized disputes. On the other hand, the intensity of these conflicts varies greatly. One issue for researchers is the number of disputes involving fishing boats without any real possibility of military confrontation between the two countries. For example, there were six of these disputes between the United States and Canada from 1974 to 1997. Another example of a low intensity conflict is an incident in 2003 when U.S. "warships and planes briefly violated Indonesian waters near the island of Java."<sup>67</sup> The conventional solution to this issue is a binary indicator for those conflicts that result in at least one fatality. This solution, however, restricts our understanding of many serious militarized disputes that did

 $<sup>^{64}</sup>$ Crescenzi (2005); Gartzke and Westerwinter (2016); Massoud and Magee (2012); Pevehouse (2004).  $^{65}$ Hensel (1994).

<sup>&</sup>lt;sup>66</sup>Palmer, D'Orazio, Kenwick et al. (2015).

<sup>&</sup>lt;sup>67</sup>Ibid.

not result in official death counts.

Another approach is to use a continuous variable of dispute severity given that the more severe conflicts involve the actual use of military force. The MIDs data includes a five-point level of hostility (LOH) scale for each state's highest military action in the dispute. This scale defines the hostility level as "1 is no militarized action, 2 is the threat to use force, 3 is the display of force, 4 is the use of force, and 5 is war."<sup>68</sup> The next question is how to measure dispute hostility given that each state often responded with a different level of military action. Diehl and Goertz address this problem by developing the baseline rivalry level (BRL) scale which multiplies each state's LOH and transforms the ordinal numbers into an interval scale based the relative frequency in a cumulative distribution function.<sup>69</sup> This results in a scale that ranges from 2 to 100. A similar measure is constructed for fatalities. Since most MIDs with fatalities do not list the exact number, the dataset provides six categories: 1) 1–25, 2) 26–100, 3) 101–250, 4) 251–500, 5) 501–999 6) > 999 deaths.<sup>70</sup> The midpoint of the range is used as the fatality estimate. The fatalities of both sides are estimated, transformed into natural logs, and then placed into a cumulative distribution scale. Both the LOH and fatality scale are spliced together to create the BRL, which ranges from 2 to 200. The full explanation of this procedure can be found in their book War and Peace in International Rivalry.<sup>71</sup>

### 4.2 Model Specification

This section estimates two separate models—(1) a logit model for the likelihood of a militarized dispute with fatalities and (2) a two-part model examining the probability of dispute severity—to assess the tendency towards militaristic belligerence by petrostates. I examine

<sup>&</sup>lt;sup>68</sup>Sweeney (2003, p. 737).

<sup>&</sup>lt;sup>69</sup>Diehl and Goertz (2001, p. 292)

<sup>&</sup>lt;sup>70</sup>Palmer, D'Orazio, Kenwick et al. (2015).

<sup>&</sup>lt;sup>71</sup>Diehl and Goertz (2001, p. 281–298).

all dyads in the MIDs dataset for the years 1970 - 2007. Significantly, 1970 is the period when nearly all oil companies became nationalized. It is also when the odds of a petrostate being involved in a fatal militarized dispute substantially increases. The appeal of the BRL scale is the ability to analyze the data with a linear model, however, the problem of selection bias must be addressed. Given that these analyses are restricted to conflicting states, they "do not employ a random or representative sample."<sup>72</sup> Therefore, previous studies have used a Heckman selection model to examine dispute severity. This requires a selection equation to predict the likelihood of conflict followed by a linear regression of the severity of military force used. The problem is that this model requires an exclusion restriction — the determination of variable(s) that should affect the onset of conflict, but not their severity. When these variable(s) are not theoretically justified, "the 'cure' may be worse than the 'disease'....[since] the appropriateness of a selection model and the quality of the results are highly sensitive to the identification of the selection process itself."<sup>73</sup> The lack of a theoretically specified variable(s) to identify the conflict onset equation is evident in the diversity of variables used. For example, Reed uses dyadic peace years to identify conflict onset, but not escalation.<sup>74</sup> Yet as Brandt and Schneider point out, there is no reason to believe that the number of peace years does not also affect conflict escalation. Moreover, this variable does not provide enough information to adequately distinguish the equations.<sup>75</sup> The same problems apply to Braithwaite and Lemke's use of contiguity, rivalry, and minor-minor status and Sweeney's selection of allies to distinguish conflict onset from escalation and severity.<sup>76</sup>

Perhaps the most important problem with using a Heckman selection model is that it "treats censored observations as missing, which gives rise to the sample selection problem that the model is designed to correct. Results are typically interpreted in terms of potential

 $<sup>^{72}\</sup>mbox{Braithwaite}$  and Lemke (2011, p. 114).

 $<sup>^{73}</sup>$ Brandt and Schneider (2007, p. 5).

 $<sup>^{74}</sup>$ Reed (2000).

 $<sup>^{75}</sup>Brandt$  and Schneider (2007, p. 19).

<sup>&</sup>lt;sup>76</sup>Braithwaite and Lemke (2011); Sweeney (2003).

outcomes."<sup>77</sup> This is a significant issue for conflict models for which a value of zero represents the lack of a dispute not missing data. Instead, Colin James Vance and Nolan Ritter advocate for the 2 PM model, commonly used in economics and other fields. This model also "involves the estimation of a probit and OLS regression, but is distinguished by the omission of the inverse Mills ratio from the latter regression. Results from the 2 PM are interpreted in terms of actual outcomes."<sup>78</sup> Thus, this model does not require an exclusion restriction and is more appropriate for studies interested in effects of the observed values of the independent variable. Therefore, I apply the 2 PM to test the hypothesis that the effectiveness of bilateral trade to reduce those conflicts most likely to be militarized differs between dyads with and without a petrostate.

### 4.3 Key Variables

FATAL DISPUTES: this variable is coded as a one if a military dispute with at least one fatality occurred between a dyad in a given year. The value is zero for all other dyad years.

SEVERITY OF DISPUTES: In the 2 PM, the first part of the model is a selection equation using a logit regression on the binary as to whether a MIDs event occurred or not for each dyad year. The second part is a regression of the BRL (level of hostility scale) for those dyad years with the occurrence of a MID.

PETROSTATE: is a country for which oil and gas revenues make up at least 20% of the total economy. Oil and gas revenue are from Ross (2013). GDP data are from Feenstra, Inklaar, and Timmer (2013). Table 3 provides a complete list of petrostates included in the regression analysis covering the years 1970 to 2007.<sup>79</sup>

<sup>&</sup>lt;sup>77</sup>Vance and Ritter (2014, p. 529).

<sup>&</sup>lt;sup>78</sup>Ibid, p. 529.

 $<sup>^{79}</sup>$ Strüver and Wegenast (2016, p. 8) argue that oil wealth per capita better captures the rentier mechanism linking oil to interstate conflict. The tables and graphs in the Appendix show that the result for this measure, in which a petrostate is defined by being in the top 25% tier of oil abundance per capita, is nearly identical to

BILATERAL TRADE: is the natural log of the total trade flow between a dyad.<sup>80</sup> Given that the model also includes the natural log of both states' GDP, this variable is essentially equivalent to the measurement of trade dependence (total trade divided by the higher GDP of the two nations). Additionally, it avoids confounding the effects of trade and economic size on the probability of conflict.<sup>81</sup>

the results for oil wealth/gdp. The top 25% was chosen as those countries who are 20% or more economically dependent on oil are also represent the top 25%.

<sup>&</sup>lt;sup>80</sup>All monetary values are in current US\$. Data is from Barbieri and Keshk (2012).

<sup>&</sup>lt;sup>81</sup>For a more detailed explanation see: Hegre, Oneal, and Russett (2010, p. 768), Keshk, Pollins, and Reuveny (2004, pp. 1164–1165).

### Table 3: Petrostates

Algeria	Mauritania
Angola	Mexico
Azerbaijan	Nigeria
Bahrain	Norway
Bolivia	Oman
Brunei Darussalam	Papua New Guinea
Cameroon	Qatar
Chad	Russia
Congo	Saudi Arabia
Ecuador	Senegal
Egypt	Sudan
Equatorial Guinea	Syrian Arab Republic
Gabon	Timor-Leste
Indonesia	Trinidad and Tobago
Iran	Turkmenistan
Iraq	United Arab Emirates
Kazakhstan	Uzbekistan
Kuwait	Venezuela
Libya	Yemen
Malaysia	

### 4.4 Control Variables

The included control variables are derived from the model in Hegre et al. (2010) and Oneal and Russet (2005), which is the most fully specified model, and therefore, the basis for most of the literature on the determinants of MIDs. Additionally, these variables have been shown theoretically and empirically to be significant predictors of militarized disputes. Detailed explanations for the control variables can be found in the above references.

*GDP*: As mentioned above, the natural log of each states GDP are included in the model. They are represented according to the lower and higher value. These variables also control for country size as discussed in Hegre (2009).  $^{82}$ 

*Lower and higher democracy:* are based on the Polity scores for each state.<sup>83</sup> These variables control for the democratic peace and the research suggesting that "democracies and autocracies are particularly likely to fight one another."<sup>84</sup>

The following variables are included to control for the balance of power theory of conflict.

*Probability of Winning* and *National Capacity:* are both based on Composite Index of National Capacity (CINC) score (version 4.0).<sup>85</sup> This index attempts to capture a nation's capacity for military conflict through measurements of a state's iron and steel production, military expenditures, military personnel, primary energy consumption, total population, and urban population. The probability of winning is the larger CINC value divided by the sum of both states' scores. This provides an indicator of the balance of power between the states as "conflict should be less likely when capabilities are closer to equal."<sup>86</sup> The model also includes the natural log of the higher CINC score, because "the larger state is the weak

<sup>&</sup>lt;sup>82</sup>Data are from Feenstra, Inklaar, and Timmer (2013), Maddison (2010).

<sup>&</sup>lt;sup>83</sup>Marshall and Jaggers (2002).

<sup>&</sup>lt;sup>84</sup>Oneal and Russett (2005, p. 298).

 $<sup>^{85}</sup>$ Singer (1988).

 $<sup>^{86}</sup>$ Bennett and Stam (2000, p. 669).

link in the chain of peaceful dyadic relations [as] it is less constrained in projecting military power."<sup>87</sup>

*Contiguity:* is a dichotomous indicator of whether the states in a dyad share a common border.<sup>88</sup> Shared borders greatly increase the propensity towards conflict.

*Distance:* is the natural log of the distance between the capitals of both countries. This value accounts for the transportation costs of projecting military power further from home as well as the degree of political relevance between pairs of states.<sup>89</sup>

Alliances: denotes whether the states have at least one formal alliance.<sup>90</sup>

Additionally, temporal dependence is adjusted for with a cubic spline for peace years as described in Beck et al. (1998). These coefficients are not reported in the results below.

### 4.5 Results

### 4.5.1 Militarized Disputes with Fatalities

Table 4 reports the logit coefficients for the probability of a militarized dispute with fatalities. The results of the control variables are as theoretically expected. While neither bilateral trade or Petrostate dyads are significant on their own in Equations 1 and 2, they are in the expected directions. In Equation 3 the interaction coefficient for bilateral trade and petrostate dyads is statistically significant, however, this value is insufficient information to determine if there is a substantively meaningful interaction among the independent variables.<sup>91</sup> One method to

<sup>&</sup>lt;sup>87</sup>Hegre, Oneal, and Russett (2010, p. 768).

<sup>&</sup>lt;sup>88</sup>Stinnett, Tir, Diehl et al. (2002).

<sup>&</sup>lt;sup>89</sup>Hegre, Oneal, and Russett (2010, p. 766).

 $<sup>^{90}</sup>$ Gibler and Sarkees (2004).

<sup>&</sup>lt;sup>91</sup>Berry, DeMeritt, and Esarey (2010, p. 257).

determine the significance and substantiveness of the interaction is to plot "how the marginal effect of one variable on Pr(Y) varies with the value of another variable."<sup>92</sup>

Figure 1 shows that the marginal effect of bilateral trade on the probability of a militarized dispute with fatalities is substantial for dyads without a petrostate, while having no effect on interstate relations that include at least one oil dependent country.<sup>93</sup> These separate effects can also be seen in Figure 2 which displays the different predictive margins for non-petrostate and petrostate dyads at distinct levels of bilateral trade.

<sup>&</sup>lt;sup>92</sup>Ibid, p. 261.

 $<sup>^{93}</sup>$ Although these effects appear quite small, they are substantively important given the rarity of a fatal militarized dispute for all dyads. For this sample there were 449 fatal conflicts out of 269,250 observations.

	(1)	(2)	(3)
Bilateral Trade <sub>ln</sub>	-0.062	-0.066	-0.129
	(0.042)	(0.041)	(0.042)
Oil Dependent Dyads	· · · ·	0.181	-0.41
		(0.217)	(0.258)
Bilateral Trade <sub>ln</sub> * Oil Dependent Dyads			0.169
			(0.056)
Smaller $GDP_{ln}$	0.037	0.030	0.052
	(0.070)	(0.070)	(0.070)
Higher $GDP_{ln}$	0.081	0.078	0.077
	(0.121)	(0.121)	(0.117)
Lower Democracy	$-0.117^{***}$	$-0.113^{***}$	-0.109*
	(0.023)	(0.022)	(0.021)
Higher Democracy	$0.031^{*}$	$0.035^{*}$	0.031
	(0.013)	(0.014)	(0.014)
Higher $Capability_{ln}$	$0.659^{***}$	$0.682^{***}$	$0.688^{*}$
	(0.117)	(0.117)	(0.113)
Probability of Winning	-3.901***	-4.020***	-4.018*
	(0.865)	(0.880)	(0.870)
Contiguity	1.904***	1.928***	$1.867^{*}$
	(0.307)	(0.298)	(0.295)
Distance <sub>ln</sub>	-0.529***	-0.534***	-0.583*
4.11.	(0.107)	(0.109)	(0.111
Alliances	0.476	0.454	0.451
	(0.262)	(0.263)	(0.264)
N	241603	241603	24160
Dyads	11016	11016	11016
Log-likelihood	-1388.958	-1388.243	-1380.5

Clustered standard errors in parentheses

Omitted: peace years and splines

All Dyads 1970-2007

\* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

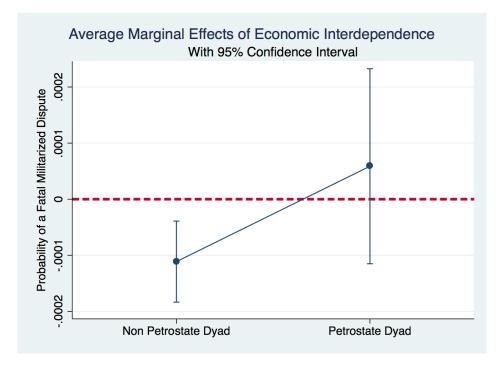


Figure 1: Marginal Effects

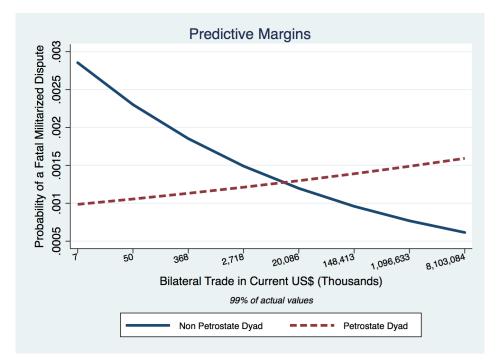


Figure 2: Predictive Margins

### 4.5.2 Hostility Level of Militarized Disputes

The results of the 2 PM are reported in Table 5. Once again, Equation 1 is the standard commercial peace argument. Interestingly, bilateral trade appears to have no effect on the onset of conflict, but significantly reduces the severity of the military force used to resolve the dispute. This result echoes other findings suggesting that trade may increase low level disputes but reduce violent militarized conflict.<sup>94</sup> In Equation 2, Petrostate Dyads are associated with more severe conflict. The interaction of trade and petrostate dyads in Equation 3 is not quite significant in the regression portion of the model. Figure 3, however, examines the marginal effects of this interaction and finds that bilateral trade has a significant effect on the hostility level of the conflict for non-petrostate dyads while being absent in oil dependent dyads. Figure 4 displays the predictive margins petrostates and their counterparts.

<sup>&</sup>lt;sup>94</sup>See for example, Crescenzi (2005); Gartzke and Westerwinter (2016); Massoud and Magee (2012); Pevehouse (2004).

Table 5:	Table 5: Severity Level of Militarized Disputes         (1)	el of Militar	rized Disput	es	C	
	Logit	$^{\prime}$ Regress	Logit	(2) Regress	u Logit	Regress
Bilateral Trade <sub>ln</sub>	0.003	-2.974**	0.004	-3.079**	-0.035	$-3.190^{**}$
	(0.024)	(1.011)	(0.024)	(0.976)	(0.027)	(0.974)
Oil Dependent Dyads			-0.091	$9.198^{*}$	$-0.564^{**}$	7.709
			(0.117)	(4.484)	(0.175)	(6.899)
Bilateral Trade <sub>ln</sub> * Oil Dependent Dyads					$0.117^{***}$	0.329
					(0.032)	(1.274)
$Smaller GDP_{ln}$	0.047	-2.340	0.051	-2.751	0.068	-2.681
	(0.046)	(1.687)	(0.047)	(1.720)	(0.047)	(1.684)
$ m Higher~GDP_{ m in}$	0.013	-0.934	0.016	-1.327	0.021	-1.329
	(0.066)	(2.534)	(0.066)	(2.452)	(0.065)	(2.450)
Lower Democracy	-0.073***	-0.757	-0.074***	-0.684	-0.074***	-0.688
	(0.010)	(0.390)	(0.010)	(0.373)	(0.010)	(0.375)
Higher Democracy	0.014	0.374	0.013	0.539	0.010	0.528
	(0.009)	(0.331)	(0.009)	(0.337)	(0.009)	(0.340)
Higher Capability <sub>In</sub>	$0.476^{***}$	6.991	$0.467^{***}$	7.583	$0.466^{***}$	7.580
	(0.063)	(4.361)	(0.064)	(4.319)	(0.064)	(4.318)
Probability of Winning	$-2.390^{***}$	-59.783**	$-2.341^{***}$	-64.277***	-2.293***	$-63.760^{**}$
	(0.458)	(19.617)	(0.461)	(19.457)	(0.456)	(19.644)
Contiguity	$1.754^{***}$	-5.028	$1.748^{***}$	-4.675	$1.712^{***}$	-4.625
	(0.180)	(5.155)	(0.179)	(5.112)	(0.181)	(5.121)
$\mathrm{Distance_{ln}}$	$-0.351^{***}$	-0.923	$-0.349^{***}$	-0.868	$-0.376^{***}$	-0.894
	(0.067)	(2.615)	(0.066)	(2.685)	(0.066)	(2.676)
Alliances	$0.448^{**}$	7.430	$0.458^{***}$	6.911	$0.463^{***}$	6.937
	(0.138)	(4.630)	(0.137)	(4.802)	(0.139)	(4.789)
N	241603		241603		241603	
Log-likelihood	-1.03e+04		-1.03e+04		-1.03e+04	
Clustered standard errors in parentheses						
Omitted: peace years and splines						
All Dyads 1970-2007						
* $p < 0.05$ , ** $p < 0.01$ , *** $p < 0.001$						

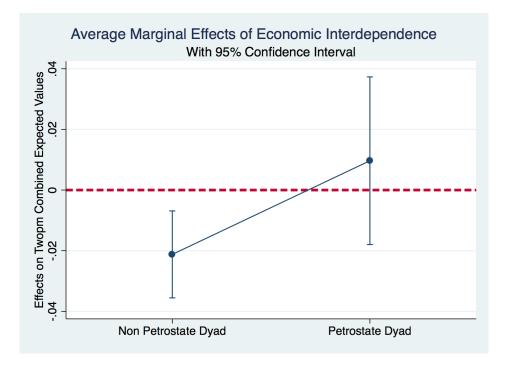


Figure 3: Marginal Effects

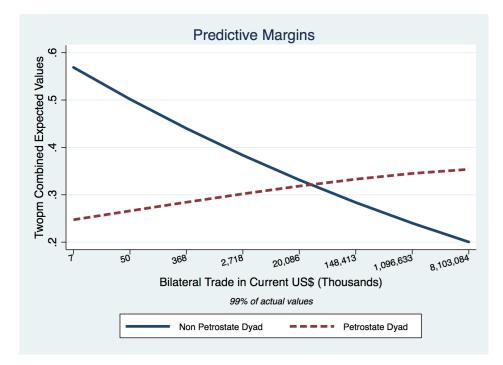


Figure 4: Predictive Margins

## 4.5.3 Discussion of results

Both models demonstrate that economic interdependence reduces the scale of military force used to resolve interstate disputes for dyads without a petrostate, while having no effect on petrostate dyads. This is consistent with the hypothesis that petrostates are more willing to use military force because they are unconstrained by the business community with financial interests in the peaceful resolution of conflict. The variation between petrostate and nonpetrostate dyads also strengthens support of a multilevel framework for the commercial peace which incorporates the degree of business influence on domestic policymaking within the interstate bargaining process.

These quantitative analyses give credence to the theory that the military bellicosity of petrostates is a result of the natural resource curse, which reduces the size and influence of the private sector. Without these economic constraints, petrostates are more likely than their counterparts to make policy decisions that harm the financial interests of their domestic businesses. The following case study on Venezuela and its rivalry with Colombia provides an illustrative example of this hypothesized causal process by demonstrating the varying effectiveness of business influence on foreign policy.

# 5 Venezuela as a Petrostate

After narrowly avoiding war in the late 1980s over a still unresolved maritime border dispute, the growth of a mutually beneficial trading relationship between Colombia and Venezuela throughout the 1990s and early 2000s seemed to result in a stable peace between these longstanding rivals. While economic interdependence did not reduce the frequency of border disputes, it did incentivize non-militarized resolutions of these conflicts. This cooperation ended due to three separate militarized incidents in 2008, 2009, and 2010, which had both countries once again preparing for a potential war with their neighbor. In its most simplistic iteration, this is a clear failure of the commercial peace thesis. The differing levels of business power in both countries, however, provides an opportunity to examine how the domestic level policy process impacts the effectiveness of economic interdependence to reduce the likelihood of interstate conflict. Moreover, the reduction of business power in Venezuela's petrostate illustrates the pathologies of oil dependence on the development of the private sector. The resulting lack of constraining business interests explains why petrostates have an increased willingness to respond to interstate disputes with military force.

## 5.1 Business and the State

### 5.1.1 Colombia

The Colombian political economy is known for its strong ties between business elites and the state. This relationship is built on personal networks, the revolving door between high-level government positions and employment in the private sector, and strong business associations. Additionally, the institutionalized structure of policymaking in Colombia requires "extensive consultation among party factions and with the private sector interest groups that are closely tied in with them."<sup>95</sup> This point is echoed in Schneider, writing that "by the 1970s, economic policy makers usually announced new policy initiatives in assemblies of major business associations rather than in Congress."<sup>96</sup> This integration extends beyond economics into security interests as well. For example, President Uribe was only able to garner support from business elites for a new security tax through the creation of a joint commission with business representatives that would have "strict oversight of expenditures" to ensure that the new revenue stream was spent effectively on security measures.<sup>97</sup> Inter-

<sup>&</sup>lt;sup>95</sup>Bushnell (1993, p. 275- 6).

<sup>&</sup>lt;sup>96</sup>Schneider (2004, p 148).

<sup>&</sup>lt;sup>97</sup>Flores-Macías (2013, p. 489–490).

views with former and current Defense Department officials confirmed the importance of formal and informal meetings with the business community.<sup>98</sup> Overall, there appears to be a consensus of a generally harmonious and institutionalized relationship between economic interests and state policy in Colombia.

#### 5.1.2 Venezuela

The oil industry in Venezuela has profoundly shaped the nation's economics, politics, and civil society. Venezuela's economic dependence on oil revenues typifies how the natural resource curse leads to a classic rentier state that deprives the private sector of leverage in policymaking. As the Dutch Disease predicts, the expansion of oil in the 1920s led to a reduction of the agricultural and manufacturing industries. Along with the overvaluation of the currency, this resulted in "traders [losing] their profitable export business and [having] to rely on imports, using the state as the source of foreign exchange."<sup>99</sup> Thus, as far back as the 1920s, Venezuela's political economy was defined as one in which "the state had the resources to provide something for everyone, and the private sector had ample access to the flow of benefits."<sup>100</sup>

It was the oil boom of the 1970s, however, that brought about the resource curse of abundance. Figure 5 shows that dependence on oil doubled during this period. As a result, the power of the executive grew at the expense of Congress, political parties, and the central business association—Fedecámaras, while "at the same time there was a growth in individual and personalistic relations with the state."<sup>101</sup> Business success, therefore, was not based on market competition, but rather on establishing relationships to the government to obtain access to state resources. Given that "profits were dependent on appropriate decisions by

 <sup>&</sup>lt;sup>98</sup>Author interviews with Luis Fernando Ramírez, Bernardo Ortiz, and Juan Guillermo Castro, 2015.
 <sup>99</sup>Thorp and Durand (1997, p. 239).

<sup>&</sup>lt;sup>100</sup>Ibid, p. 230.

 $<sup>^{101}</sup>$ Ibid.

bureaucrats or party leaders... businessmen became commensurate lobbyists."<sup>102</sup> Gabriela Febres-Cordero, former Venezuelan Minister of Trade from 1989–1992, described the business community as beggars, needing the state to survive.<sup>103</sup> The result was a state that was essentially autonomous through its direct accrual of oil revenue, thereby severely limiting the influence of the business community on government policymaking.

The Presidency of Hugo Chávez further weakened the power of business in both the private and public sectors, including the state-owned oil company, PDVSA. Constitutional reforms expanded the powers of the president, eliminated the Senate, and expanded the government's role in the economy.<sup>104</sup> In response, the workers and managers of PDVSA held a three month strike in 2002. Instead of leading to political change, however, Chávez fired "nearly 60 percent of the PDVSA personnel, including most managers, and assigned control of the oil industry to the military."<sup>105</sup> Loyalty to Chávez became the chief criteria for employment. With this victory Chávez had completely eliminated the private sector from the regime's "real selectorate" — "the group that actually chooses the leader."<sup>106</sup>

<sup>&</sup>lt;sup>102</sup>Ortiz (2006, p. 76).

 $<sup>^{103}</sup>$ Interview with author, 2015.

 $<sup>^{104}</sup>$ Ortiz (2006).

<sup>&</sup>lt;sup>105</sup>Corrales and Penfold-Becerra (2015, Kindle Locations 603–604).

 $<sup>^{106}\</sup>mathrm{Bueno}$  de Mesquita and Smith (2011, p. 5).

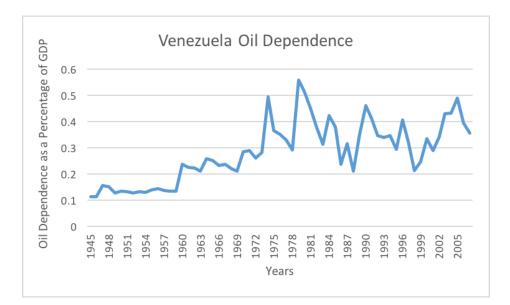


Figure 5: Venezuela

## 5.2 Overview of the Colombia - Venezuela Rivalry

Since the dissolution of Gran Colombia in 1830, Colombia and Venezuela have one of Latin America's most active militarized rivalries. Accordingly, of the areas in Latin America that "are particularly notable for potential sources of conflict," David Mares argues that the Colombia - Venezuela rivalry is the most likely to militarize.<sup>107</sup> The primary issue of dispute has been about territory. Colombia and Venezuela share a land border that spans 1,378 miles. While the demarcation is settled on paper, many areas of this territory are very rural and receive few services from either state's government. In these places, it is often not clear to locals or each nation's military where the actual border between Colombia and Venezuela lay. The journalist Laura Gils described this area as a type of "third country" in which the families who live there cannot find the demarkation line or determine if they are Colombian or Venezuelan.<sup>108</sup> <sup>109</sup>

Tensions along the land border are often due to the ease with which drug traffickers and guerrillas cross the border freely to avoid capture and arrest. Interstate conflicts regarding the land-based territory have largely been based on the right of "hot pursuit," meaning that the military and national police may cross the border when chasing criminals, particularly organized crime like drug trafficking. Both nations have violated each other's territorial sovereignty in this manner.

The lack of an official agreement to demarcate the Colombia - Venezuela maritime border has also been a source of conflict. The issue gained salience in the 1960s with the "discovery of possibly very substantial offshore oil fields in precisely those maritime zones under dispute."<sup>110</sup> Tensions substantially increased in the 1980s. Like the rest of Latin America,

 $<sup>^{107}</sup>$ Mares (2012, p. 90).

 $<sup>^{108}</sup>$ Interview with author, 2015.

<sup>&</sup>lt;sup>109</sup>Interestingly, there is some evidence to suggest that current President Nicolás Maduro, who unusual for a Venezuelan lacks a birth certificate, may have been born in the Colombian border town of Cúcuta. Lansberg-Rodríguez (2015).

 $<sup>^{110}</sup>$ George (1988, p. 143).

both countries were experiencing economic adversity during this decade. Therefore, both the Colombian and Venezuelan governments were eager to develop this potential new source of economic wealth from petroleum deposits in the Gulf. In 1987, the navies of both countries faced off against each other, in what has come to be known as the Caldas incident. War was narrowly averted through mediation by the Organization of American States (OAS). Both land and maritime borders remain a source of friction.

## 5.3 Conflict and Economic Interdependence

When the Caldas incident occurred in 1987, Colombia and Venezuela had virtually no trading relationship. What did exist, consisted largely of Colombian imports of Venezuelan oil. As the 1990s dawned, however, both countries participated in the Latin American shift towards economic liberalization. In doing so, the governments realized that their shared border gave them a comparative advantage in developing their industrial sectors with the goal of decreasing their economic dependence on commodities.<sup>111</sup> During this period of growing economic interdependence, territorial disputes remained a constant irritant. Instead of responding with military threats and low-level violence, however, the importance of their mutual trading relationship incentivized the governments to find diplomatic means of resolving their disputes. Venezuela's petro-politics, however, made this an unstable peace and illustrates why dyads with a petrostate are less likely to be affected by economic interdependence impact on reducing militarized disputes.

As part of Venezuela's economic liberalization, President Carlos Andrés Pérez sought to move away from rentierism and towards a market-based model. This attempt proved disastrous due to the lack of a consultative mechanism between the government and the private sector. The exclusion of business interests from the formulation of Venezuela's economic policy

<sup>&</sup>lt;sup>111</sup>In Colombia these commodities have primarily been agricultural, including coffee and flowers.

guaranteed its failure. Febres-Cordero explained that the lack of effective consultation with the private sector resulted in the perception that the new system would just give greater privileges to those already in power.<sup>112</sup> The business community, already weak in terms of cohesiveness, fractured further as groups vied "for control over raw materials, financing, and distribution channels."<sup>113</sup> This failure not only led to the rise of Hugo Chávez, but reflected a system in which business had no means to protect its meager influence.

## 5.4 The Chavez Years

#### $5.4.1 \quad 2001$

Initially, Chávez pursued a pragmatic economic foreign policy, prioritizing trade with Colombia, particularly when ideologic tensions arose.<sup>114</sup> This is illustrated in the 2001 incident involving Jose Maria Ballestas, an ELN member wanted for the hijacking of a Colombian commercial airliner in 1999. On February 13, 2001, Venezuelan and Colombian police made a joint arrest of Ballestas in Caracas. It was expected that "two days later, on Feb. 15, Mr. Ballestas was to have been handed over at the Caracas airport to two Colombian agents, who were to have transported him there."<sup>115</sup> Therefore, it was with genuine surprise when just moments before Ballestas was to be flown to Colombia, "Venezuela's interior minister and Mr. Chavez's closest political adviser, Luis Miquilena, ordered the guerrilla's release, arguing that he had requested asylum."<sup>116</sup>

The Colombian government grew increasingly frustrated when Venezuelan officials denied knowledge of Ballestas's presence in Venezuela, forcing Colombia's defense minister, Luis

 $<sup>^{112} \</sup>mathrm{Interview}$  with author, 2015.

<sup>&</sup>lt;sup>113</sup>Di John (2010, p. 120).

 $<sup>^{114}</sup>$ Campello (2011).

 $<sup>^{115}</sup>$ Forero (2001).

 $<sup>^{116}</sup>$ Webb-Vidal (2005).

Ramírez, to release a video of the guerrilla's arrest. In April, Venezuela rearrested Ballestas, charging him "with forging documents and assuming a false identity."<sup>117</sup> After months of unanswered phone calls from Colombia's Ministry of Defense, Venezuela finally extradited Ballestas in December.<sup>118</sup>

Although the incident raised tensions between Colombia and Venezuela, trade remained the top priority. In March, just days after Colombia filed a formal extradition request for Ballestas, Colombian President Pastrana and Chávez held a bilateral meeting to discuss commercial issues. Both leaders stated that the "Ballestas" case has been overcome. At the meeting, Pastrana "stressed the significance of the binational economy, which, according to him, had increased by more than 30 per cent. He added that in this regard, this figure is expected to exceed 40 per cent this year."<sup>119</sup>

#### $5.4.2 \quad 2005$

Chávez's victory over PDFSA and in the 2004 recall referendum was an important milestone in consolidating his power. Upon doing so, he undertook a complete "overhaul of the Venezuelan Ministry of Foreign Affairs."<sup>120</sup>. This was one more indicator that "the nature of policy-making had been dramatically altered. The comfortable elite accommodation of the Punto Fijo years has been swept aside and replaced by a system in which the state and especially the president were increasingly the focal points of policy-making and where countervailing forces in society were greatly weakened."<sup>121</sup>

The consequences of this shift can be seen most clearly by comparing the arrests of Jose Maria Ballestas and Rodrigo Granda. In December 2004, Rodrigo Granda, a senior member

<sup>&</sup>lt;sup>117</sup>BBC World Service (2001).

<sup>&</sup>lt;sup>118</sup>These events were confirmed in an interview between the author and Luis Fernando Ramírez, 2015. <sup>119</sup>Sanchez (2001).

 $<sup>^{120}\</sup>mathrm{McCarthy-Jones}$  and Turner (2011, p. 557)

 $<sup>^{121}</sup>$ Ibid.

of FARC, was captured in Caracas and then "transported to Colombia, and arrested by Colombian officials."<sup>122</sup> Venezuela declared this incident to be a violation of its sovereignty and of international law, while Colombia accused Venezuela of "knowingly harboring Colombian guerrillas."<sup>123</sup> With the commercial sector fully excluded from policy at this point in his presidency, Chávez took the unprecedented action of suspending bilateral trade and business accords in January 15, 2005, demanding an apology from the Colombian government.

Initially, Colombian President, Álvaro Uribe insisted that the government had not been involved, rather "Mr. Granda was picked up inside Colombia and that his capture was the result of the offer of a monetary reward."<sup>124</sup> The suspension of trade and border closure immediately led to a sharp increase in petroleum prices in Colombia and shortages of foods and essential goods in Venezuela.<sup>125</sup> The economic shutdown forced Uribe to respond to "growing protests from his own commercial supporters" by conceding to Venezuelan's demand for an official apology.<sup>126</sup> Trade was restored on January 28th. A bilateral meeting on February 15th between the two leaders appeared to heal the rift in their bilateral relations.

The Colombian government had no reason to expect that the Granda incident would not be solved diplomatically as had previous disputes. The political manipulation of trade can only come from a government that is not constrained by business interests. The suspension of trade did not simply punish Colombia, but it also put severe stress on the Venezuelan economy. The strength of the power of business in Colombia is evident in the fact that Uribe conceded with an apology within two weeks of the border closure. He did so in response to strong pressure from business elites, many who were calling and speaking directly to Uribe and his Foreign Minister, Jaime Bermudez.<sup>127</sup> While the fact that Uribe so quickly capitulated made the tactic initially successful, it also fundamentally changed the relationship

 $<sup>^{122}</sup>Randall$  (2011, p. 148).

 $<sup>^{123}</sup>$ Ibid.

 $<sup>^{124}</sup>$ Webb-Vidal (2005).

 $<sup>^{125}\</sup>mathrm{BBC}$  Monitoring Latin America (2005).

 $<sup>^{126}{\</sup>rm Raby}$  (2011, p. 166).

 $<sup>^{127}</sup>$  Interview with author, 2015.

from one of mutual benefit to a tool of political coercion.

### 5.4.3 From Economic Interdependence to The Possiblity of War

The two leaders were not always antagonists, and at times it seemed that on a personal level they related well to each other.<sup>128</sup> On August 30, 2007, Uribe invited Chávez to act as a mediator to the FARC in order to release several hostages that had been taken between 2001–2003. Regrettably, this gesture renewed bilateral tensions as Uribe became increasingly suspicious that Chávez was possibly providing financial and other support to the FARC. Uribe terminated Chávez's role in the negotiations on November 21st.<sup>129</sup> This event was a prelude to a new era of conflict in which the risk of war became a genuine concern.

On March 1, 2008, the Colombian military crossed the border of Ecuador, targeting a FARC camp, in which Colombian intelligence had just placed one of its highest-ranking members, Raúl Reyes. The pre-dawn raid succeeded in killing Reyes and 24 others.<sup>130</sup> Unsurprisingly, Ecuador reacted hostilely to the event occurring within its territory. Venezuela's militarized response was unexpected, however, as Chávez ordered the mobilization of 15,000 Venezuelan troops, sending "10 battalions and tanks to the Colombian border,"<sup>131</sup> He also threatened to cut off all commerce, and trade slowed along the borders as Chávez began blocking Colombian imports. For its part, Colombia did not respond to the military provocation and attempted to diffuse the situation. The leaders of Venezuela, Colombia, and Ecuador met on March 7th at a "summit in the Dominican Republic in an effort to resolve the dispute before it could escalate further."<sup>132</sup> While war was averted at this time, trade between Colombia and Venezuela was not fully restored until July "when Uribe and Chávez met

<sup>&</sup>lt;sup>128</sup>Author interview with Laura Gil, 2015.

 $<sup>^{129}</sup>$ Mander and Lapper (2007).

 $<sup>^{130}</sup>$ Marcella (2008).

 $<sup>^{131}</sup>$ Ibid, p. 18.

<sup>&</sup>lt;sup>132</sup>Randall (2011, p. 151).

in Paraguaná, Venezuela.<sup>133</sup> Analysts interpreted the eventual crisis resolution as being "driven by practical economic considerations" given "Colombian-Venezuelan bilateral trade was valued at some \$6 billion per annum.<sup>134</sup> Future crises, however, would challenge this assumption.

Hendrix cites this incident to support his argument that higher oil prices emboldens the aggressive tendencies of petrostates' leaders.<sup>135</sup> In actuality, Chávez's weaponization of trade coincided with an economy that was beginning to falter. Although oil would not hit its historical peak until June 2008, economists were concerned over increasing inflation in Venezuela and shortages of basic food items.<sup>136</sup> These shortages worsened with Chávez's trade blockade given that Colombia was its top source of foodstuffs.

A new crisis emerged in July 2009 over leaked details of a U.S.-Colombia Defense Cooperation Agreement, which would have given U.S. armed forces access to at least three Colombian military bases. Chávez responded by breaking off commercial and economic relations as well as expropriating the assets of Colombian businesses operating in Venezuela.<sup>137</sup> Chávez's reaction seemed to be a repetition of previous squabbles, and Colombian businesses, as well as most economic analysts, expected that trade would resume within weeks. The president of one of Colombia's most influential business association, ANDI, Luis Carlos Villegas, predicted "that although exports will fall, they will remain 'high' because of the two countries' economic interdependence."<sup>138</sup>

Rather than a restoration of the trading relationship, however, tensions between the two countries continued to climb. In October, the kidnapping of 12 youths playing soccer "in

<sup>133</sup>Ibid.

<sup>&</sup>lt;sup>134</sup>Ibid.

 $<sup>^{135}</sup>$ Hendrix (2015).

 $<sup>^{136}</sup>$ Reuters (2008).

<sup>&</sup>lt;sup>137</sup>In 2015, the Colombians I spoke with were still angry about the expropriation of Exito, joint French-Colombian supermarket chain.

<sup>&</sup>lt;sup>138</sup>The Economist (2009).

the Venezuelan State of Tachira and the subsequent massacre of 11 of them, including nine Colombians" inflamed emotions on both sides.<sup>139</sup> Venezuela followed this incident up with a "protest note to the Colombian Embassy in Caracas," and revived a "theory about a plot to assassinate President Hugo Chavez."<sup>140</sup> The situation began to be described by some, such as former Colombian President Ernesto Samper, as a "state of pre-war."<sup>141</sup> Certainly, events seemed to be headed in that direction. In November, Venezuelan soldiers blew up two pedestrian bridges.<sup>142</sup> At a public ceremony during the same month, Chávez instructed his generals to "prepare for war" against Colombia.<sup>143</sup> A report in the Colombian weekly Cambio noted that despite the 1987 Caldas incident and numerous armed clashes over the maritime and land border, "Prepare for war,' had never previously been said in public by any Venezuelan or Colombian president."<sup>144</sup> Unsurprisingly, Colombia's armed forces also began assessing scenarios for a possible attack from Venezuela.<sup>145</sup> Similar clashes continued until Uribe's successor, Juan Manuel Santos, took office in August 2010. Both countries suffered from the breakdown in economic interdependence. Colombia estimated that 170,000 jobs were lost as a result, while basic food shortages substantially worsened in Venezuela.<sup>146</sup> Although trade was officially restored in late 2010, bilateral trade continued to decline due to the worsening Venezuelan economy. For example, one large obstacle to the resumption of economic ties was the \$800 million owed to Colombian exporters for unpaid products.<sup>147</sup>

This account illustrates how the extent of business influence on policymaking impacts the effectiveness of economic ties to reduce militarized conflict. By substantiating the link between oil dependence and a smaller and less influential private sector, this case study establishes that the lack of business power is a signifiant cause of petro-aggression. In Venezuela, the

 $^{143}$ Pardo (2009).

<sup>&</sup>lt;sup>139</sup>BBC Monitoring Latin America (2009b).

 $<sup>^{140}</sup>$ Ibid.

 $<sup>^{141}</sup>$ Ibid.

 $<sup>^{142}</sup>$ Hamer (2009).

<sup>&</sup>lt;sup>144</sup>BBC Monitoring Latin America (2009c).

 $<sup>^{145}\</sup>mathrm{BBC}$  Monitoring Latin America (2009a).

 $<sup>^{146}</sup>$ Wells (2009).

 $<sup>^{147}</sup>$ Reuters (2010).

Dutch Disease and the rentier politics of the resource curse resulted in the subordination of the interests of business to the state. In contrast to its neighbor, economic elites, who were greatly profiting from bilateral ties, repeatedly pressured the Colombian government to restore and improve relations when interstate disputes arose. In Venezuela, however, businesses benefiting from trade with Colombia had no ability to constrain Chávez from militarizing conflict, even though the results were as harmful to the Venezuelan economy as the effect on Colombian businesses. Thus, the rivalry once again created the possibility of war between Colombia and Venezuela.

## 6 Conclusion

Petrostates are a major source of international instability. In general, most international relations analyses assume that the higher likelihood of participation in militarized conflict are due to oil dependent states being targeted for their petroleum resources. The emergent literature on petro-aggression, however, has demonstrated that oil dependent states are more likely to initiate conflict rather than be the recipient of their neighbors' aggression. Despite the persistent classification of many of these conflicts as "oil wars," disputes over territory are less likely to include those areas with access to petroleum deposits. Yet, the fact remains that petrostates are nearly twice as likely as their counterparts to be involved in a militarized dispute with fatalities. Given the consequences of these conflicts, there is an urgent need to understand why petrostates are more willing to use military force to resolve interstate disputes.

I argue that an important cause of petro-aggression is that they are impervious to the pacific effects of economic interdependence. The impact of economic ties on the resolution of bilateral disputes is dependent on the degree that business interest are included in the policymaking process. As a result of the natural resource curse, the private sector is smaller

and less influential in petrostates. Therefore, oil dependent states are not constrained by the financial interests of the business community on the use of military force. As a result, petrostate dyads are more likely to militarize their disputes.

The empirical analyses support this theory. Operationalizing the size of the private sector, I demonstrate that it is substantially smaller in petrostates. Given that a large portion of the disputes in the MIDs dataset consist of conflicts that are unreciprocated, such as those that involve fishing boats in unsettled maritime borders, or do not actually entail the use of military force I estimate two different models to capture truly militarized disputes. This threshold is significant because these conflicts contain the likelihood of escalating to war. In the model of fatal militarized disputes, I find that while economic interdependence significantly reduces the likelihood of these conflicts for non-petrostate dyads, it has no effect for dyads that include at least one oil dependent state. Not all militarized disputes result in at least one fatality, however, therefore I also estimate a two-part model of conflict severity (the more severe conflicts being more likely to involve military force) which similarly finds that bilateral trade reduced the possibility and severity of military force used in a conflict only for non-petrostate dyads. Finally, the Colombia - Venezuela case study illustrates the causal process of business power in policymaking and contrasts the influence of these interests on policy decisions between non-petrostates and petrostates when an issue of dispute arises.

Like most studies in political science, the conclusions reached in this paper are limited by the availability of data. There is a surprising lack of research attempting to measure private sector size. The data for the measures used in this paper are still quite restricted regarding the countries and years for which they can be obtained. More difficult is determining a generalizable measure of business power. As Karcher and Schneider point out "most of the areas of business influence lack easily measurable indicators."<sup>148</sup> Because "business's political engagement often takes place out of the public eye," research on business power

 $<sup>^{148}\</sup>mathrm{Karcher}$  and Schneider (2012, p. 280).

relies "on extensive fieldwork, hundreds of interviews, and documents unavailable outside the studied countries."<sup>149</sup> Therefore, in order to make the best possible use of existing data, I test my argument through statistic models relating the size of the private sector to the theoretical expectations of the business influence in petrostates. Additionally, the case study of Colombia - Venezuela directly assesses the impact of oil dependence on the role of economic interests in formulating policy responses to these rivals frequent disputes.

The dangers of aggressive petrostates are all too apparent when considering the examples of Venezuela in the late 2000s and Russia's conflict with the Ukraine. This paper contributes to the pressing need to understand the bellicosity of petrostates by providing a theory that explains how the smaller private sector in oil dependent states reduces the economic constraints on using military force. Consequentially, petrostates are not affected by the incentives of economic integration that increases the likelihood of pacific conflict resolution. These findings should help policymakers react to current and prospective conflicts, as well as develop strategies to encourage longer term stability and cooperation in the international system.

<sup>&</sup>lt;sup>149</sup>Fairfield (2015, p. 4).

# 7 APPENDIX

The following tables and graphs duplicate the quantitative analysis, substituting the original definition of a petrostate as oil revenue as a percentage of GDP to one that is based on oil revenue per capita.

Table 6: Fatal Militarized Disputes	
	(1)
Bilateral Trade <sub>ln</sub>	-0.133**
	(0.043)
Oil/Cap Dependent Dyads	-0.117
	(0.231)
Bilateral Trade <sub>ln</sub> $*$ Oil/Cap Dependent Dyads	$0.134^{**}$
	(0.043)
Smaller $GDP_{ln}$	0.040
	(0.071)
Higher $GDP_{ln}$	0.077
	(0.120)
Lower Democracy	-0.115***
	(0.022)
Higher Democracy	0.031*
	(0.015)
Higher Capability $_{ln}$	0.745***
	(0.116)
Probability of Winning	-4.161***
	(0.898)
Contiguity	1.637***
	(0.290)
Distance <sub>ln</sub>	-0.747***
A 11:	(0.135)
Alliances	0.317
	(0.278)
N	232100
Dyads	10597
Log-likelihood	-1327.094
Clustered standard emerg in parentheses	

 Table 6: Fatal Militarized Disputes

Clustered standard errors in parentheses Omitted: peace years and splines

All Dyads 1970-2007

\* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

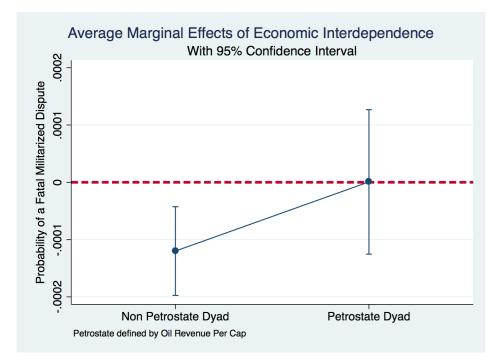


Figure 6: Marginal Effects

Table 7: Severity Level of Militarized Disputes		
	(1	L)
	Logit	Regress
Bilateral Trade <sub>ln</sub>	-0.064*	-3.224**
	(0.028)	(1.011)
Oil Dependent Dyads	-0.112	-0.592
	(0.152)	(6.034)
Bilateral Trade <sub>ln</sub> * Oil Dependent Dyads	$0.105^{***}$	0.476
	(0.027)	(1.053)
Smaller $\text{GDP}_{\text{ln}}$	0.053	-2.443
	(0.048)	(1.751)
Higher $GDP_{ln}$	0.013	-0.404
	(0.066)	(2.431)
Lower Democracy	-0.072***	-0.707
	(0.010)	(0.402)
Higher Democracy	0.017	0.291
	(0.010)	(0.362)
Higher Capability <sub>ln</sub>	$0.539^{***}$	7.377
	(0.065)	(4.290)
Probability of Winning	$-2.551^{***}$	$-63.549^{**}$
	(0.477)	(20.293)
Contiguity	$1.579^{***}$	-7.569
	(0.176)	(5.856)
Distance <sub>ln</sub>	$-0.517^{***}$	-2.899
	(0.073)	(3.515)
Alliances	$0.359^{*}$	6.753
	(0.150)	(4.955)
Ν	232100	
Log-likelihood	-9849.646	

Table 7: Severity Level of Militarized Disputes

Clustered standard errors in parentheses

Omitted: peace years and splines

All Dyads 1970-2007

\* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

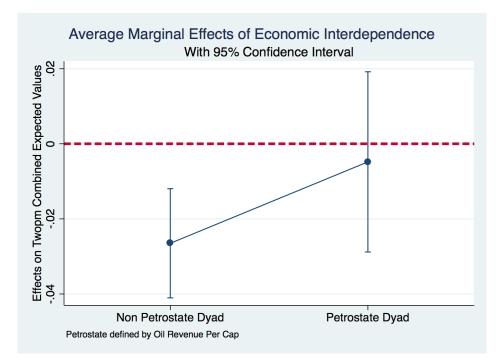


Figure 7: Marginal Effects

# References

- Anderton, Charles H, and J R Carter. 2001. The Impact of War on Trade: An Interrupted Times-Series Study. Journal of Peace Research 38 (4):445–457.
- Baird, R, and G Dixon. 2010. Business before Conflict: Does Economic InterdependenceReduce the Intensity of Rivalries? In Annual Meeting of the Southern Political ScienceAssociation. Atlanta, Georgia: Annual Meeting of the Southern Political Science ....
- Barbieri, Katherine. 1996. Economic Interdependence: A Path to Peace or a Source of Interstate Conflict? Journal of Peace Research 33 (1):29–49.

———. 2002. *The Liberal Illusion*. Does Trade Promote Peace? Ann Arbor, MI: University of Michigan Press.

- Barbieri, Katherine, and Omar M G Keshk. 2012. Correlates of War Project Trade Data Set Codebook, Version 3.0. Online: http://correlatesofwar.org.
- BBC Monitoring Latin America. 2005. Colombian Business Sector Concerned by Venezuela's Decision to Suspend Trade. Caracol Colombia .
- ———. 2009a. Colombian Armed Forces Prepare for Conflict with Venezuela. *El Espectador* .
- ----. 2009b. Tension between Venezuela and Colombia seen as worsening. *Cambio*.
- ———. 2009c. War with Venezuela "not imminent, but closer than ever". *Cambio*.
- BBC World Service. 2001. Venezuela Charges Suspected Colombian Guerrilla. BBC News .
- Bennett, D Scott, and Allan C Stam. 2000. Research Design and Estimator Choices in the Analysis of Interstate Dyads When Decisions Matter. *Journal Of Conflict Resolution* 44 (5):653–685.
- Berry, William D, Jacqueline H R DeMeritt, and Justin Esarey. 2010. Testing for Interaction in Binary Logit and Probit Models: Is a Product Term Essential? American Journal of Political Science 54 (1):248–266.
- Braithwaite, Alex, and Douglas Lemke. 2011. Unpacking Escalation. Conflict Management and Peace Science 28 (2):111–123.
- Brandt, Patrick T, and Christina J Schneider. 2007. So the Reviewer Told You to Use a Selection Model? Selection Models and the Study of International Relations. *Journal Of Conflict Resolution*.
- Bueno de Mesquita, Bruce, and Alastair Smith. 2011. The Dictator's Handbook : Why Bad Behavior Is Almost Always Good Politics. New York: PublicAffairs.

- Bushnell, David. 1993. *The Making of Modern Colombia*. A Nation in Spite of Itself. Univ of California Press.
- Bussmann, Margit. 2010. Foreign Direct Investment And Militarized International Conflict. Journal of Peace Research 47 (2):143–153.
- Campello, Daniela. 2011. The Politics of Redistribution in Less Developed Democracies: Evidence from Brazil, Ecuador, and Venezuela. In *The Great Gap Inequality and the Politics of Redistribution in Latin America*, edited by Merike Blofield.
- Caselli, Francesco, Massimo Morelli, and Dominec Rohner Rohner. 2015. The Geography of Interstate Resource Wars. *The Quarterly Journal of Economics* 130 (1):267–315.
- Colgan, Jeff D. 2010. Oil and Revolutionary Governments: Fuel for International Conflict. International Organization 64 (4).
- ———. 2013. *Petro-Aggression: When Oil Causes War*. Cambridge University Press, kindle edn.
- ———. 2014. Petro-Aggression: How Russia's Oil Makes War More Likely. *The Washington Post*.
- Corrales, Javier, and Michael Penfold-Becerra. 2015. Dragon in the Tropics: Hugo Chavez and the Political Economy of Revolution in Venezuela. Brookings Institution Press, kindle edn.
- Crescenzi, Mark J C. 2005. *Economic Interdependence And Conflict In World Politics*. Lanham: Lexington Books.
- Culpepper, Pepper D. 2011. Quiet Politics and Business Power. Corporate Control in Europe and Japan. New York, NY: Cambridge University Press.
- Dahl, Robert A. 1959. Business and Politics: A Critical Appraisal of Political Science. American Political Science Review .

- Di John, Jonathan. 2010. From Windfall to Curse?: Oil and Industrialization in Venezuela, 1920 to the Present. Penn State Press.
- Diehl, Paul F, and Gary Goertz. 2001. War And Peace In International Rivalry. University of Michigan Press.
- Dixon, Sarah. 2008. Organisational Transformation in the Russian Oil Industry. Edward Elgar Publishing.
- Dorussen, Han, and Hugh Ward. 2010. Trade Networks and the Kantian Peace. Journal of Peace Research 47 (1):29–42.
- Fairfield, Tasha. 2015. Private Wealth and Public Revenue in Latin America. Business Power and Tax Politics. Cambridge University Press.
- Feenstra, Robert C, Robert Inklaar, and Marcel Timmer. 2013. PWT 8.0-a user guide. Groningen Growth and Development Centre, University of Groningen.
- Flores-Macías, Gustavo A. 2013. Financing Security Through Elite Taxation: The Case of Colombia's ?Democratic Security Taxes? Studies in Comparative International Development 49 (4):477–500.
- Forero, Juan. 2001. Colombia in New Dispute With Venezuela Over a Missing Rebel. New York Times .
- Gartzke, Erik. 2007. The Capitalist Peace. American Journal of Political Science 51 (1):166–191.
- Gartzke, Erik, and Quan Li. 2003. Measure for Measure: Concept Operationalization and the Trade Interdependence-Conflict Debate. *Journal of Peace Research* 40 (5):553–571.
- Gartzke, Erik, Quan Li, and Charles Boehmer. 2001. Investing in the Peace: Economic Interdependence and International Conflict. *International Organization* 55 (2):391–438.

- Gartzke, Erik, and Oliver Westerwinter. 2016. The complex structure of commercial peace contrasting trade interdependence, asymmetry, and multipolarity. *Journal of Peace Research* 1–20.
- Gartzke, Erik, and Jiakun Jack Zhang. 2015. Trade and War. In *The Oxford Handbook of* the Political Economy of International Trade, 419–438. Oxford University Press.
- George, Larry N. 1988. Realism and Internationalism in the Gulf of Venezuela. Journal of Interamerican Studies and World Affairs 30 (4):139.
- Ghosn, Faten, Glenn Palmer, and Stuart A Bremer. 2004. The MID3 Data Set, 1993—2001: Procedures, Coding Rules, and Description. Conflict Management and Peace Science 21 (2):133–154.
- Gibler, Douglas M, and Meredith Reid Sarkees. 2004. Measuring Alliances: the Correlates of War Formal Interstate Alliance Dataset, 1816–2000. Journal of Peace Research 41 (2):211– 222.
- Glick, Reuven, and Alan M Taylor. 2010. Collateral damage: Trade disruption and the economic impact of war. *Review of Economics and Statistics* 92 (1):102–127.
- Haggard, Stephan, Sylvia Maxfield, and Ben Ross Schneider. 1997. Theories of Business and Business-State Relations. In *Business and the State in Developing Countries*, 36–60. Cornell University Press.
- Hamer, Ashley. 2009. Venezuelan Army Blows Up Two Bridges in Colombia. Colombia Reports .
- Hegre, Håvard, John R Oneal, and Bruce M Russett. 2010. Trade Does Promote Peace: New Simultaneous Estimates of the Reciprocal Effects of Trade and Conflict. *Journal of Peace Research* 47 (6):763–774.

- Hendrix, Cullen S. 2015. Oil prices and interstate conflict. Conflict Management and Peace Science 1–22.
- Hensel, Paul R. 1994. One Thing Leads to Another: Recurrent Militarized Disputes in Latin America, 1816-1986. Journal of Peace Research 31 (3):281–297.
- Hults, David R. 2007. Petroleos de Venezuela, SA: The right-hand man of the government. The Program on Energy and Sustainable Development.
- Karcher, Sebastian, and Ben Ross Schneider. 2012. Business Politics in Latin America. In Google Correlations: New approaches to collecting data for statistical network analysis, 273–284. Routledge.
- Karl, Terry Lynn. 2007. Oil-led development: social, political, and economic consequences. CDDRL Working Papers .
- Keshk, Omar M G, Brian M Pollins, and Rafael Reuveny. 2004. Trade Still Follows the Flag: the Primacy of Politics in a Simultaneous Model of Interdependence and Armed Conflict. *Journal of Politics* 66 (4):1155–1179.
- Kim, Nam Kyu. 2013. Testing Two Explanations of the Liberal Peace: The Opportunity Cost and Signaling Arguments. *Journal Of Conflict Resolution* 58 (5):894–919.
- Kinne, Brandon J. 2012. Multilateral Trade and Militarized Conflict: Centrality, Openness, and Asymmetry in the Global Trade Network. *The Journal of Politics* 74 (01):308–322.
- Koubi, Vally, Gabriele Spilker, Tobias Böhmelt, and Thomas Bernauer. 2014. Do Natural Resources Matter for Interstate and Intrastate Armed Conflict? *Journal of Peace Research* 51 (2):227–243.
- Lansberg-Rodríguez, Daniel. 2015. The Venezuelan President's Birther Problem. *Foreign Policy*.

- Lee, Hoon, and Sara McLaughlin Mitchell. 2012. Foreign Direct Investment and Territorial Disputes. *Journal Of Conflict Resolution* 56 (4):675–703.
- Lee, Jong-Wha, and Ju Hyun Pyun. 2016. Does Trade Integration Contribute to Peace? Review of Development Economics 20 (1):327–344.
- Lupu, Yonatan, and Vincent A Traag. 2013. Trading Communities, the Networked Structure of International Relations, and the Kantian Peace. Journal Of Conflict Resolution 57 (6):1011–1042.
- Maddison, Angus. 2010. Statistics on world population, GDP and per capita GDP, 1-2008 AD. *Historical Statistics*.
- Mander, Benedict, and Richard Lapper. 2007. Chavez puts Colombia relations in 'freezer'. *Financial Times*.
- Maoz, Zeev. 2009. The Effects of Strategic and Economic Interdependence on International Conflict Across Levels of Analysis. American Journal of Political Science 53:223–240.

Marcella, Gabriel. 2008. War Without Borders. Tech. rep.

- Mares, David R. 2012. Latin America and the Illusion of Peace. Adelphi Books.
- Marshall, Monty G, and Keith Jaggers. 2002. Polity IV Project: Political Regime Characteristics and Transitions, 1800-2002.
- Massoud, Tansa G, and Christopher S Magee. 2012. Trade and Political, Military, and Economic Relations. *Peace Economics, Peace Science, and Public Policy* 18 (1).
- McCarthy-Jones, Anthea, and Mark Turner. 2011. Explaining radical policy change: the case of Venezuelan foreign policy. *Policy Studies* 32 (5):549–567.
- McDonald, Patrick J. 2009. *The Invisible Hand of Peace*. Capitalism, the War Machine, and International Relations Theory. Cambridge University Press.

Meierding, Emily. 2016. Dismantling the oil wars myth. Security Studies 25 (2):258–288.

Morrow, James D. 1999. How could trade affect conflict? *Journal of Peace Research* 36 (4):481–489.

Mueller, John. 2014. Economic Interdependence as a Facilitator of War?

- Oneal, John R, and Bruce M Russett. 1999. The Kantian Peace: The Pacific Benefits of Democracy, Interdependence, and International Organizations, 1885-1992. World Politics 1–38.
- ———. 2005. Rule Of Three, Let It Be? When More Really Is Better. Conflict Management and Peace Science 22 (4):293–310.
- Ortiz, Nelson. 2006. Entrepreneurs: Profits Without Power? In The Unraveling of Representative Democracy in Venezuela, edited by Jennifer L McCoy and David J Myers, 71–92. Baltimore: Johns Hopkins University Press.
- Palmer, Glenn, Vito D'Orazio, Michael Kenwick, and Matthew Lane. 2015. The MID4 Dataset, 2002–2010: Procedures, Coding Rules and Description. Conflict Management and Peace Science 32 (2):222–242.
- Pardo, Rodrigo. 2009. Colombia and Venezuela Said to Have Faced Their Worst Crisis Ever in 2009. Caracol Colombia.
- Pevehouse, Jon C. 2004. Interdependence Theory and the Measurement of International Conflict. *Journal of Politics* 66:247–266.

Polachek, Solomon W. 1980. Conflict and trade. Journal Of Conflict Resolution 24 (1):55–78.

Polachek, Solomon W, Carlos Seiglie, and Jun Xiang. 2012. Globalization and International Conflict: Can Foreign Direct Investment Increase Cooperation Among Nations? Oxford University Press.

- Raby, Diana. 2011. Venezuelan Foreign Policy under Chávez, 1999-2010: The Pragmatic Success of Revolution Ideology? In Latin American Foreign Policies, 159–178. Palgrave Macmillan.
- Randall, Stephen J. 2011. The Continuing Pull of the Polar Star: Colombian Foreign Policy in the Post-Cold War Era. In *Latin American Foreign Policies*, 139–157. New York: Palgrave Macmillan, New York.
- Reed, William. 2000. A Unified Statistical Model of Conflict Onset and Escalation. American Journal of Political Science 84–93.

Reuters. 2008. High inflation threatens Venezuelan economy in 2008. Reuters.

———. 2010. Venezuela paying 336 mln debt to Colombian exporters. *Reuters*.

- Robst, John, Solomon W Polachek, and Yuan-Ching Chang. 2007. Geographic Proximity, Trade, and International Conflict/Cooperation. Conflict Management and Peace Science 24 (1):1–24.
- Rosecrance, Richard, and Peter Thompson. 2003. Trade, Foreign Investment, and Security. Annual Review of Political Science 6 (1):377–398.
- Ross, Michael L. 2012. The Oil Curse: How Petroleum Wealth Shapes the Development of Nations. Princeton University Press, kindle edn.

———. 2013. Oil and Gas Data, 1932-2011. Harvard Dataverse Network.

- ———. 2015. What Have We Learned about the Resource Curse? Annual Review of Political Science 18 (1):5.1–5.21.
- Ross, Michael L, and Erik Voeten. 2015. Oil and International Cooperation. International Studies Quarterly 60 (1):85–97.

- Sanchez, Luis Guillermo. 2001. Colombian, Venezuelan Presidents Meet; Differences Said "Overcome". Caracol Colombia.
- Schneider, Ben Ross. 2004. Business Politics and the State in Twentieth-Century Latin America. Cambridge University Press.
- ———. 2010. Business Politics and Policy Making in Contemporary Latin America. In *How Democracy Works*. Inter-American Development Bank.
- Schneider, Gerald. 2014. Peace through globalization and capitalism? Prospects of two liberal propositions. Journal of Peace Research 51 (2):173–183.
- Schultz, Kenneth A. 2015. Mapping Interstate Territorial Conflict: A New Data Set and Applications. *Journal Of Conflict Resolution* 1–26.
- Simmons, Beth. 2003. Pax Mercatoria and the Theory of the State. In *Economic Interde*pendence and International Conflict, 31–43. University of Michigan Press.
- Singer, Joel David. 1988. Reconstructing the Correlates of War Dataset on Material Capabilities of States, 1816–1985. International Interactions 14 (2):115–132.
- Souva, Mark, and Brandon Prins. 2006. The Liberal Peace Revisited: The Role of Democracy, Dependence, and Development in Militarized Interstate Dispute Initiation, 1950–1999. International Interactions 32 (2):183–200.
- Stampini, Marco, Ron Leung, Setou M Diarra, and Lauréline Pla. 2013. How Large Is the Private Sector in Africa? Evidence From National Accounts and Labour Markets. South African Journal of Economics 81 (1):140–165.
- Stinnett, Douglas M, Jaroslav Tir, Paul F Diehl, Philip Schafer, and Charles Gochman. 2002. The Correlates of War (COW) Project Direct Contiguity Data, Version 3.0. Conflict Management and Peace Science 19 (2):59–67.

- Strüver, Georg, and Tim Wegenast. 2016. The Hard Power of Natural Resources: Oil and the Outbreak of Militarized Interstate Disputes. *Foreign Policy Analysis*.
- Suzuki, Motoshi. 1994. Economic Interdependence, Relative Gains, and International Cooperation: The Case of Monetary Policy Coordination. International Studies Quarterly 38 (3):475.
- Sweeney, Kevin J. 2003. The Severity of Interstate Disputes Are Dyadic Capability Preponderances Really More Pacific? *Journal Of Conflict Resolution* 47 (6):728–750.
- The Economist. 2009. Venezuela and Colombia: Politics Versus Trade. The Economist .
- Thorp, Rosemary, and Francisco Durand. 1997. A historical view of business-state relations. Colombia, Peru and Venezuela compared. *Business and the state in developing* ....
- Vance, Colin James, and Nolan Ritter. 2014. Is Peace a Missing Value or a Zero? on Selection Models in Political Science. Journal of Peace Research 51 (4):528–540.
- Webb-Vidal, Andy. 2005. Chavez Suspends Accords with Colombia. Financial Times 4.
- Wells, Bryon. 2009. Colombia VP condemns 170,000 jobs lost to Venezuela crisis.
- Wright, Joseph, Erica Frantz, and Barbara Geddes. 2013. Oil and Autocratic Regime Survival. British Journal of Political Science 45 (02):287–306.