

2022-2023

ISSUE 03

# DEMOS

UNDERGRADUATE RESEARCH JOURNAL

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University of California,  
Los Angeles



Photograph of Powell Library circa 2007, Public Domain.

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## ABOUT

# ABOUT

Demos is a group of undergraduate students at UCLA showcasing the collaborative efforts between students here and across the country. We are dedicated to displaying the academic excellence of those who are not just undergraduate students but those have also earned the title of political science researcher. As an organization created by UCLA undergraduates, we aim to serve the undergraduate community and beyond by giving students a chance to publish their work, garner writing and publishing experience, and put a spotlight on valuable research.

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# ABOUT THE COVER

For my second issue as manager of publication, I wanted to keep consistent with the previous edition of DEMOS. Whereas the image for last year's journal was an image of Royce Hall, this year we elected an image of Powell Library. While Royce is an iconic landmark, the beautiful reading rooms of Powell is much more familiar to me as a student. That majestic reading room is under renovation as this issue is being published, so it felt right to remember the majesty of Powell via the front cover. The color halftone used on the cover is more than an aesthetic choice. Like the dots that form the larger image of Powell, all the student contributors to this journal had to work together to realize its publication and achieve something beyond their individual capabilities.

- Evan Holter

# DEMOS STAFF

## 2022-2023

*A special thanks to the writers, editors, and managers that made this issue possible*

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# RIDDHI PATEL'S LETTER

Dear Reader,

It is with great honor and privilege that I introduce to you this year's DEMOS journal. Our team of fifteen has worked tirelessly to showcase diverse topics ranging from social justice to religion. After months of hard work and resilience, we have composed a journal highlighting four research papers. We hope to build a more equitable and knowledgeable future through sharing the work of our Political Science Bruins. This is my second year serving as the co-editor-in-chief for DEMOS, and I will miss it deeply once I graduate. Being a part of the Political Science Undergraduate Council has been a fulfilling experience, and I look forward to continuing learning from future DEMOS publications.

Best,  
Riddhi Patel

# DAVID GJERDE 'S LETTER

Dear Reader,

We are proud to present the third issue of the DEMOS journal, a culmination of effort from student leaders and scholars during the 2022 - 2023 school year. Of all the problems in the world, none were ever solved or without dialogue and serious reflection. In an age where silence is often the response to complex questions, this is our small contribution to communal understanding and scholarly debate on UCLA's campus. It has been an honor to serve as co-editor-in-chief, and we hope you learn something new!

Sincerely,  
David Gjerde





# Hello HI-1: Groups in the Democratic Primary

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**Jennifer Mei**

**Edited by**

**Heeya Firdaus &  
Sharanya Choudhury**

The UCLA group theory of parties argues that “interest groups or activists can be shown to determine the particular individuals nominated for office.” Specifically regarding House nominations, most winners of winnable open-seat primaries for the 2014 election cycle anchored their campaigns in the support of a group party. One such primary was the 2014 Democratic primary for Hawaii’s 1st Congressional District, the first time Hawaii had an open congressional seat race without a categorized favorite. Quite unusually, the race was regarded as wide open with a few frontrunners, particularly state House member Mark Takai and state Senate president Donna Mercado Kim<sup>1</sup>. The 2014 HI-1 Democratic primary significantly aligns with the UCLA group theory of parties as it was widely shaped by interest groups and activists; group support helped Mark Takai win, a result that would have been unexpected if a race was candidate-centered.

The group theory of parties argues that political parties exist because groups form coalitions to represent and advocate for their different interests by creating policy and building electoral coalitions. The more classically accepted theory of candidate-centered parties argues that parties exist as a vehicle for powerful individuals to be elected to office. In the context of races, the group-centered theory emphasizes the role of party leaders, interest groups, and other influential individuals in shaping the electoral process, notably playing a large role in influencing and sometimes choosing who gets nominated and wins party support. Meanwhile, the candidate-centered theory argues that a strong individual and their personal attributes are the main factors in deciding a nomination or result of a primary.

Prior to the race, Takai spent a long legislative career working for veterans and educators. Meanwhile, Kim had spent her energy on well-publicized investigations that brought her high name recognition but did not favor any interest group. Although Takai did not have the name recognition that Kim had when the race began, he anchored his campaign in the support of groups who were able to provide both legitimacy and money for his campaign. Takai’s main support came from military groups given his advocacy for military-related issues and his own military background. His record in the Hawaii state legislature was overwhelmingly positive for military issues, giving military groups the assurance that Takai both aligned with their values and potential agendas. Takai’s identification with these groups and his veteran status also helped him gain the support of white voters—many of whom have military backgrounds; white voters dominate the electoral makeup and are the second most important voting group following Japanese voters<sup>2</sup>. The advantage Takai received from significant military group support is evident when the money that groups can provide is taken into account. The support of groups allows money for ads, targeted mail, and manpower, all of which were essential in HI-1 given the local nature of the race, as television alone does not tend to work well in Hawaii<sup>3</sup>. The graph below shows the correlation between spending share and vote share for the primary with an  $R^2$  of 0.718; Takai is the unlabelled data point on the furthest right. There is an observable correlation between the support of groups and the success of a campaign given the amount of money and resources that groups can provide.

While groups want to advance their own interests by endorsing and supporting candidates that match their ideals, they also have a responsibility to ensure that the candidates they support are likely to win the election. For example, Equality Hawaii was Hawaii’s main LGBTQ+ political advocacy group that endorsed Takai for the primary despite his previous flip-flopping on civil unions; many civil unions bills had been heard in session and deferred or died at the end of session. Takai was also considered more moderate to conservative than other candidates such as Kathryn Xian, a member of the LGBTQ+ community, and Stanley Chang, the leading progressive candidate and leader for LGBTQ+ rights. However, Equality Hawaii wanted to support someone who would not only vote for their interests but also had a probable chance of winning the election. While they originally wanted to support Chang, his novelty to politics rendered him unlikely to win and therefore not worth endorsing. Even though he

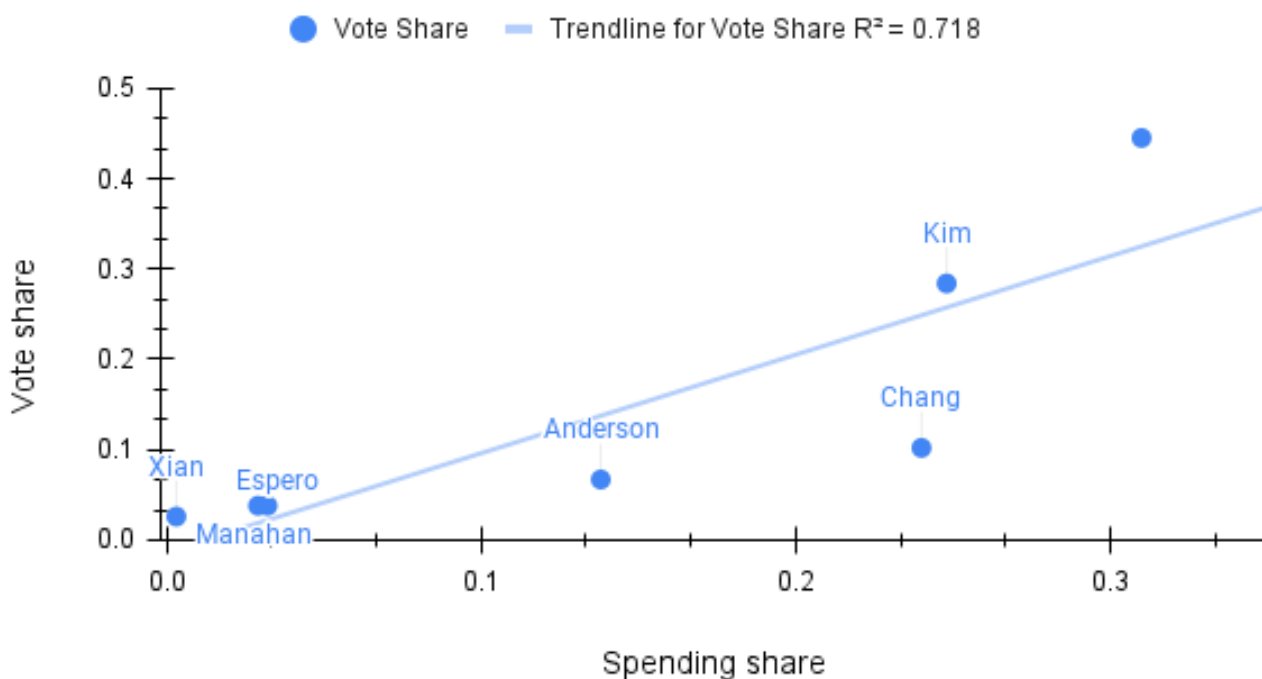
1 Hawaii Government Employees Association (HGEA)

2 Hawaii Government Employees Association (HGEA)

3 Hawaii Government Employees Association (HGEA)

did not offer the same commitment to group ideals as Chang would, Equality Hawaii saw Takai as a candidate who would both vote in favor of the group and have a higher chance of winning the election in order to do so<sup>4</sup>. Supporting a candidate who would feasibly win and vote in favor of the group was more beneficial than supporting a candidate who would lead an agenda but might not even get a chance to do so. As such, this group advanced their own interests and endorsement credibility by supporting someone who was not the most ideologically similar but was more likely to win. Their judgment of Takai's chances of winning gave Takai credibility and increased those same chances, creating a cyclical relationship of group support.

### 2014 HI-1 Democratic Primary



Additionally, Takai's campaign came to represent not only himself but also the anti-Kim candidate. The Director of the Hawaii Government Employees Association (HGEA) thought that no groups would be anti-candidate since those who disliked Kim were not a cohesive group<sup>5</sup>. However, HGEA also perceived Takai as the anti-Kim candidate and thus did not endorse anyone in the race since they feared retribution from Kim for an endorsement that they saw no personal advantage from<sup>6</sup>. Interviews with other leaders also contradict this statement. For example, Takai received the support of the Sierra Club, which endorses candidates on how a candidate aligns with their values and also the candidate's incumbency and viability<sup>7</sup>. While incumbency was not a factor in this endorsement, Takai's values were also not at the forefront; rather, the endorsement was more of an endorsement against Kim and her abysmal voting record for environmental issues<sup>8</sup>. Equality Hawaii endorsed Takai for similar reasons beyond those already mentioned: Kim notably voted against same-sex marriage<sup>9</sup>. While the University of Hawaii Professional Assembly (UHPA) endorsed Takai for his aligning views regarding

4 Equality Hawaii

5 Hawaii Government Employees Association (HGEA)

6 University of Hawaii Professional Assembly (UHPA)

7 <https://sierraclubhawaii.org/blog/how-the-sierra-club-of-hawaii-endorses-candidates>

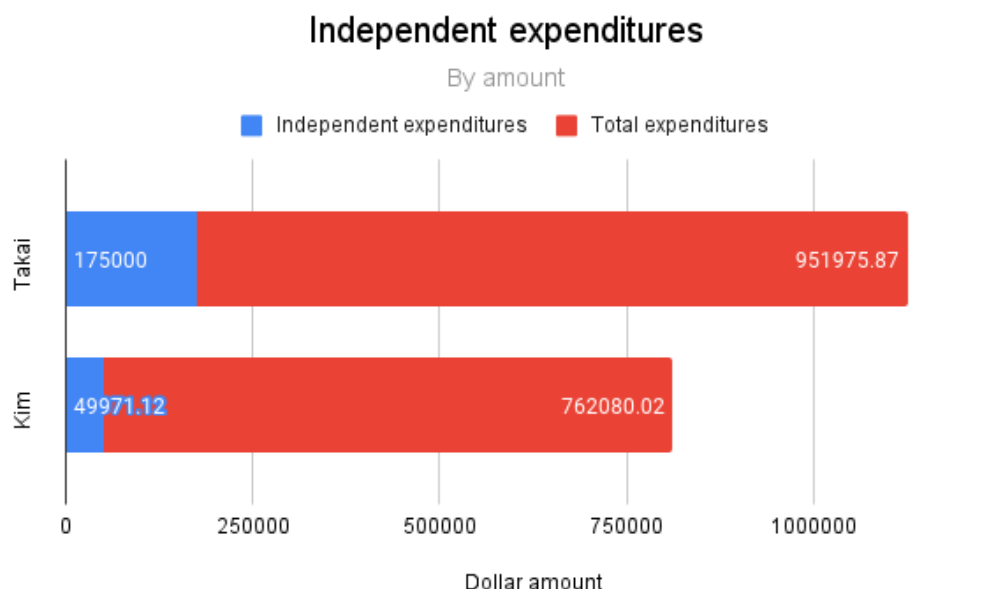
8 Progressive leader interview

9 University of Hawaii Professional Assembly (UHPA)



public education and the role of the federal government, they also knew that Kim was more likely to vote with the Republicans than the Democrats in Congress and that her view of higher education was too simplistic; UofH also just publicly disdained Kim in general<sup>10</sup>. These three groups were able to help shape the primary by making judgments on Kim, a candidate that they did not want to win, and throwing their support behind Takai, the candidate who was most likely to beat Kim. In essence, the groups used their power to identify a candidate who would not be beneficial to creating policy in the interest of their coalition and threw their support behind the candidate who would more likely represent their separate interests.

While Kim did receive the support of groups throughout her campaign, she did not anchor her campaign in any particular group that would increase her credibility or benefit her campaign. Her main group support came from EMILY's List, an organization that helps Democratic pro-choice women run for office. Interestingly, Kim received their endorsement despite her socially conservative views and pro-life voting record. Other groups involved in the primary regarded this endorsement as phony, saying that EMILY's List "dumbed down their standards" to endorse Kim and has gone from being an organization that supports women's rights to an organization that just supports women, "blind to all but sex and political identification"<sup>11</sup>. The support of EMILY's List for Kim's campaign doesn't carry its full weight because of her pro-life stances and lacks credibility with the progressive community of the Democratic party. In this case, the interest group shaped the primary by practically providing an endorsement of false hope and decreased the credibility of Kim amongst other groups, once again impacting the cyclical relationship of group support. Kim also received blue-collar/union support, specifically the private-sector union, but as unions become self-satisfied with their current conditions, they also become weaker support groups. Since the status quo of their power is consolidated, they do not have the same drive to support a candidate that other groups would<sup>12</sup>. Besides EMILY's List, Kim did not truly anchor her campaign in any particular group, especially not one that had higher credibility or one that would actively work to ensure her win.



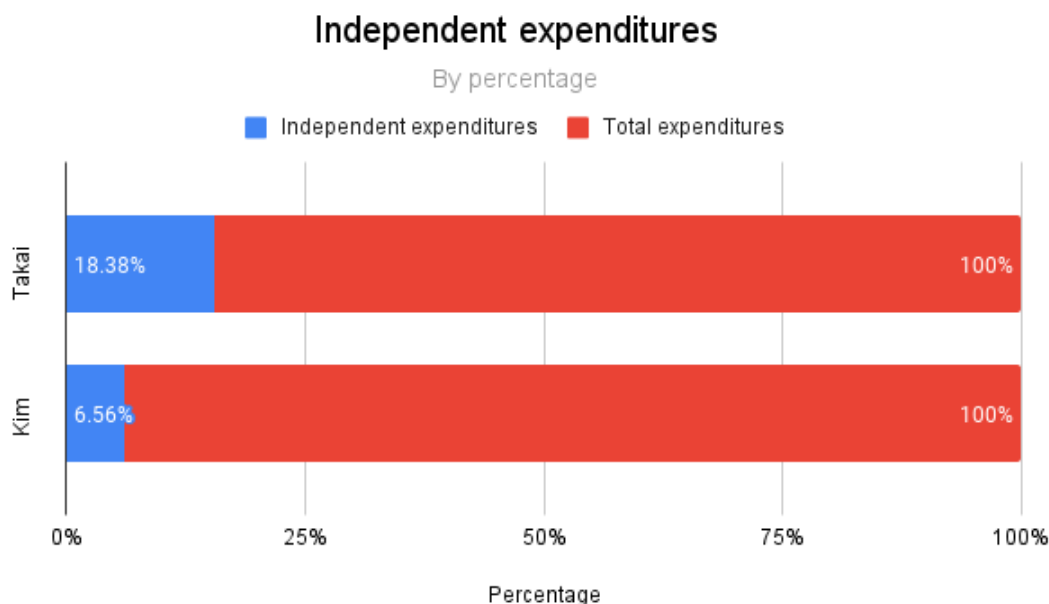
This is quite noticeable upon a comparison between how much of each candidate's total expenditures came from group independent expenditures as shown in the graphs below. All of Takai's \$175,000 in independent expenditures for the primary came from VoteVets while Kim's near \$50,000 in

10 Hawaii Government Employees Association (HGEA); University of Hawaii Professional Assembly (UHPA)

11 Hawaii Government Employees Association (HGEA); University of Hawaii Professional Assembly (UHPA)

12 Top lobbyist

independent expenditures came from Women Vote!, the EMILY's List independent expenditure program. However, when compared to the totals, the independent expenditures from VoteVets, a military group, were 18.38% of Takai's total expenditures, while the independent expenditures from EMILY's List were only 6.56% of Kim's total expenditures. Takai's percentage of group funding is almost triple that of Kim's, showing that Takai was able to successfully anchor his campaign in the support of particular groups and depend upon them for monetary support, while Kim was severely lacking in this aspect.



Moreover, Kim's campaign strategy was flawed and had a high level of presumption that ultimately contributed to her loss in the primaries. Her campaign catered to the idea that parties are candidate-centered: that Kim was guaranteed to win the primary because of her higher name recognition given her position as Senate President. She did not spend as much money as Takai on ads, potentially sandbagging money to prepare for the general election. Her campaign was mostly media driven aside from putting up signs and banners; she also ignored radio ads<sup>13</sup>. Her simple campaign strategy capitalized on superior name recognition relative to others, but this ultimately contributed to her loss in the primary. She not only was unable to anchor her campaign in the support of a group, but was also likely unwilling to and thought she would be able to win the primary without their support.

Meanwhile, Takai had a better understanding of the groups that he could appeal to and therefore developed a more sophisticated campaign operation than Kim. The support of military groups proved very useful for him, as VoteVets was much more willing than Kim's groups to spend money on television ads for Takai through independent expenditures. His campaign also used talent to assist with voter identification and target niches of voters to most effectively use the campaign's funds; in addition to military-affiliated groups, he had the backing of union members and Japanese Americans. As mentioned previously, unions have lost their will to heavily influence elections and their endorsements have lost some luster and functionality. However, Takai recognized that their support is still a major factor and his campaign did not want their opposition. Kim had previously killed some union interests, which pushed them to split off and endorse Takai; the support Takai received from UHPA was also significant<sup>14</sup>. Takai's campaign acknowledged and relied on the support of Japanese Americans who made up 28%

13 Hawaii Government Employees Association (HGEA)

14 President of Young Democrats

of the voting population, running Japanese ads to reach the largest ethnic voting block in HI-1<sup>15</sup>. With his greater understanding of his support groups, Takai was able to appeal to different voters using the backing and monetary support of those same groups, creating a more efficient and productive campaign than Kim.

There is also ethnic-based group support that cannot be ignored given how elections in Hawaii are approached: while a big taboo in Hawaiian elections, ethnic-voting is quite prevalent, with many Hawaiian voters simply looking at the last names on the ballot and voting within their own ethnic group. In all Hawaiian races in 2014, ethnicity was a large issue among supporters of former US Senator Daniel Inouye, a Japanese-American who represented Hawaii in the Senate for 49 years; his deathbed request for the governor to appoint Japanese-American Colleen Hanabusa was ignored in favor of the white lieutenant governor. This slight motivated exceptional ethnic political factors across all races, not excluding the primary we are discussing. Among the Democratic Party primary voters in Hawaii, Japanese voters are a fairly large group (the district is almost 30% Japanese) known for voting in disproportionately high numbers, Filipino voters are a semi-large group that vote in lower numbers (low to mid 20%), and Chinese voters are a small group. Takai lived in a large Japanese-American community, which has an inherent defensiveness against white people in Hawaii (Haoles) and therefore vote in large numbers. Meanwhile, there were two other Filipino candidates in the race who took up to 5% of the overall votes away from Kim. Lastly, while Chang was the candidate for the Chinese ethnic group, he was unlikely to pull the Chinese vote because he was more progressive than the general Chinese voter. Thus Takai's success in the primary was baked into the electoral makeup compared to Kim and Chang.

Apart from how Equality Hawaii decided to endorse Takai over him, Chang has been ignored in this race, primarily because groups want to endorse someone who has a possibility of winning and thus hold the cards in determining nominations. Chang was the candidate closest to matching the frontrunner status of Takai and Kim. He was noted for his charisma and his apparent ability to work hard: he walked his district three times and visited every home, gaining name recognition; his competitiveness in the race was based solely on his hard work<sup>16</sup>. If nominations were based on candidate effort and political ambition, Chang would have been among the frontrunners instead of being mentioned merely out of politeness. His willingness to work hard could overcome his lack of fundraising compared to Takai and Kim<sup>17</sup>. If nominations were based on candidate personality and issues, Chang could be a frontrunner by touting himself as the more progressive candidate, especially compared to Takai and Kim<sup>18</sup>. However, Chang's young age and lack of experience prevented him from making a large showing in the race as groups did not wish to use their resources supporting someone who aligned closely with their values but did not have a high possibility of winning. Many progressive groups aligned more closely with Chang's ideals but followed Equality Hawaii's path by accepting a candidate that would still support their issues after having a greater chance of being elected. Even Chang himself did not expect how little control he would have over his campaign and the race<sup>19</sup>. His personality and issues were not able to override his campaign's lack of group endorsements.

The theory of candidate-centered parties intertwines with the group theory to apply to the 2014 HI-1 Democratic primary in a negative way; the candidate-centered theory doesn't help determine who wins so much as it helps determine who loses. In this race, these factors helped Takai overcome Kim for the Democratic nomination. The theory of candidate-centered campaigns argues that they revolve around the candidate's personality and issues rather than party or group issues. For Kim, this did not work to her benefit: she was not the most personable individual, often viewed as a fighter and a bully, and

15 Hawaii Government Employees Association (HGEA)

16 Hawaii Government Employees Association (HGEA)

17 Hawaii Government Employees Association (HGEA)

18 Progressive leader interview

19 Stanley Chang interview

positioned herself as a confrontational political leader<sup>20</sup>. Her long political career made her very polarizing and lobbyists were scared of her as she was too abrasive and often chewed them out<sup>21</sup>. Everything in Hawaii is personal relationships while issues are secondary, and Kim's personality often heavily strained these relationships; even her own Senate colleagues supported her run so she would leave the state legislature<sup>22</sup>. Additionally, the open primary system in Hawaii allows for Republicans to cross over and vote for the most Republican-like candidate in the Democratic primary. Kim is the more obvious choice for these voters given her socially conservative record. Many of these voters like Takai's background, but more-so dislike Kim. Despite their similar ideologies, voters turned against Kim due to either her gender or her aggressive personality<sup>23</sup>. The importance of a candidate's personality is most apparent not when the candidate is successful but when opposition to the candidate arises. As such, groups were not comfortable endorsing Kim, intertwining the group theory of parties and how groups take into account candidate personality when making choices on whether or not to endorse a candidate. While Takai was nowhere near as known as Kim in terms of name recognition, he was still able to overcome that deficit with the lack of negative perceptions of his personality, which allowed groups to endorse him without much fear of controversy.

Ultimately, the 2014 HI-1 Democratic primary works in favor of the UCLA group theory of parties. Groups can determine the individuals nominated for office as they often have a choice of candidates who will make the necessary effort and choose the one who is most likely to get elected and will subsequently work for group values. While groups look at a candidate's personality and issues to decide on whether to support a candidate, this does not undermine the strength of group-centered parties to support the idea of candidate-centered campaigns; rather, group involvement can make or break a candidate's campaign. Kim lacked a strong group to anchor her campaign in and instead overestimated the power of a candidate-centered campaign. Chang's personality and stances on issues could not overcome his lack of group support. Takai ultimately prevailed because he understood the importance of groups and anchored his campaign in the support of groups that provided him with money, legitimacy, and voting power.

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20 Hawaii Government Employees Association (HGEA); Top journalist

21 President of Young Democrats

22 Top lobbyist; Progressive leader interview

23 Progressive leader interview



## REFERENCES

Equality Hawaii. <https://www.equalityhawaii.org>

Hawaii Government Employees Association (HGEA). <https://www.hgea.org>

Chapter, Sierra Club Hawai'i. "How the Sierra Club of Hawai'i Endorses Candidates." Sierra Club of Hawai'i, August 1, 2022. <https://sierraclubhawaii.org/blog/how-the-sierra-club-of-hawaii-endorses-candidates>.

President of Young Democrats, interview held at University of California, Los Angeles

Progressive leader, interview held at University of California, Los Angeles

Stanley Chang, interview held at University of California, Los Angeles

Top journalist, interview held at University of California, Los Angeles

Top lobbyist, interview held at University of California, Los Angeles

University of Hawaii Professional Assembly (UHPA). <https://www.uhpa.org>



# The Fight for Housing and Climate Change: How CEQA Affects Housing in California

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**Luis R. Garcia Chavez**

**Edited by**

**Tamara Nogueira &  
Dylan Tzung**

## KEY WORDS

1. CALGreen 2. Housing Rate/Capita 3. Paired t-test 4. Texas 5. California

## ABSTRACT

This paper explores the potential impact of the 2010 California Green Building Standards Code (CALGreen) on the state's housing development. CALGreen, the nation's first set of green housing codes, has been cited as a possible impediment to the development of housing. I explore how CALGreen effects creation of new housing through a comparative, large n-study. This is done by comparing the housing rate change per capita change of Texas and California in both the county and state levels between 2001-2009 and 2011-2020. A t-test with a diff-in-diff design was used and runned through STATA. The findings were inconclusive, but there is suggestive evidence of a negative correlation between CALGreen and change rate of housing per capita. A more sophisticated design with stronger control for population variances is needed to properly explore this relationship.

## INTRODUCTION

California is facing a massive rise in homelessness as the demand for housing surpasses supply. According to the PPIC, California saw a 6% rise in homelessness from 2020 to now compared to only a 0.3% rise nationally<sup>1</sup>. According to a 2015 California Department of Housing and Community Development report, approximately 3 million new housing units were needed to maintain the supply-demand equilibrium, but only an estimated 500k were built, leaving an estimated 1.5 million shortfall<sup>2</sup>. Additionally, the housing that is available is not affordable for low-income residents. According to a 2022 report, the average wage required for a person to live in Mixin Waters LA district, is \$3 per hour, nearly \$19 more than the minimum wage<sup>3</sup>. Critics have pointed to a host of possible reasons for the housing crisis. For example, some have cited the continued prevalence of single-family zoning, and others have blamed the lack of public housing across the state<sup>4</sup>.

Simultaneously, with the passage of CALGreen and other similar measures, California, in an attempt to counteract the climate crisis by reducing greenhouse emissions<sup>5</sup>, has extended green policy to the realm of building construction and maintenance.

## CALGREEN AND OTHER POLICIES

CALGreen is a major regulatory code passed in 2010 that updates housing provisions in the California Code of Regulations. According to the California Housing and Community Development, it adds regulations in five categories: 1) planning and design, 2) energy efficiency, 3) water efficiency & conservation, 4) material conservation and resource efficiency, and 5) environment quality<sup>6</sup>. CALGreen is further broken into two categories: required and voluntary codes. The voluntary code is further broken down into two parts that local ordinances may adopt: Tier 1 and Tier 2<sup>7</sup>. Each category is meant to reduce negative or promote positive environmental impacts in local communities. As such, projects must prove to regulators that they are fulfilling the five categories mandated by CALGreen.

In addition to CALGreen, many other environmental regulations passed both by the state of California and the federal government have both directly and indirectly affected the development of new housing. The Federal Endangerment Species Act of 1973, for example, is a federal legislation that protects endangered species from human activity, including the expansion of housing. It has contributed

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1 PPIC 2013  
 2 U.S. Census Bureau QuickFacts: California  
 3 National Low Income Coalition, p.4  
 4 Hotel California  
 5 GHG  
 6 HCD  
 7 HCD

to the denial of thousands of permits. The California Environmental Quality Act (CEQA) is a major piece of legislation passed in 1970 that has been cited as a potential barrier to the development of housing. Under CEQA, Land projects (including housing) are investigated to calculate their potential environmental and social impacts. A report is produced that dictates if the project moves forward or not. However, the results of the study itself are vulnerable to litigation by a single individual who can challenge the methodology of the report which can delay projects by months to years and potentially lead to the cancellation of the project altogether.

## SIGNIFICANCE AND BACKGROUND INFO

### Significance

As a result of the regulations imposed by CALGreen, housing developers, renters, and other stakeholders could face increased costs. In a small case study covering lot 37 at Davis (where a pre-trial of CALGreen was implemented), there was found to be a 1.6% increase in the initial cost of development when implemented CALGreen<sup>8</sup>. Rent was increased for tenants in the range between \$1,777- \$34,140. Developers/landlords faced a \$40,574-\$988,350 increased production cost associated with CALGreen.

Very little studies have been conducted to study the effects of CALGreen on the development of housing. This paper intends to spearhead research on this relationship and encourage other researchers to conduct similar studies.

### Literature Review

Prior research evaluates the impact of environmental laws & regulations. In a 2018 study conducted to evaluate the housing impact of the California Environmental Quality Act (CEQA), a survey was sent out to all counties and cities in California to assess its impact. Out of 30 responses sent to government officials, 17 felt that CEQA was not a major burdening cost to housing in their local jurisdiction with 4 stating it was a mixed result, and 9 stating it was a major cost<sup>9</sup>. Respondents provided three major reforms to lower the cost of CEQA: 1) modify the environmental regulation to allow for more exemptions and streamline the process, 2) simplify the litigation process to hasten the timeline and raise the bar for litigation requirements, and 3) improve implementation by offering more technical and training assistance.

## THEORY AND ARGUMENT

For the analysis, I used CALGreen as the independent variable and the change rate of housing per capita as the dependent variable. CALGreen is formulated as the independent variable because of its addition of regulations and rules to the construction of housing that may or may not have an effect; Instead of using raw housing units, I used the change rate of housing per capita because counties have varied population sizes and require varying numbers of housing units, it is important to use the change rate of housing per capita in order to create uniformity in the analysis. Texas is used as a comparison to California because of their shared similarities and Texas's lack of an equivalent CALGreen. I hypothesize that CALGreen produced a negative change rate of housing/capita in California in 2011-2020 compared to 2001-2009 and Texas. However, I did not control for the 2008 Recession or the difference in population growth rate between Texas and California. The Recession had a major effect on the housing market across the country such as: major cuts to production, collapse of major housing investment corporations, and other effects. Due to the varied, complex effects of the Recession, it was difficult to quantify and control in the design. Coupled with my lack of experience and time constraints, controlling for the Recession's effects was not feasible.

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8 UC Davis 2011

9 Environment Practice 2019



Furthermore, California's and Texas's differentiated population growth rates may have affected the results. Texas's population growth rate was higher than California's during the 2010s. As such, higher population growth increases economic activity which may influence the housing market and ultimately affect the relationship between CALGreen and housing/capita. Uneven population growth prevents uniformity between measurements that makes it difficult to analyze the design.

## RESEARCH DESIGN AND DATA

I conducted a large n-study with a difference-in-difference design with a state and county level analysis. I compared Texas and California due to their similarities. Both states are minority-majority, have similar ethnic breakdowns (such as a high Latino concentration), and are large in geographic size. This reduces the error produced by co-founding variables. These similarities reduce the effect of confounding variables on the analysis. Furthermore, Texas's lack of a CALGreen equivalent allows for a comparison on the policy's influence on the change rate of housing/capita between similar states.

I extracted housing and population from the US Census Bureau and American Community Survey (ACS) in California (CA), Texas (TX), and their counties between 2001-2019. I divided the data into two periods, 2001-2009 and 2011-2019. I divided the data between states and level of analysis to strengthen validity and reliability. This created eight table sets: a 2001-2009 CA county table, a 2011-2020 CA county table, a 2001-2009 TX county table, a 2011-2020 TX county table, a 2001-2009 CA state table, a 2011-2019 CA state table, a 2001-2009 TX state table, and a 2011-2019 TX state table. I didn't include 2010 in the data because this was the year CALGreen was passed. As a result, the effects of the policy were not felt until 2011. I ran four paired t-tests in two programs. For the state-level analysis, I ran a simplified, paired t-test in Excel. Due to the magnitude of the county data, I aggregated the tables to run a more comprehensive paired t-test through STATA. The aggregate county-level data was run by inputting all rate change of housing per capita from two variables, labeled cal and no cal. No cal represented the 2001-2009 time interval, while the cal represented the 2011-2019 time interval. For the Texas aggregate county analysis, the two variables were labeled beforeTexas and afterTexas. They represented the 2001-2009 and 2011-2019 time interval groups respectively. This produced the means for all levels and time intervals for both states. I calculated the difference in means between each period and level of analysis. I then compared the differences-in-differences (diff-in-diff) between the states and their counties to gauge the impact of the independent variable.

To calculate the change rate of housing per capita I created two calculations. I first calculated the housing per capita by dividing the housing units by the population. For example, in County A, there were 1,000 housing units, with a population of 100 in Year 1. I divided 1,000 units by 100 people to get 10 housing units/capita. Then, in Year 2, there were 1,000 units, with a population of 200 in Year 2. I divided 1,000 housing units by 200 persons to get 5 housing units/capita. To calculate the rate change of housing per capita in County A, I took Year 2's 5 housing/capita and subtracted Year 1's 10 housing per capita  $((5-10)=-5)$ . Then, I divided up the result by Year 1's housing per capita  $(-5/10=0.5)$  and multiplied the quotient by 100 to get the change rate (-50%).

I used the proportion of housing per capita instead of the number of housing units in order to achieve more representative results. If I had only used housing unit data, variances between counties would have occurred. For example, in Los Angeles County, the count of housing units is ~3.5 million units, which is significantly higher than Nevada county at ~50,000 units. Comparing the counties based solely on the housing unit counts would have skewed the analysis because of significant differences in population density. Calculating the proportion of housing per capita creates uniformity across counties.. However, The housing/capita, while more accurate than using housing unit data, still is affected by differentiated population growth between counties.

I conducted a difference-in-difference (diff-in-diff) design for the paired t-test. I subtracted the means of the two time intervals to produce the difference. For example, in State A, the mean for Year 3 is 30%, while the mean for Year 4 is 40%. You subtract 40% by 30% to produce the 10% difference

(mean of Year 3-mean of Year 2). I then compared the differences between the two states to complete the difference-in-difference. For example, State A has a difference of 10%, while State B has a difference of 5%. You subtract 10% by 5% to produce the difference-in-difference (10% of State A- 5% of State B= 5% difference-in-difference towards State A).

Checking the differences of the means between Texas and California was essential to control for co-variables. Comparing the means of each t-test would have created unreliable results. California and Texas hold differences in the quantity of their population and housing that makes one mean larger or smaller than the other. By comparing the diff-in-diff, it produced the uniformity necessary for validity.

A p-value test was used to identify significance in a relationship. If results produced a p-value of: less than 0.5 implies suggestive connections, less than 0.1 implies statistical significance, and less than 0.01 implies strong statistical significance. If the test's p-value falls under the three values, then the test's results would be unlikely to be produced in a randomized relationship with a 95%, 99%, and 99.7% confidence interval.

## RESULTS

### California Test

#### Aggregate County Test

*Paired T-Test (95% Confidence Interval)*

Variable	Mean	Obs.	Mean Std.	Err.	Std.	Dev.
nocal	0.2999675	522.299968	0.0316547	0.7232261	0.2377809	0.3621542
cal	0.1025214	522.102521	0.0438585	1.004334	0.0161637	0.1888791

*Different Between Time Intervals, Degree of Freedom, P-Value*

Differences between time intervals	Degree of Freedom	Pr(T>t)
0.31	521	0.0003

#### State Analysis

*T-Test: Two-Sample Assuming Unequal Variances*

Variable	Mean
nocal	0.238748
cal	0.016308

*Differences between time intervals, Degree of Freedom, p-value*

Differences between time intervals	Degree of Freedom	P(T<=t) two Tail
0.22	14	0.269668

### Texas Test

#### Aggregate County Analysis

*Paired T-Test (95% Confidence Interval)*

Variable	Mean	Obs.	Mean Std.	Err.	Std.	Dev.
beforeTexas	0.40073	2286.40073	0.0355777	1.701047	0.3309623	0.4704983
afterTexas	0.0924134	2286.09241	0.0449828	2.150722	0.0042021	0.1806247

*Different Between Time Intervals, Degree of Freedom, P-Value*

Differences between time intervals	Degree of Freedom	Pr(T>t)
0.308317	2285	0.0000

### State Analysis

*T-Test: Two-Sample Assuming Unequal Variances*

Variable	Mean
beforeTexas	0.327337
afterTexas	-0.04647

*Differences between time intervals, Degree of Freedom, p-value*

Differences between time intervals	Degree of Freedom	P(T<=t) two Tail
-0.05	13	0.043845

*Diff-in-Diff*

Aggregated County level	State level
0.11	0.16

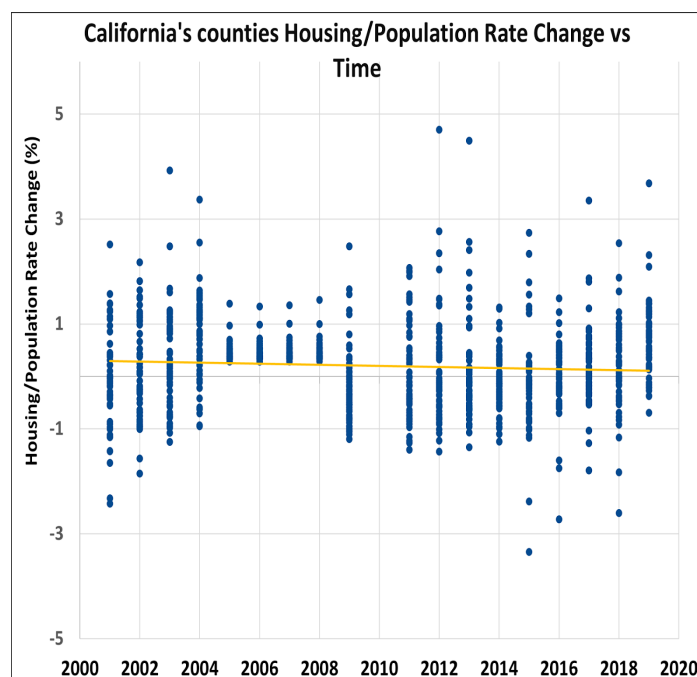


Figure 1. There is a smaller housing/population change rate in 2011-2019 compared to 2001-2009. US Census Bureau

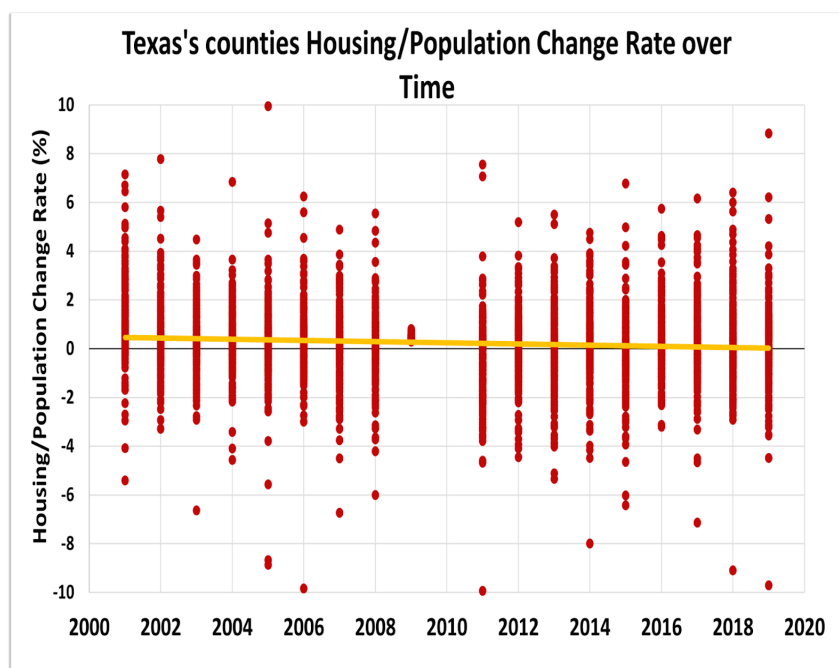


Figure 2. There is a smaller housing/population change rate in 2011-2019 compared to 2001-2009. US Census Bureau

The California aggregated county paired t-test is statistically very significant for a p-value of 0.00 (below the 0.01 threshold). The mean for 2001-2009 is 0.30% change rate and a 0.10% change rate for 2011-2019. This produces a change of 0.20%. The Texas aggregated county paired t-test is statistically very significant for a p-value of 0.00 (below the 0.01 threshold). The mean for 2001-2009 is a 0.40% change rate and a 0.09% change rate for 2011-2019. This produces a difference of 0.31%. By calculating the diff-in-diff, there is a 0.11% difference toward Texas.

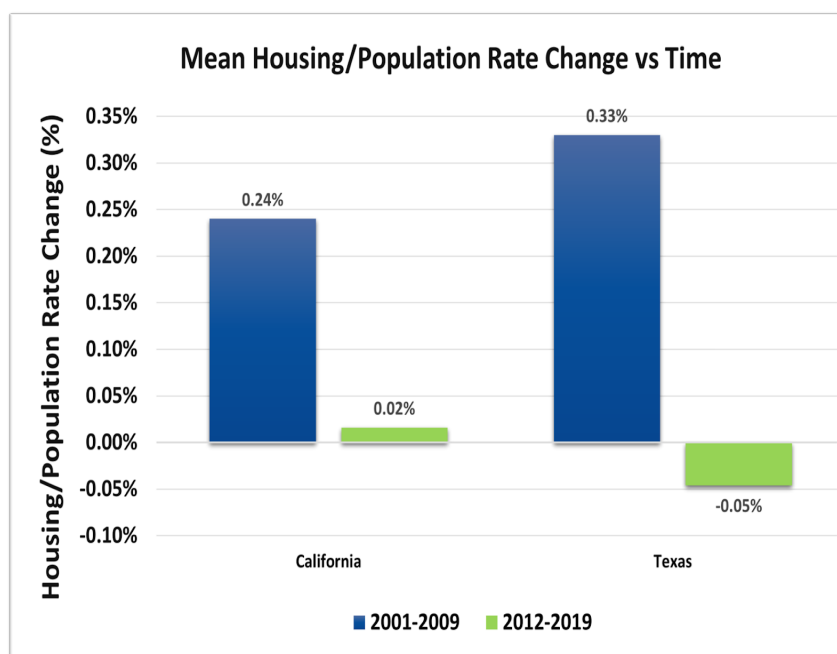


Figure 3. There is a smaller/negative housing/population change rate in 2011-2019 compared to 2001-2009. US Census Bureau



The California state-wide paired t-test is statistically insignificant for a p-value of 0.3 (above the 0.1 threshold). The mean for 2001-2009 is 0.24% change rate and a 0.02% change rate for 2011-2019. This produced a change of 0.22%. The Texas state-level paired-t test is considered statistically significant for a p-value of 0.044 (smaller than the 0.1 threshold). The mean for 2001-2009 is a 0.33% change rate and a -0.05% change rate for 2011-2019. This produced a change of 0.38%. By calculating the diff-in-diff, there is a 0.16% difference towards Texas.

## FINDINGS

The results proved inconclusive. The Texas state-level analysis and aggregate county-level analysis created statistically significant and statistically strongly significant results without the presence of CALGreen. While California produced statistically significant results for its county aggregate county-level, the differences between the two time intervals was smaller when compared to the differences in Texas's aggregate level county analysis. There are potential explanations. The 2008 Recession, which was not accounted for in the analysis, significantly impacted the housing markets in both states. Furthermore, differentiated population growth between California and Texas may have caused the results to be inaccurate. Finally, my own inexperience in statistical analysis limited the validity and sophistication of the design.

To improve the design, the effects of the 2008 Recession and differentiated population growth both need to be controlled in order to provide a thorough analysis. In addition, the introduction of randomized sampling could be used to run multiple models to ensure results are not caused by chance. This would improve validity and improve the design.

## CONCLUSIONS

California is facing a dual mandate of fighting climate change while also ensuring housing is both affordable and readily available. In 2010, California passed CALGreen, the first green building code in the nation. The study explored how CALGreen affects housing in California. I hypothesize that CALGreen will create a negative change rate of housing/capita in California in 2011-2020 compared to 2001-2009 and Texas. I conducted a large, comparative n-study with a paired t-test analysis from an aggregated county and state level in California and Texas between 2001-2009 and 2011-2019. I calculated the means of each of the four paired t-tests to find the diff-in-diff. Texas showed a larger difference of their mean in both the state (0.16% difference towards Texas) and aggregate county level (0.11% difference towards Texas) compared to California. In California, the county aggregate level proved statistically significant, the state-level did not. In Texas both pairs of t-tests proved statistically significant and strongly significant. This created an inconclusive result that may be explained by the influence of two co-founding variables that may have affected the analysis: the 2008 Recession on the housing market or the differentiated population growth between the two states. I was limited by my lack of expertise and time constraint during the research program. Regardless, CALGreen likely still had an effect on the change rate of housing/capita in California, but further research needs to be explored.

## REFERENCES

- 11, F. O. X. (2022, July 27). Ventura County has the most severe housing shortage in the US: Study. FOX 11 Los Angeles. Retrieved August 1, 2022, from <https://www.foxla.com/news/ventura-county-has-most-severe-housing-shortage-in-us-study>
- Buchanan, S. A., Detwiler, P. M., & Wassmer, R. W. (2011). Calgreen Costs Green, but will it save green too?: A case study of 10799 International Drive, Rancho Cordova, Ca. University of California, Davis .
- California Department of Housing and Community Development. (n.d.). CALGreen. CALGreen | California Department of Housing and Community Development. Retrieved August 1, 2022, from <https://hcd.ca.gov/calgreen>
- Clarke , M. (2022). 2022 Out of Reach: The High Cost of Housing . National Low Income Housing Coalition .<https://doi.org/file:///D:/UCCS%20Research%20Project/low%20income%20housing%20report.pdf>
- Gray, M. N. (2021, March 13). How californians are weaponizing environmental law. The Atlantic. Retrieved August 1, 2022, from <https://www.theatlantic.com/ideas/archive/2021/03/signature-environmental-law-hurts-housing/618264/>
- Janet Smith-Heimer & Jessica Hitchcock (2019) CEQA and housing production: 2018 survey of California cities and counties, *Environmental Practice*, 21:2, 69-84, DOI: 10.1080/14660466.2019.1609848
- Mehdizadeh, R., & Fischer, M. (2013). The unintended consequences of Greening America: An examination of how implementing green building policy may impact the dynamic between local, state, and federal regulatory systems and the possible exacerbation of class segregation. *Energy, Sustainability and Society*, 3(1). <https://doi.org/10.1186/2192-0567-3-12>
- News, B. C. (2022, July 29). Housing ‘out of reach’ for Bay Area Minimum Wage workers: Report. NBC Bay Area. Retrieved August 1, 2022, from <https://www.nbcbayarea.com/news/local/bay-area-housing-minimum-wage-workers/2963777/>
- Paluch, J., & Herrera, J. (2023, April 14). Homeless populations are rising around California. Public Policy Institute of California. Retrieved April 20, 2023, from <https://www.ppic.org/blog/homeless-populations-are-rising-around-california/>
- Roy, A., Blasi, G., & Coleman, J. (2020). Hotel California: Housing the Crisis. UCLA Publisher .
- Trahan, R., & Opgenorth, J. (2010). CALGreen Building Standards Code: Marketing and Reality. Paul Hasting Stay Current. <https://doi.org/file:///D:/UCCS%20Research%20Project/CALGreen%20impact%20article%20%232.pdf>
- United States Census Bureau. “County Intercensal Tables: 2000-2010” census.gov. 11 October 2020. 12 July 2022 County Intercensal Tables: 2000-2010 (census.gov)
- United States Census Bureau. “County Population Totals: 2010-2020 (census.gov) ” census.gov. 11 October 2020. 12 July 2022 County Population Totals: 2010-2020 (census.gov)
- United States Census Bureau. “Housing Units Intercensal Tables: 2000-2010” census.gov. 11 October 2010. 12 July 2022 Housing Units Intercensal Tables: 2000-2010 (census.gov)
- United States Census Bureau. “National, State, and County Housing Unit Totals: 2010-2020” census.gov. 11 October 2020. 12 July 2022 National, State, and County Housing Unit Totals: 2010-2020 (census.gov)
- Zabel, J. E., & Paterson, R. W. (2006). The effects of critical habitat designation on Housing Supply: An analysis of california housing construction activity\*. *Journal of Regional Science*, 46(1), 67–95. <https://doi.org/10.1111/j.0022-4146.2006.00433.x>



# Pope Francis I's Mission to Reform the Catholic Church and Inspire International Social Justice

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## A POPE OF FIRSTS

On March 13, 2013, 76-year-old Argentine Jorge Mario Bergoglio intoned his first words as Pope Francis I to a cheering crowd in St. Peter's Square. In electing him the Bishop of Rome, he lightheartedly remarked, the "Cardinals [had] come almost to the ends of the Earth to get him."<sup>1</sup> Indeed, Pope Francis, the first pope to hail from Latin America, had come a long way. But the firsts of his papacy do not stop there. He is also the first Jesuit pope; the first to assume the pontifical name of St. Francis of Assisi; to "tweet" regularly and in nine languages, connecting with youth through his extensive social media presence<sup>2</sup>; to drive a Ford Focus rather than a Mercedes; to abandon the lavish velvet papal capes and shoes; and to pass up the Apostolic Palace for a two-room apartment<sup>3</sup>. So humble is Pope Francis that he asked St. Peter's Square during his initial address for "a favor. Before the bishop blesses the people, I ask that you would pray to the Lord to bless me."<sup>4</sup> Leveling with and imploring the common Catholic for spiritual support in embarking in his papacy, Pope Francis hinted at his ideology of "brotherhood in love and mutual trust"<sup>5</sup>—of inclusivity, and genuine human connection—which is the destination for the "journey of the Church"<sup>6</sup> he envisions under his benevolent leadership.

The Pope is one of a kind; as the head of the largest religious order, the adherents of which can be found in almost every one of the world's countries, he is unique from all other political leaders. Thus, he wields special power. In the contemporary political landscape fraught with division and increasing skepticism toward religion and the Catholic Church, understanding Pope Francis I's efforts for reform is crucial to distinguish the current role of one of history's longest enduring offices—the papacy—and institutions—the Church—as well as their future and influence on international affairs.

This paper will begin with a brief background on the papacy and Church as well as their evolving political countenances. Then, the paper will review Pope Francis' biography to shed light on the origin of his theology before launching into an analysis of his pastoral vision for reform in the Church. In its analysis, the paper will demonstrate that although Pope Francis is not immune to error, as exemplified by his lackluster response to the sexual abuse crisis and empty promises for the reform of women's roles in the Church, he has succeeded in using his pastoral touch as a starting point to structurally decentralize the Church and open it up to previously excluded identity groups and demographics. Finally, I will explore Pope Francis' global vision as a political actor: beyond the Church, Pope Francis champions social justice issues as a moral spokesperson for refugees and the poor and, at times, as a direct peace negotiator and policymaker for world leaders.

## NOT SEMPER IDEM<sup>7</sup>: THE CHANGING CHURCH AND PAPAL ROLE IN THE 20TH AND 21ST CENTURIES

Once, the Church exercised expansive political control as an autonomous nation-state. From the mid-eighth century through the following thousand years, the Pope ruled over the Papal States and held far-reaching sway over neighboring states<sup>8</sup>. However, the eighteenth century brought challenges one after another. First, the Enlightenment and French Revolution's liberal ideas called religion into question

1 "Transcript: Pope Francis' First Speech As Pontiff." NPR, Core Publisher, 13 Mar. 2013. [Web]. <https://www.npr.org/2013/03/13/174224173/transcript-pope-francis-first-speech-as-pontiff>

2 Lyon, Alynna J, et al, "Eluding Established Categories: Toward an Understanding of Pope Francis," in *Pope Francis as a Global Actor: Where Politics and Theology Meet* (Cham, Switzerland: Palgrave Macmillan, 2018), chap. 1, Kindle edition.

3 Carroll, James. "Who Am I To Judge?" *The New Yorker*, Condé Nast, 16 Dec. 2013. [Web]. <https://www.newyorker.com/magazine/2013/12/23/who-am-i-to-judge>

4 "Transcript: Pope Francis' First Speech As Pontiff."

5 Ibid.

6 Ibid.

7 "Semper Idem" is a latin expression meaning "always the same." It is used to describe the immutability of the Catholic Church and its doctrines. Carroll.

8 The Editors of Encyclopaedia Britannica. "Papal States." *Encyclopædia Britannica*, Encyclopædia Britannica, Inc. 15 April 2015. [Web]. <https://www.britannica.com/place/Papal-States>



and turned society's attention from the hereafter to the here-and-now. Then, the rise of nationalism, specifically with Italy's unification, led to the Church's loss of their territorial states in 1870<sup>9</sup>. The Church reacted with the First Vatican Council in 1870<sup>10</sup>, which enshrined the Church's monarchical organization, only adding to its medieval appearance. The Church at the dawn of the twentieth century was a Church set stubbornly in its ways. Meanwhile, people became more secular. In the aftermath of World War II, many lost faith in long-established truths and further refocused away from religion. The Lateran Treaty in 1929 established the independent Vatican state<sup>11</sup>, but the direct rule of the Catholic Church had ceased and it would have to forge a new political role for itself.

Pope John XXIII spiritually re-enlivened the papacy with the monumental changes produced by the Second Vatican Council (Vatican II, 1959-1965)<sup>12</sup>. Vatican II revamped the Church to reconcile it with the modern world. Recognizing the "sign of the times" and embracing the "unity of all humanity"<sup>13</sup> in their main published document, "The Dogmatic Constitution on the Church," the Council reinterpreted the gospel as a call for social justice and emphasized decentralization and pastoral understanding over strict doctrinal compliance.

Pope John Paul II took this sentiment beyond the Church's theology to revitalize its political role. His opposition to communism and support of the Solidarity movement in Poland is accepted by key players as integral to bringing about the fall of the Eastern Communist bloc in 1989<sup>14</sup>. The conservative papacy of Benedict XVI, who reacted against the reforms of Vatican II<sup>15</sup>, somewhat reversed this progress<sup>16</sup>.

With the twenty-first century, a further and most damning manifestation of the Church's impotence and corruption emerged. A 2002 Boston Globe investigation<sup>17</sup> brought to international attention countless victims, mostly young boys, of sexual abuse by priests and the illicit cover-ups of these crimes. Illegal money-laundering and various other scandals also emerged around this time<sup>18</sup>. Outraged by the Church's incompetent response, many Catholics lost faith and left the Church—though this exodus is just the latest episode in a long-term shrinkage of the Catholic community. In the United States, for example, former Catholics comprise 10% of adults<sup>19</sup>. And in Latin America, the Pew Research Center concluded that from the 1960s to the 2010s, Catholic-identifying adults surveyed fell from 90% to 69%<sup>20</sup>. Further, average rank-in-file Catholics are largely unresponsive to the Pope's causes and, according to several studies, derive their beliefs increasingly from their political association<sup>21</sup> and ethnicity<sup>22</sup>, revealing recent papacies' inability to transform the politics of individuals or inspire grassroots movements. Other demographic changes challenge the Church's history of Eurocentrism. While 65% of Catholics lived in

9 Ibid.

10 The Editors of Encyclopaedia Britannica. "First Vatican Council." Encyclopædia Britannica, Encyclopædia Britannica, Inc. 1 December 2022. [Web]. <https://www.britannica.com/event/First-Vatican-Council>

11 Ibid.

12 The Editors of Encyclopaedia Britannica. "Second Vatican Council." Encyclopædia Britannica, Encyclopædia Britannica, Inc. 2 Dec. 2019. [Web]. <https://www.britannica.com/event/Second-Vatican-Council>

13 Lennan, Richard. "Pope Francis and the Changing, Unchanging Church." *The Australasian Catholic Record*, vol. 93, no. 4 (October, 2016): 447-457. [ProQuest].

14 Bernstein, Richard. "Pope Helped Bring Poland Its Freedom." *The New York Times*, New York Times Company, 6 April 2005. [Web]. <https://www.nytimes.com/2005/04/06/world/europe/pope-helped-bring-poland-its-freedom.html>

15 Carroll.

16 Fisher.

17 The Boston Globe won the 2003 Pulitzer Prize in Public Service "for its courageous, comprehensive coverage of sexual abuse by priests, an effort that pierced secrecy, stirred local, national and international reaction and produced changes in the Roman Catholic Church." See <https://www.pulitzer.org/winners/boston-globe-1> for more information.

18 Carroll.

19 Ibid.

20 Gustafson, Christine A., "The Pope and Latin America: Mission from the Periphery," in *Pope Francis as a Global Actor*, chap. 10, Kindle edition.

21 Lyon. "Pope Francis as a Global Policy Entrepreneur." chap. 7.

22 Glatzer, et al. chap. 13.



Europe in 1910, the largest regional group of Catholics now reside in Latin America (around 39% as of 2010)<sup>23</sup>.

Roiled by scandal and in-fighting between progressive and conservative religious factions; faced with declining numbers and shifting Catholic populations; and confronted with culture wars, vast numbers of refugees, and chauvinistic populist parties, the Church that the new Pope inherited would have to navigate and transform to find harmony with modernity and pursue peace. The College of Cardinals chose Bergoglio as the leader to lead this evolution.

## **A SINNER'S ATONEMENT: THE TRANSFORMATION OF JORGE MARIO BERGOGLIO INTO POPE FRANCIS I**

Jorge Mario Bergoglio boasts an unusual background for a pope. Born the son of a northern Italian immigrant and the eldest of five siblings in 1936, Bergoglio had a humble upbringing amid a politically charged, diverse Buenos Aires, Argentina. Far away from Catholicism's European center, Bergoglio first graduated as a technical engineer—quite the opposite of a Pope's expected education—and even worked in a laboratory. Bergoglio's religious calling arrived later. At twenty-one, he began training for the priesthood as a Jesuit. He studied during the Sixties, as Vatican II renewed ancient interpretations of the gospel, undoubtedly influencing Bergoglio's budding theological beliefs and the eventual progressiveness of his papacy<sup>24</sup>.

Profound trials for Bergoglio's faith and leadership came with the political turmoil he faced as a senior official for Argentina's Jesuit order. The social justice that Vatican II espoused initiated a grassroots religious movement among Latin American priests called Liberation Theology, which advocated civil action to support the poor<sup>25</sup>. Throughout the Sixties in Argentina, these priests took the side of leftist political movements. Meanwhile, a reactionary faction of priests backed the right-wing military regime, the Junta, which seized power during Argentina's Dirty War (1976-1983). In navigating the tricky politics and morals of this severe divide—which split even Bergoglio's Jesuit order—Bergoglio descended with an iron fist to maintain control. In doing so, he embodied the traditional Jesuit ideology of hierarchical deference, demanding clergy who sympathized with the poor to refrain from living in the impoverished neighborhoods of Buenos Aires and almost expelling from his order those who defied him<sup>26</sup>.

Reflecting on his experience in a 2013 interview with the priest, journalist, and Vatican consultant, Antonio Spadaro, for the Jesuit journal, *La Civiltà Cattolica*, Pope Francis exhibited regret, confessing that “my authoritarian and quick manner of making decisions led me to have serious problems and to be accused of being ultraconservative.”<sup>27</sup> His hostility and shortcomings as a leader had dire consequences. At the beginning of the Dirty War, the Junta arrested and tortured two of Bergoglio's particularly defiant priests. Although he worked for their release from torture, he had failed in his responsibilities to protect those in his order. According to a close friend, Bergoglio acknowledges his lack of bravery and “constantly reproached himself for not doing enough.”<sup>28</sup> In Spadaro's interview, when asked how he defined himself as an individual, Bergoglio's first response was: “I am a sinner.”<sup>29</sup>

For the rest of his life, Bergoglio seems to seek atonement for these past sins. First, as Archbishop of Buenos Aires, he switched his earlier stance by encouraging priests to reside and conduct Mass in

23 Carter, Elizabeth., “Sign o’ the Times: Does Francis’ Papacy Represent a New Era for Western Europe?,” in *Pope Francis as a Global Actor*, chap. 9, Kindle edition.

24 Carroll.

25 Carter, chap. 9.

26 Carroll.

27 Spadaro, Antonio. “A Big Heart Open to God: An Interview with Pope Francis.” *America the Jesuit Review*, America Press, 30 Sep. 2013. <https://www.americamagazine.org/faith/2013/09/30/big-heart-open-god-inter-view-pope-francisc>

28 Carroll.

29 Spadaro.

the slums. Then, as Pope Francis I, Bergoglio defied the world's expectations; the New York Times initially described his election as "a conventional choice" and characterized him as a "theological conservative"<sup>30</sup>—assumptions that Pope Francis would soon complicate and transcend. Continuing his guilt-born theological reevaluation and drawing from his firsthand experience with poverty, Pope Francis works to form "a poor Church, for the poor"<sup>31</sup>—evoking sentiments of Liberation Theology, which he had earlier opposed. And he became the first pope to assume the papal name of the modest friar, St. Francis of Assisi, emblematic of his devotion to peace, the environment, and the impoverished<sup>32</sup>. Certainly, Bergoglio's spiritual revisions inform his papal commitment to mercy and acceptance. And his technical training may explain his desire to appease a secular, scientific world paralyzed by culture wars. Descending from his predecessors' morally rigid positions to embrace simplicity, poverty, and individual connection, Bergoglio combines his charisma and unique experience to capture the modern world's attention and reinfuse the papacy with humility and humanity.

### **‘BROTHERLY EMBRACE:’<sup>33</sup> POPE FRANCIS’S MERCIFUL HAND WITHIN THE CATHOLIC CHURCH<sup>34</sup>**

Pope Francis is a new kind of pope because he is a new kind of leader: one who, beginning with his modesty, is a role model rather than a moralizer, and who, as a 'sinner' himself, empathizes with human hardships. Illustrating his vision in Spadaro's interview, Pope Francis asserted "that the thing the church needs most today is the ability to heal wounds and to warm the hearts of the faithful; it needs nearness, proximity. I see the church as a field hospital after battle."<sup>35</sup> His plan is not one of exact doctrinal modifications. Instead, he maintains confidence that spiritual adaptation will lend naturally to gradual doctrinal and structural adjustments while making the Church more compatible with contemporary society.

Pope Francis extends his inclusive ideology to achieve détente with the modern practices of divorce, homosexuality, and contraception that have long challenged the Church. He achieves this through a de-emphasis of these issues, instead embracing people as multifaceted individuals. On a plane along his 2013 travels to Rio, Pope Francis responded to a question about his stance on homosexuality, asking "who am I to judge?"<sup>36</sup> Elaborating this thought in Spadaro's interview, Pope Francis insisted that one "must always consider the person,"<sup>37</sup> not just the so-called sin that they committed. This sentiment originates in his dedication to mercy and desire to open the Church to previously excluded groups, such as the LGBTQ+ community that Catholic countries like Ireland, Mexico, and Poland have struggled against. Yet Pope Francis is not radical in his religious beliefs. As a theological conservative, he maintains the Church's condemnation of abortion, homosexuality, divorce, and contraception<sup>38</sup> and, in turn, stops

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30 Carroll.

31 Lyon, et al. "Eluding Established Categories." chap. 1.

32 Carroll.

33 In 1999, Bergoglio addressed Plaza de Mayo in Buenos Aires, Argentina as Archbishop, speaking of unity and promising that "it's better to be united as brothers, than be distant, estranged and angry. Now let's give each other a brotherly embrace." Immediately, the entire square, once strangers to their neighbors, turned to one another and gave a warm hug. These words and the subsequent demonstration of unity and love are exactly the embodiment of Bergoglio's ideology that remains central to his papacy. Pope Francis: A Man Of His Word, directed by Wilm Wenders (2018; Cannes: Focus Features, 2018), Netflix, <https://www.netflix.com/watch/80244855?trackId=14277281&tctx=0%2C0%2C56dd1de2-3772-4bea-9e4f-15f3311ae3d5-156060592%2C%2C>

34 This research paper will limit discussion of Pope Francis's theology to its contributions to his more tangible political and structural reforms within and beyond the Catholic Church—it will not expound purely theological changes.

35 Spadaro.

36 Horowitz, Jason. "How the Pope Is Changing the Catholic Church." Vogue, Condé Nast, 16 July 2018. [Web]. <https://www.vogue.com/article/pope-francis-vogue-august-2018-issue>.

37 Spadaro.

38 Stack, Liam. "Pope Francis on Abortion and Other Issues." The New York Times, New York Times Company, 21 Sept. 2015. [Web]. <https://www.nytimes.com/interactive/2015/09/21/us/pope-francis-issues-catholics.html>

short of doctrinal change regarding these issues, as seen with his recent silence on whether to allow the ordination of married men in the Amazon where there is a shortage of priests<sup>39</sup>. But he refuses to dwell on these issues and criticizes the world's preoccupation with them, opting pragmatically to focus more on achieving spiritual unity among Catholics than on what he considers abstract doctrinal questions. He even contends in Spadaro's interview that "the dogmatic and moral teachings of the Church are not all equivalent,"<sup>40</sup> a clear departure from his traditionalist predecessors. Distinguishing between the letter of doctrine and the realistic practice of Catholicism for the sake of practicality and appeasement, Pope Francis allows regional differences in theological interpretation; as a result, Catholicism in Germany, for instance, is vastly secular beside Poland's religious conservatism<sup>41</sup>. Here, one can see how Pope Francis's prioritization of pastoral changes and inclusivity contributes to subsequent structural decentralization that finds its origin at Vatican II.

Pope Francis also breaks with his predecessors to respond to a changing center of the Church from Europe to Latin America. His travels are evidence of this. While Pope Benedict XVI remained in Europe for 50% of his travels, only 16% of Pope Francis's travels have been within Europe<sup>42</sup>. Instead, he goes to Latin American countries, including Ecuador, Bolivia, Paraguay, Cuba, Mexico, Colombia<sup>43</sup>. His commitment continues with his appointment of more diverse individuals to powerful Church positions. More than 60% of the cardinal electors he chose were not from Europe or the United States but instead from smaller African and Latin American countries<sup>44</sup>; about half of the cardinals now hail from developing countries<sup>45</sup>. Such diversity contributes to a more accessible, relatable Church, as is Pope Francis's ultimate goal.

Despite his positive transformation of the Church, Pope Francis has made mistakes, as he, no doubt, would be the first to admit. Pope Francis initially came up short in dealing with the fallout from the sexual abuse scandal. He remained silent, refused to meet with victims, undermined allegations as "slander," endorsed an accused Chilean bishop<sup>46</sup>, and maintained the Church's long-scorned secrecy by withholding documents from the United Nations<sup>47</sup>. However, Pope Francis eventually owned up to his failings and validated the victim's stories in personal conversations with them<sup>48</sup>. Furthermore, he formed a tribunal to judge clergy who faced accusations of abuse. Following more than thirty years of demands for such recognition and action<sup>49</sup>, Pope Francis deserves some credit for steps taken, but his semi-satisfactory strides against the perpetrators are long overdue and there is still more work to be done.

In other areas, Pope Francis' approach of de-emphasizing social issues can backfire. Usually the resulting doctrinal flexibility of such a refocusing can create a more welcoming Church and represent progress. But sometimes this same method results in stagnation, leaving problems unaddressed, such as in the case of the role for women in the Church. On the topic, Pope Francis stated that "it is necessary

39 "Pope Francis balks at a proposal to ordain married men in Amazonia." The Economist. The Economist Group, 12 Feb. 2020. [Web]. <https://www.economist.com/the-americas/2020/02/12/pope-francis-balks-at-a-proposal-to-ordain-married-men-in-amazonia>

40 Spadaro.

41 Douthat, Ross. "Pope Francis Is Beloved. His Papacy Might Be A Disaster." The New York Times, New York Times Company, 16 March 2018. [Web]. <https://www.nytimes.com/2018/03/16/opinion/pope-francis-vatican-disaster.html>

42 Harlan, Chico. "Pope Francis, Globe-Trotting At An Age When Other Popes Have Eased Up, Is Trying to Transform the Church Through His Travels." The Washington Post, Fred Ryan, 22 Nov. 2019. [Web]. [https://www.washingtonpost.com/world/europe/pope-francis-globe-trotting-at-an-age-when-other-popes-have-eased-up-is-trying-to-transform-the-church-through-his-travels/2019/11/22/b40cbc8a-0570-11ea-9118-25d6bd37dfb1\\_story.html](https://www.washingtonpost.com/world/europe/pope-francis-globe-trotting-at-an-age-when-other-popes-have-eased-up-is-trying-to-transform-the-church-through-his-travels/2019/11/22/b40cbc8a-0570-11ea-9118-25d6bd37dfb1_story.html)

43 Gustafson, chap. 10.

44 Carter. Chap. 9.

45 Harlan.

46 Horowitz.

47 Carroll.

48 Horowitz.

49 "8 Ways Pope Francis Is Changing the Direction of the Catholic Church." The New York Times, New York Times Company, 6 July 2015. [Web]. <https://www.nytimes.com/interactive/2015/06/13/world/europe/francis-the-activist-pope.html>

to broaden the opportunities for a stronger presence of women in the Church.”<sup>50</sup> Accordingly, he ended sexist investigations initiated under Pope Benedict into American nuns accused of promoting feminism, an ideology antagonistic to traditional Catholic teachings<sup>51</sup>. But he has not made clear exactly what this ‘stronger presence’ of which he spoke constitutes, for he rejects the ordination of women, continuing to refuse doctrinal change<sup>52</sup>. Here, his refusal to budge on doctrine, merely looking away from it, renders his verbal promise empty and forms a glaring blind spot in his leadership.

Despite these shortcomings, there is no evidence of regression under Pope Francis’s watch, only a lack of the forward momentum expected from his progressive leadership, which is understandably difficult in a slow-moving institution like the Church. Thus, Pope Francis’s papacy should be viewed as one of gradual but meaningful pastoral change that, though contrasting his immediate predecessors, is a continuation of Vatican II’s shifting interpretations of the Gospel and decentralizing efforts.

### **A TOILING SHEPARD: POPE FRANCIS’S EFFORTS TO EFFECT CHANGE BEYOND THE CATHOLIC CHURCH**

Stalin rhetorically remarked in 1935, “how many divisions has the pope?”<sup>53</sup> None. Yet, by no means is he deprived of power. There is only one pope in existence, and he is the leader of the world’s largest religion. Using his office’s niche and prestige, Pope Francis expands his vision for the Church to the world at large, intentionally engaging the global political stage as a policy entrepreneur<sup>54</sup> for climate change and an advocate for the victims of an exclusionary world system. Notably, he began his papacy as the largest number of migrants in history became displaced<sup>55</sup>. Combating the xenophobia of reactionary populist regimes rising throughout the world, Pope Francis contributes a moral imperative to and sparks awareness for the dangerous ramifications of such prejudicial behavior.

He achieves this, for one, through his travels and symbolic actions. Pope Francis took his first trip outside of the Vatican to the Italian island, Lampedusa, the arrival place of many North African migrants. There, he lamented “the globalization of indifference [that] has taken away from us the ability to weep!”<sup>56</sup> With his words, he evoked an urgent mission to rediscover the humanity and empathy he believes society has lost in the material pursuits that are intrinsic to liberal market economies. Pope Francis practiced what he preached, visiting refugees in over thirty countries by 2017<sup>57</sup>, even allowing twelve Syrian Muslim refugees to return with him to reside at the Vatican<sup>58</sup>. He continued opening the Catholic religion beyond an exclusive group to those of other faiths, genders, and socioeconomic statuses when he reformed the tradition of Holy Thursday to bring it to those who needed it most—prisoners looking for rehabilitation. Instead of washing twelve clergy’s feet at the Vatican, as custom dictates, Pope Francis, with the help of two women, washed the feet of twelve inmates, two of whom were Muslim,

50 Spadaro.

51 Stack.

52 Ibid.

53 Lyon, et al. “Eluding Established Categories.” chap. 1.

54 Alynna J. Lyon, in her essay “Pope Francis as a Global Policy Entrepreneur: Moral Authority and Climate Change,” defines a policy entrepreneur as an individual who can (1) “change the way we think about things; they redefine both problems and solutions,” (2) “serve as advocates for certain actions. Here they articulate what can be done to address the problem—as they have defined it—and may lobby and venue shop for arenas that are ripe to adopt a policy prescription,” and (3) “bring relevant stakeholders to the negotiating table, nudge political leaders, and even contribute resources (time, money, and legitimacy) to move a discussion or policy forward.” Lyon, Alynna J., “Pope Francis as a Global Policy Entrepreneur: Moral Authority and Climate Change,” in Pope Francis as a Global Actor, chap. 7, Kindle edition.

55 Glatzer, Miguel, et al., “‘You Are Instead a Gift’: Pope Francis’s Response to Global Migration and the Refugee Crisis,” in Pope Francis as a Global Actor, chap. 13, Kindle edition.

56 Ibid.

57 Ibid.

58 Ivereigh, Austen. “Poland’s Problem With This Pope.” Politico, Axel Springer SE, 27 July 2016. [Web]. <https://www.politico.eu/article/polands-problem-with-this-pope-francis-krakow-catholic-church/>



at the Casal del Marmo jail near Rome<sup>59</sup>. His outreach to the poor is intimate, so much so that he even invited eight homeless people to share in his eightieth birthday breakfast<sup>60</sup>. Pope Francis, therefore, makes change at the personal level, offering the impoverished a communal home in the Church.

Pope Francis also calls directly for change on a global scale, assuming the role of a policy entrepreneur<sup>61</sup> with a moral agenda. He accepted an invitation to address the United States Congress in 2015—an offer previous popes had declined going back twenty years<sup>62</sup>—thereby demonstrating his desire to be more concrete and candid in his politics than his predecessors. To Congress, he spoke openly of his opinions on immigration and climate change<sup>63</sup>. In 2015, Pope Francis became the second pope to address the United Nations (UN) General Assembly where he bemoaned a “relentless process of exclusion” and a “culture of waste,”<sup>64</sup> clearly backing a specific political platform and consequently assuming the risk of a politician in communicating his personal beliefs. Again, in 2014 at the European Union’s Parliament, he criticized large corporations, calling them “unseen empires” and urging democracies not to “collapse under the pressure of multinational interests which are not universal”<sup>65</sup>—he later denounced oil companies who maltreated the environment<sup>66</sup>. Whether a supporter of his liberalism or a critic calling him a communist—as so many do<sup>67</sup>—one must confess that Pope Francis’s addresses to political organizations are often more political than theological. With his calls for change on a macro level, Pope Francis hopes to raise awareness for his special interests and policies among the body of political leaders he can reach.

Pope Francis has also had success in acting as a diplomat in several cases that have yielded international political change. In 2014, Pope Francis led negotiations between the United States and Cuba, which produced an agreement regarding political prisoners and humanitarian issues<sup>68</sup>. Later, organizing a summit and prayer session between the Israeli and Palestinian presidents<sup>69</sup>, he furthered his mediating role. Through these efforts, Pope Francis concretizes the papacy’s role as a trusted intermediary for states hoping to solve disputes through diplomacy.

Pope Francis’s most successful political initiative has been in influencing international policy on climate change. In 2015, conveniently before the United Nations Climate Change Conference in Paris (COP21), Pope Francis published the widely popular encyclical, “*Laudato Si: On Care for Our Common Home*.” In it, he demands that we “integrate questions of justice in debates on the environment”<sup>70</sup> and accompany “our immense technological development” with “development in human responsibility, values, and conscience,”<sup>71</sup> thereby uniting science and theology to condemn the environment’s exploitation and calling for the fight against climate change to be regarded as a moral mission. Here, Pope Francis finds his most powerful political voice. “*Laudato Si*” reached a wide audience. Catholic bishops and priests

59 Carroll.

60 Glatzer, et al. chap. 13.

61 Lyon. “Pope Francis as a Global Policy Entrepreneur.” chap. 7.

62 Cammisa, Anne Marie. “The Pope and the United States: Faith as Dialogue,” in Pope Francis as a Global Actor, chap. 8, Kindle edition.

63 “Transcript: Pope Francis’s Speech to Congress.” The Washington Post, Fred Ryan. [Web]. [https://www.washingtonpost.com/local/social-issues/transcript-pope-franciss-speech-to-congress/2015/09/24/6d7d7ac8-62bf-11e5-8e9e-dce8a2a2a679\\_story.html](https://www.washingtonpost.com/local/social-issues/transcript-pope-franciss-speech-to-congress/2015/09/24/6d7d7ac8-62bf-11e5-8e9e-dce8a2a2a679_story.html)

64 Lyon. “Pope Francis as a Global Policy Entrepreneur.” chap. 7.

65 Carter. Chap. 9.

66 Horowitz.

67 Lyon. “Pope Francis as a Global Policy Entrepreneur.” chap. 7.

68 Yardley, Jim, and Gaia Pianigiani. “Pope Francis Is Credited With a Crucial Role in U.S.-Cuba Agreement.” The New York Times, New York Times Company, 17 Dec. 2014. [Web]. <https://www.nytimes.com/2014/12/18/world/americas/breakthrough-on-cuba-highlights-popes-role-as-diplomatic-broker.html>

69 “8 Ways Pope Francis Is Changing the Direction of the Catholic Church.”

70 Lyon. “Pope Francis as a Global Policy Entrepreneur.” chap. 7.

71 Yardley, Jim, and Laurie Goodstein. “Pope Francis, in Sweeping Encyclical, Calls for Swift Action on Climate Change” The New York Times, New York Times Company, 18 June 2015. [Web]. <https://www.nytimes.com/2015/06/19/world/europe/pope-francis-in-sweeping-encyclical-calls-for-swift-action-on-climate-change.html>



worldwide discussed the writing during services. Meanwhile, Pope Francis arranged a highly-publicized string of travels to raise awareness that resembled a politician's campaign<sup>72</sup>. He projected images of nature and pollution across the face of St. Peter's Basilica<sup>73</sup> and he sent his shoes in symbolic support to a silent rally in Paris<sup>74</sup>. These gestures were heard around the world by important political figures; United States President Obama tweeted regarding the encyclical and the UN Secretary-General voiced his support for the Pope's positions<sup>75</sup>. On the individual level, Pope Francis has had success; a survey found a 7% increase of respondents who viewed global warming as a moral issue between the spring before the encyclical's publication and the following autumn<sup>76</sup>.

Pope Francis, armed with policy entrepreneurship, crowded the weeks before COP21 with meetings and appeals to religious and political leaders, including those in Kenya, Uganda, and the Central African Republic<sup>77</sup>. As the conference began, the Vatican sent representatives to express the Pope's stance<sup>78</sup> and pressure attending world leaders. Pope Francis, according to the BBC, even personally called the Nicaraguan president to persuade him to sign the final deal<sup>79</sup>, which committed 200 countries to reduce carbon emissions and prevent global warming from exceeding 2°C. The Sustainable Development Goals that were adopted at COP21 confirmed seventeen objectives, twelve of which were detailed in "Laudato Si,"<sup>80</sup> indicating that the Pope had a direct influence in the creation and adoption of this historic deal.

Through his understanding of his position as a religious leader, Pope Francis successfully raises awareness for the plight of the poor, immigrants, and the environment through a moral lens. In doing so, he forges a unique role for the Vatican to act as a spiritual guide in international political discourse and for political world leaders.

## CONCLUSION: A REVITALIZED CATHOLIC CHURCH AND ITS UNCERTAIN FUTURE

At the dawn of the twenty-first century, the sexual abuse scandal and inward-looking leadership threatened the Church's relevance in an increasingly secular world. Pope Francis refashioned the pastoral countenance of the Church to achieve structural decentralization and clerical diversification, responded to a proliferation of Catholics outside of Europe, and exercised policy entrepreneurship and diplomacy to raise awareness and create political change in addressing existential global questions. Despite Pope Francis's successful efforts in modernizing the Church, he had several failures, which suggest that the Church's future remains uncertain. The Church must continue adapting to population shifts. Although Latin America currently boasts large shares of Catholics, more than 40% of Catholics will live in sub-Saharan Africa by 2060, according to Pew Research Center<sup>81</sup>. Even larger an obstacle is Catholicism's global decline, which has not reversed under Pope Francis's leadership, and its lack of responsiveness to popes' calls to action. Nonetheless, Pope Francis has established a new role for the Pope as a shepherd for the displaced and destitute, a moral mouthpiece addressing the leaders of an indifferent world, and a creator of a sacred space where those who were once marginalized can feel more welcome and less judged.

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72 Ibid.

73 Scammell, Rosie. "Pope Calls On World Leaders to Adopt Paris Climate Deal." The Washington Post, Fred Ryan, 14 Dec. 2015. [Web]. [https://www.washingtonpost.com/national/religion/pope-calls-on-world-leaders-to-adopt-paris-climate-deal/2015/12/14/519bd6c2-a2ae-11e5-8318-bd8caed8c588\\_story.html](https://www.washingtonpost.com/national/religion/pope-calls-on-world-leaders-to-adopt-paris-climate-deal/2015/12/14/519bd6c2-a2ae-11e5-8318-bd8caed8c588_story.html)

74 Lyon. "Pope Francis as a Global Policy Entrepreneur." chap. 7.

75 Ibid.

76 Ibid.

77 Ibid.

78 Scammell.

79 Ibid.

80 Lyon. "Pope Francis as a Global Policy Entrepreneur." chap. 7.

81 Harlan.

Will successors follow in Pope Francis's footsteps? It is hard to say, for his perceived radicalism may spark a pendulum effect in the Church's leadership that promotes a conservative candidate's election. Only time will tell. Either way, Pope Francis's genuine modesty, fight for social justice, and anti-material message have fallen upon the willing ears of youth, creating a preliminary future for this new type of Church. Most importantly, Pope Francis is the leader that the contemporary Church and world need: more than a politician, a supportive friend who is sure to "talk little, listen a lot, say just enough, and always look people in the eye."<sup>82</sup>

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82 Pope Francis: A Man Of His Word, directed by Wilm Wenders

## REFERENCES

- Bernstein, Richard. "Pope Helped Bring Poland Its Freedom." *The New York Times*, New York Times Company, 6 April 2005. [Web]. <https://www.nytimes.com/2005/04/06/world/europe/pope-helped-bring-poland-its-freedom.html>
- Cammisa, Anne Marie. "The Pope and the United States: Faith as Dialogue," in *Pope Francis as a Global Actor*, chap. 8, Kindle edition.
- Carroll, James. "Who Am I To Judge?" *The New Yorker*, Condé Nast, 16 Dec. 2013. [Web]. <https://www.newyorker.com/magazine/2013/12/23/who-am-i-to-judge>
- Carter, Elizabeth., "Sign o' the Times: Does Francis' Papacy Represent a New Era for Western Europe?," in *Pope Francis as a Global Actor*, chap. 9, Kindle edition.
- Douthat, Ross. "Pope Francis Is Beloved. His Papacy Might Be A Disaster." *The New York Times*, New York Times Company, 16 March 2018. [Web]. <https://www.nytimes.com/2018/03/16/opinion/pope-francis-vatican-disaster.html>
- Glatzer, Miguel, et al., "'You Are Instead a Gift': Pope Francis's Response to Global Migration and the Refugee Crisis," in *Pope Francis as a Global Actor*, chap. 13, Kindle edition.
- Gustafson, Christine A., "The Pope and Latin America: Mission from the Periphery," in *Pope Francis as a Global Actor*, chap. 10, Kindle edition.
- Harlan, Chico. "Pope Francis, Globe-Trotting At An Age When Other Popes Have Eased Up, Is Trying to Transform the Church Through His Travels." *The Washington Post*, Fred Ryan, 22 Nov. 2019. [Web]. [https://www.washingtonpost.com/world/europe/pope-francis-globe-trotting-at-an-age-when-other-popes-have-eased-up-is-trying-to-transform-the-church-through-his-travels/2019/11/22/b40cbc8a-0570-11ea-9118-25d6bd37dfb1\\_story.html](https://www.washingtonpost.com/world/europe/pope-francis-globe-trotting-at-an-age-when-other-popes-have-eased-up-is-trying-to-transform-the-church-through-his-travels/2019/11/22/b40cbc8a-0570-11ea-9118-25d6bd37dfb1_story.html)
- Horowitz, Jason. "How the Pope Is Changing the Catholic Church." *Vogue*, Condé Nast, 16 July 2018. [Web]. <https://www.vogue.com/article/pope-francis-vogue-august-2018-issue>
- Ivereigh, Austen. "Poland's Problem With This Pope." *Politico*, Axel Springer SE, 27 July 2016. [Web]. <https://www.politico.eu/article/polands-problem-with-this-pope-francis-krakow-catholic-church/>
- Lennan, Richard. "Pope Francis and the Changing, Unchanging Church." *The Australasian Catholic Record*, vol. 93, no. 4 (October, 2016): 447-457. [ProQuest].
- Lyon, Alynna J, et al, "Eluding Established Categories: Toward an Understanding of Pope Francis," in *Pope Francis as a Global Actor: Where Politics and Theology Meet* (Cham, Switzerland: Palgrave Macmillan, 2018), chap. 1, Kindle edition.
- Lyon, Alynna J., "Pope Francis as a Global Policy Entrepreneur: Moral Authority and Climate Change," in *Pope Francis as a Global Actor*, chap. 7, Kindle edition.
- Pope Francis: A Man Of His Word, directed by Wilm Wenders (2018; Cannes: Focus Features, 2018), Netflix, <https://www.netflix.com/watch/80244855?trackId=14277281&tctx=0%2C0%2C56dd1de2-3772-4bea-9e4f-15f3311ae3d5-156060592%2C%2C>
- Pulitzer. "The Boston Globe." *The Pulitzer Prizes*, 2003. <https://www.pulitzer.org/winners/boston-globe-1>.
- Scammell, Rosie. "Pope Calls On World Leaders to Adopt Paris Climate Deal." *The Washington Post*, Fred Ryan, 14 Dec. 2015. [Web]. [https://www.washingtonpost.com/national/religion/pope-calls-on-world-leaders-to-adopt-paris-climate-deal/2015/12/14/519bd6c2-a2ae-11e5-8318-bd8caed8c588\\_story.html](https://www.washingtonpost.com/national/religion/pope-calls-on-world-leaders-to-adopt-paris-climate-deal/2015/12/14/519bd6c2-a2ae-11e5-8318-bd8caed8c588_story.html)
- Spadaro, Antonio. "A Big Heart Open to God: An Interview with Pope Francis." *America the Jesuit Review*, America Press, 30 Sep. 2013. <https://www.americamagazine.org/faith/2013/09/30/big-heart-open-god-inter-view-pope-franci>
- Stack, Liam. "Pope Francis on Abortion and Other Issues." *The New York Times*, New York Times Company, 21 Sept. 2015. [Web]. <https://www.nytimes.com/interactive/2015/09/21/us/pope-francis->

issues-catholics.html

The Editors of Encyclopædia Britannica. "First Vatican Council." Encyclopædia Britannica, Encyclopædia Britannica, Inc. 1 December 2022. [Web]. <https://www.britannica.com/event/First-Vatican-Council>

The Editors of Encyclopædia Britannica. "Papal States." Encyclopædia Britannica, Encyclopædia Britannica, Inc. 15 April 2015. [Web]. <https://www.britannica.com/place/Papal-States>

The Editors of Encyclopædia Britannica. "Second Vatican Council." Encyclopædia Britannica, Encyclopædia Britannica, Inc. 2 Dec. 2019. [Web]. <https://www.britannica.com/event/Second-Vatican-Council>

Yardley, Jim, and Gaia Pianigiani. "Pope Francis Is Credited With a Crucial Role in U.S.-Cuba Agreement." The New York Times, New York Times Company, 17 Dec. 2014. [Web]. <https://www.nytimes.com/2014/12/18/world/americas/breakthrough-on-cuba-highlights-popes-role-as-diplomatic-broker.html>

Yardley, Jim, and Laurie Goodstein. "Pope Francis, in Sweeping Encyclical, Calls for Swift Action on Climate Change" The New York Times, New York Times Company, 18 June 2015. [Web]. <https://www.nytimes.com/2015/06/19/world/europe/pope-francis-in-sweeping-encyclical-calls-for-swift-action-on-climate-change.html>

"8 Ways Pope Francis Is Changing the Direction of the Catholic Church." The New York Times, New York Times Company, 6 July 2015. [Web]. <https://www.nytimes.com/interactive/2015/06/13/world/europe/francis-the-activist-pope.html>

"Pope Francis balks at a proposal to ordain married men in Amazonia." The Economist. The Economist Group, 12 Feb. 2020. [Web]. <https://www.economist.com/the-americas/2020/02/12/pope-francis-balks-at-a-proposal-to-ordain-married-men-in-amazonia>

"Transcript: Pope Francis' First Speech As Pontiff." NPR, Core Publisher, 13 Mar. 2013. [Web]. <https://www.npr.org/2013/03/13/174224173/transcript-pope-francis-first-speech-as-pontiff>

"Transcript: Pope Francis's Speech to Congress." The Washington Post, Fred Ryan. [Web]. [https://www.washingtonpost.com/local/social-issues/transcript-pope-franciss-speech-to-congress/2015/09/24/6d7d7ac8-62bf-11e5-8e9e-dce8a2a2a679\\_story.html](https://www.washingtonpost.com/local/social-issues/transcript-pope-franciss-speech-to-congress/2015/09/24/6d7d7ac8-62bf-11e5-8e9e-dce8a2a2a679_story.html)



# Beyond Oil: Exploring the Effects of Resource Rents in Today's Information Landscape

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**Tess Louie**

**Edited by**

**Erik Movsessian &  
Jennifer Buckley**



## ABSTRACT

How do we explain variations in informational freedom among autocracies? What use is the information generated by the press or the internet to a dictator? This paper builds off Egorov, Guriev, and Sonin's (2009) work which establishes an empirical relationship between oil abundance and media repression. I first explore whether this relationship is generalizable to other types of "rents" to a regime. Using panel data from 1992 to 2017, I demonstrate that other types of natural resource rents exert the same negative effect on media freedom, but more volatile rents, such as foreign aid, do not. I also consider the theoretical differences between traditional news media and internet reports and the value of the informational signals these sources provide to a dictator. I show that internet freedom, as measured by censorship and internet shutdowns, also exhibits an inverse relationship with resource abundance; however, compared to traditional media freedom, it is less clearly related to quality of governance.

## INTRODUCTION

Freedom of the press is a hallmark of democracy. A free press helps citizens form political preferences by collecting and disseminating information about key economic and social issues. Citizens, in turn, hold governments accountable by expressing those political preferences in competitive elections. It is known widely to both supporters and opponents of democracy that a free press plays this important role. It is known widely to both supporters and opponents of democracy. One might expect, then, that the absence of a free press is characteristic of dictatorship. Instead, we find that the severity of press repression varies widely among non-democratic regimes.

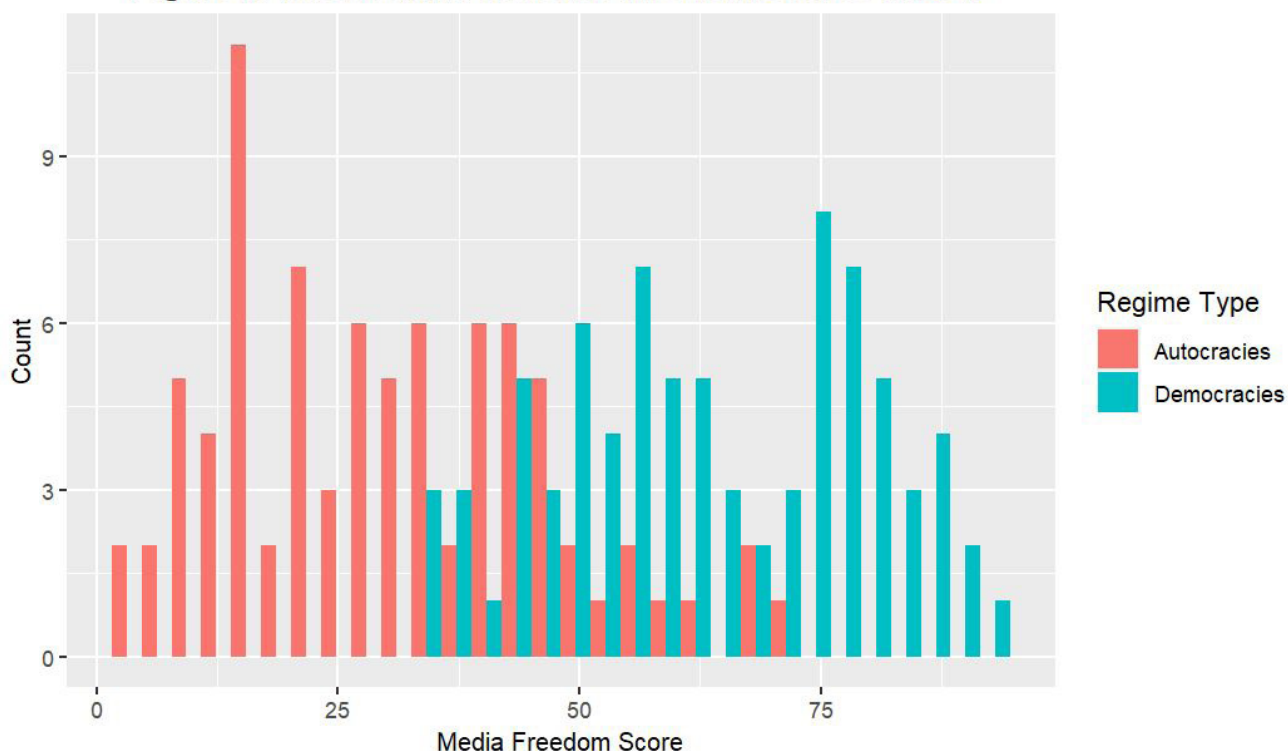
Up until 2017, Freedom House published a media freedom index that measured the extent to which a country's political, economic, and legal environments enabled a free press to operate. For clarity, I will hereafter call this variable a country's "media freedom" or "media freedom score," and the concept it measures "traditional media freedom," as it reflects the extent to which press can freely disseminate information through traditional forms of media such as print, radio, and television. Under Freedom House's aggregation strategy, countries received a media freedom score between 0 and 100, with 0 being the least free and 100 being the most free<sup>1</sup>. Defining autocracies as countries falling below the median democracy level of a given year<sup>2</sup>, we see in Figure 1 that in 2017 autocracies received media freedom scores ranging from 2 to 72. This means that autocracies spanned all three categories of "not free," "partly free," and "free" media environments, and that some relatively more autocratic countries had greater traditional media freedom than some democracies.

Why wouldn't all dictators choose to completely stifle the press, knowing that it acts as a check on their power? Egorov, Guriev, and Sonin (2009), hereafter EGS, offer an answer to this question. Just as a free press offers information to citizens about the performance of government, it also offers feedback to a dictator about the behavior of bureaucrats. Such feedback would otherwise be hard for a dictator to observe. In this way, a free press can enable a dictator to induce good governance from her bureaucrats and by doing so protect her political survival.

Natural resource abundance, however, makes good governance less important, as it allows dictators to rely more on the profits of extractive industries than on the productivity of a well-regulated modern sector for government revenue. EGS therefore argue that by making good governance less important, natural resource abundance makes a dictator less inclined to tolerate a free press. They present evidence that differences in the amount of oil present in a country can help explain some of the variation in media freedom scores among autocracies.

<sup>1</sup> Note that in the original publication, 0 actually corresponded with the most media freedom; the score increased with more repression. I invert the score because I think it is more straightforward to talk about higher scores being more free and lower scores being less free.

<sup>2</sup> Democracy level is measured using polity score from the Polity dataset; this measure is frequently used in comparative literature. Further justification for this operationalization is provided in the evidence section.

**Figure 1: Distribution of Media Freedom Scores in 2017**

EGS make an argument about natural resources in general, but their empirical analysis uses oil alone as a proxy. The authors do not consider whether there is something unique about oil markets that differentiate it from other natural resources such that other natural resources would not demonstrate the same relationship with traditional media freedom. This is an important question for several reasons. First, the number of countries with a substantial amount of oil is limited. According to World Bank estimates for 2020, oil rents account for 2% or more of GDP in just 35 countries. Using a broader conceptualization of natural resources allows us to learn about more of the world; coal, mineral, and/or forestry rents account for 2% or more of GDP in an additional 40 countries. Second, there are in fact unique characteristics of oil, such as the extent to which oil industries are nationalized and the sheer size of the global oil market. It is worth considering how such characteristics factor into a dictator's decision to censor the press, and if these characteristics are important enough that other natural resources do not matter in the same way in respect to traditional media freedom.

Therefore, the first contribution of this paper is to ask whether all natural resources negatively affect traditional media freedom. I consider the unique characteristics of oil, but ultimately conclude that the attenuating effect of natural resource abundance on traditional media freedom extends beyond oil. To explore this idea, I regress media freedom score on total natural resource rents and demonstrate that total rents are a better predictor than oil rents alone.

Second, the rise of the internet, particularly social media, has changed the information environment for citizens of both democracies and dictatorships in ways that EGS could not have imagined at the time their paper was published. For example, a 2022 survey of Russian citizens by the independent research organization Levada Center found that 39% of respondents most often relied on social media to obtain their local and international news. Television remained the most popular source of news, but the share of respondents who reported they most often got their news from television had declined significantly since 2013. With many countries seeing similar trends, it is worth asking whether the internet plays the same role as traditional media in disseminating important political information. Consequently, can the same

relationship be established between natural resources and internet freedom as between natural resources and traditional media freedom?

I argue that because the internet provides weaker information signals and increases the threat of collective action (i.e. fewer upsides and greater risks), both resource-rich and resource-poor dictators will have greater incentives to censor it. Thus, there should not be a clear relationship between internet freedom and natural resource abundance. By analyzing data from VDEM's Digital Society Survey, I demonstrate that while resource abundance is negatively correlated with internet freedom, the difference in internet freedom between high- and low-resource autocracies is smaller than the difference in traditional media freedom between high- and low-resource autocracies. Additionally, using the World Bank's governance indicators, I show that the relationship between internet freedom and quality of governance is less clear than that between traditional media freedom and quality of governance.

## RELATED LITERATURE

Two separate but related branches of literature underline this paper: theories of mass political action and models of the behavior of dictatorships. In a comprehensive review, Gehlbach, Sonin, and Svobik (2016) identify two main themes found in formal models of dictatorship: asymmetrical information and commitment issues. The theme of asymmetrical information finds intellectual roots in the seminal work of Wintrobe (1998) which defines the "dictator's dilemma": dictators cannot ascertain whether their polity supports the regime because they genuinely approve of it or because the regime commands their support. Therefore, the dictator must engage in the political exchange of public services and patronage to individuals and interest groups in return for political loyalty. The dictator can also use repression to exert power over her polity and thus must optimize her use of these two resources. Islam and Winer (2004) show that only some of Wintrobe's empirical predictions hold, but the fundamental insight of the "dictator's dilemma," while straightforward, is significant as it contextualizes a great amount of the behavior of dictators as a means of compelling loyalty or of gathering information. For example, Lorentzen (2013) explains that, given the absence of competitive elections and free media, the Chinese Communist Party (CCP) tolerates small-scale, isolated economic protests to gather information about public resentment and bureaucratic performance.

Theories of mass political action also illustrate the informational asymmetries inherent to dictatorship. Kuran (1989, 1991) supports the idea of the "dictator's dilemma" through a theory of mass political action in which a status quo regime is replaced only when public opposition exceeds a critical level. However, the cost of openly expressing opposition depends on the size of the existing opposition movement. Individuals have differing values for reporting their true preferences and therefore different propensities for "preference falsification," such that small protests of highly motivated citizens sometimes cascade and eventually lead to broader protests. Lohmann (1994) advances a similar model of "information cascades," in which citizens are only partially informed about the state of the world but well-informed in aggregate. She shows that individuals' decisions to participate or abstain from a protest movement depend on changes in aggregate protest turnout over time because people extract information about the true competence or incompetence of the regime from turnout numbers.

From these two strands of literature, I outline the following theoretical framework: a dictator can use both repression and policy change (provision of goods and services, distribution of rents, level of expropriation, personal freedoms, etc.) as tools to stay in office, but past a certain point these tools are subject to tradeoffs. Incomplete information about the loyalty of citizens and the competence of bureaucrats complicates the calculus of dictators. Citizens can overthrow the regime and replace it with an alternative if they want to, but they face a complex collective action issue wherein some have a higher affinity for the incumbent regime, but these heterogeneous affinities are not readily observable, the probability of political action being worthwhile depends on how many others act, and a miscalculated decision to express opposition could have dire consequences.

With this framework in mind, I now consider the focus of this paper: the role of media freedom

in dictatorships. Media is relevant to both dictators and the citizens of dictatorships in securing preferred outcomes. For citizens, independent media reveals information about the competence or incompetence of the regime. It therefore signals to them whether it is in their interest to protest for regime change, and if so, facilitates coordination between protesters. Simultaneously, independent media provides important information about government performance and public opinion for the dictator, making it easier to know what combination of repression and policy change is appropriate to stay in power. However, the advantages media provides to citizens are disadvantages to the dictator, who wants to keep her incompetence hidden and make coordinated opposition against the regime difficult.

Existing literature explores methods of media repression and their uses to the dictator, such as nationalization, dissemination of misinformation, censorship, intimidation, etc. For example, Edmond (2005) shows that the dictator can use co-opted or state-owned media to disseminate propaganda and misinformation that exploits the heterogeneous beliefs of her policy to engender more support. Lorentzen (2014) discusses the usefulness of refraining from censorship, finding that permitting limited investigative journalism in China allows the CCP to keep local, low-level officials in check, as long as underlying social tension is not too high. But a question remains, why do some dictators tolerate more media freedom than others?

And what about the internet? Do dictators face the same strategic considerations when deciding how much internet freedom to allow? Existing literature primarily focuses on how citizens of dictatorship interact with new information and communication technology (ICT) in the vein of the mass political action literature discussed earlier. For example, Stein (2017) finds that the diffusion of ICT access increases the likelihood of anti-government protests, but cannot completely predict whether political liberalization will occur. Similarly, Chen and Yang (2019) conduct a field experiment in China to show that uncensored internet access alone does not significantly increase the acquisition of politically sensitive information because even individuals aware of censorship still underestimate the value of outside information sources.

King, Pan and Roberts (2013, 2017) consider the other side of the equation: how do dictators interact with these new technologies? Their work uses the CCP's massive censorship program to study how dictators strategically manipulate online information in unexpected ways. They find content filtering in China does not aim to prevent all political speech and government criticism online but rather to silence any potential collective action. Similarly, government-fabricated social media posts are not designed to argue against online critics but to divert public attention from actual or potential collective action with "cheerleading" posts (inspirational quotes, patriotism, cultural references, etc.). These findings are illustrative of some of the central informational problems that I outlined above but still fall short of explaining why some dictators will allow relatively more internet freedom than others.

## THEORY

This paper builds off the central argument of EGS, that natural resource abundance makes a dictator more likely to repress the media because it makes the performance of her bureaucracy less important to her ability to collect rents. First, I will clarify some key terms and explain the mechanics of EGS's argument in greater depth. Then, I will argue that abundance in any natural resource, rather than just oil abundance, which is the empirical focus of EGS's paper, will have a negative effect on media freedom. Foreign aid, on the other hand, despite being another form of income to the regime that is independent of the domestic economy's performance, will not have a clear effect on media freedom. Finally, I will argue that the internet is a less useful tool for dictators in observing bureaucratic performance than traditional media, and thus resource abundance should not have a clear negative relationship with internet freedom as it does with media freedom.

I use the term media freedom to describe the extent to which information can be openly disseminated through various forms of news media, such as print, radio, television, etc., without interference by political actors. I use this synonymously with press freedom. While the extent to which



major media outlets cover diverse political perspectives and report critically on government performance does not define whether media is free, such measures are usually good indicators of whether the political, legal, and economic environments in which outlets operate are conducive to media freedom. I use the term internet freedom to describe the extent to which the internet functions as a public platform for disseminating information, free from the discriminatory provision of access and censorship of content and/or online platforms. This definition is admittedly vague but sufficient to illustrate that, while media outlets may increasingly use the internet as a medium through which to publish content, media freedom and internet freedom are substantively different. Both capture different elements of a broader concept of freedom of information.

### **Oil and Media Freedom**

EGS use the following theoretical framework to understand media freedom under dictatorship. When choosing whether to censor media, all dictators face a tradeoff between maintaining political control and providing proper incentives to bureaucrats. In democracies, regular elections provide feedback on the performance of government officials, but no such mechanism reliably exists under dictatorship. Thus, the value of free media to a dictator is that it

provides information about the competence of bureaucrats. A dictator can then induce good governance by conditioning bureaucrats' income on the media's report of their success or failure. This describes half of the dictator's tradeoff: free media allows the dictator to provide a bureaucratic incentive scheme that promotes good governance. However, if citizens observe a report of a failed policy outcome from a free media, they may infer that the regime is incompetent, even if the responsibility for this failure falls on a few low-level officials. Furthermore, in a free information environment, citizens could learn whether others have seen the same report, in which case the regime's incompetence and the populace's dissatisfaction could become common knowledge. This common knowledge may allow citizens to overcome the coordination problem associated with revolution, as discussed in theories of mass political action, and force regime change. Thus, the free flow of information is an inherent threat to a dictator and presents her with the prospect of losing the rents that power allowed her access to.

According to EGS, resource abundance factors into a dictator's calculus by changing the extent to which promoting good governance is important to her. They specifically argue that in a resource-rich country, a dictator can rely primarily on the profits of extractive industries for government revenue and is less dependent on the productivity of the modern sector. In other words, for the resource-rich dictator, failed policy outcomes that reduce the size of the domestic tax base are offset by resource rents. Thus, such a dictator is less concerned about motivating bureaucrats to achieve her policy outcomes and less interested in the information free media could provide<sup>3</sup>. At the same time, the higher she perceives the rents she can siphon from extractive industries to be, the higher her expected losses from leaving power. Therefore, with a heightened concern for her political survival, she has even greater incentives to repress the media.

### **Expanding the Concept of Resource Endowment**

EGS advance a theory that speaks to the effect of resource abundance on media freedom, but their empirical analysis focuses solely on oil. I now explicitly argue that non-oil resources should have the same negative effect on media freedom and that total natural resource rents should even better predict media freedom than oil rents alone. This isn't because all natural resource markets are identical, but because what matters about those markets to the argument being advanced here is roughly similar. Nationalization of a resource industry or government ownership of the land holding the resource might seem necessary for resource endowment to be consequential for government finance. But governments

<sup>3</sup> There are other possible stories for why good governance might be less important to a resource-rich paper, but these are not the primary concern of this paper and would not change how I approach my empirical analysis.



that haven't nationalized a resource can still collect rents from it by taxing the private firm extracting it. Resource industries, in particular, face huge potential rewards to investment, making new extraction projects attractive to private firms even when subject to steep tax/royalty systems. Furthermore, once a firm has incurred the high sunk costs involved in discovering a resource and installing infrastructure for extraction, the firm has little choice but to continue production so long as revenues cover variable costs, making production after investment fairly insensitive to changes in the tax regime (Daniel, Keen, and McPherson, 2010). The point here is that whether a natural resource industry is nationalized should not influence a dictator's ability to siphon rents from it, and thus shouldn't influence a resource-rich dictator's decision to repress media.

Additionally, the size of the global industry for each natural resource should not matter in its relationship to media freedom. Instead, the size of the resource rent relative to the total size of a country's economy may determine the extent to which it influences a dictator's decision to repress the media. For example, we might say that copper rents matter less to governments than oil rents because copper production is a smaller global industry with fewer revenues. But if we have two hypothetical countries, one with copper rents as 5% of GDP and no other natural resources, and one with oil rents as 5% of GDP and no other natural resources, then we should expect the same prediction for media freedom; in both countries, the importance of the resource rent relative to the modern sector is the same.

### Foreign Aid

Second, I argue that foreign aid will have no relationship to media freedom, unlike a natural resource. In a resource-rich country, while the profits of extractive industries and government revenues are subject to price fluctuations in global resource markets, the regime knows, even during relative losses, that it can count on the resource as a form of long-run revenue. In contrast, the allocation of aid reflects the perceived needs and merit of recipient countries as well as the changing interests of donors and thus may be a more volatile form of income. If an aid-dependent regime permits bureaucratic incompetence and modern sector underdevelopment, but aid is suddenly reduced or conditioned on policies that the dictator isn't prepared to provide, then she may face a crisis wherein government revenue is insufficient to maintain the spending habits that keep her in power (like provision of public goods, patronage, buying off opposition, etc.). Even if the dictator suddenly halts media repression and the press begins to provide critical coverage of political outcomes, a high-powered bureaucracy and thriving modern sector will not just spring forth to provide a domestic tax base. Individuals' incomes will generally stay low in the short run while media reports signal regime incompetence, making anti-regime collective action likely. Knowing this, a dictator might sub-optimally plan to allow free media and induce high bureaucratic effort even while receiving high rents from foreign aid because she believes the aid is transitory. So, we shouldn't expect to see a consistent relationship between foreign aid and media repression. This reasoning advances a broader argument that EGS's theory is not generalizable to every type of economic rent but only to those whose future value the dictator can predict with relative certainty.

### Internet Freedom

Turning to the dependent variable, I argue that resource rents will affect internet freedom differently than media freedom. First, I argue that the internet provides relatively weaker information signals. By this, I mean it is less certain that politically relevant signals will be perceived when published online versus through a traditional media outlet, and even when a politically relevant signal is perceived, it may be less credible. Second, I argue that the internet's ability to create common knowledge faster than traditional media makes it a larger threat to regime survival, making dictators, regardless of their resource endowment, more likely to censor it.

Consider how a political signal, i.e., a report of some policy outcome or government official's performance, is received and processed when disseminated by a reputable news outlet in a free media environment, according to EGS's theoretical framework. We expect that when this outlet reports a

political signal, it will be perceived by a sizable audience (or else the outlet wouldn't be economically viable), with members of the incumbent regime's political elite likely being a part of that audience. Knowing the outlet is reputable, those who perceive the signal will believe it to be entirely true or will contextualize it with the information they have about the news organization's potential bias. Either way, viewers will make judgments about the incumbent regime accordingly. The regime, in turn, will respond to the political signal by punishing or replacing lower-level officials if appropriate.

Contrast this with how a similar political signal might be received and processed when disseminated by an individual online, say, through a blog or social media post. The individual publishing the signal doesn't need a regular audience to make their project economically viable, as it costs her virtually nothing to produce<sup>4</sup>. Furthermore, given the enormous volume and diversity of online content, the signal could easily be crowded out by "noise" and fail to reach even those internet users who are highly interested in and would actively seek such content. In other words, whether political signals are being published by an individual online versus through a media outlet alters the extent to which freedom from censorship actually leads to citizens observing these signals. Furthermore, if such a signal doesn't gain traction among citizens, it is unlikely that members of the incumbent political elite will see it. In that instance, from the dictator's perspective, permitting the free dissemination of information online doesn't actually lead to observing feedback on the performance of bureaucrats.

Consider also that those who do see the political signal won't necessarily know whether to trust it. Every internet user can consume and create online content, and author anonymity/identity fabrication is possible and frequent. Because of this, citizens may be more likely to report their true preferences online, as anonymity lowers the risk of consequences, but they may also be more likely to report and spread false information (and governments might strategically do the same). Citizens who are aware of this are rightfully less certain about how reliable a given piece of information being disseminated online is. An incumbent regime, likewise, is unlikely to act on an online political signal with an unfamiliar source. We can contrast this with a traditional media environment in which a limited number of content creators share information with a larger number of consumers, and the identity of the reporting individual, or, at least, the identity of the press entity disseminating the information, is usually known. In such an environment, even when confronting consistently biased reporting from competing news organizations, consumers can contextualize information by adjusting for the typical bias of the source and thereby estimate the truth. On the internet, however, because the sources of information being analyzed are numerous and disjointed, and because the direction of bias is not uniform or predictable, it may be harder for citizens to contextualize bias and identify misinformation. So, even when the internet is relatively uncensored, citizens and governments may be more skeptical of the information signals they observe online. From a dictator's perspective, this means that allowing the free flow of information on the internet and observing political content disseminated by individual internet users does not necessarily mean observing a clear and useful signal about the performance of bureaucrats and the success or failure of policy outcomes.

If this line of reasoning is correct, then we can conclude that a free internet does not reliably provide information to a dictator about the quality of bureaucratic performance and is not a useful tool for incentivizing high effort from government officials. Therefore, even resource-poor dictators will not consider internet freedom a tool for promoting the development of a strong domestic economy, so the decision of whether to allow internet freedom should be unrelated to natural resource abundance.

Additionally, the risk of inciting mass political action may be higher when allowing internet freedom than traditional press freedom. Some authors have argued that the internet facilitates collective, anti-regime action in autocracies by reducing the informational uncertainty of potential protestors. But a free press, too, threatens to create common knowledge of disruptive political information since it transmits to a predictable audience. Instead, the heightened risk to political stability stems from the sheer

4 This is consistent with the literature discussed earlier, particularly Chen and Yang (2019) and King et al. (2017).

volume of content disseminated online and the potential for seemingly small, random signals to spread through the population<sup>5</sup>. This presents the possibility for political signals that might normally fly under the radar of large media outlets, for example, an individual's interaction with a low-level government official, to unpredictably gain traction and have destabilizing effects. This may make dictators, regardless of their level of rent, less willing to tolerate internet freedom.

## HYPOTHESES

Following these arguments, I present three main hypotheses:

H1: Countries with higher “rents” are likely to have less free media when the rents being measured are from natural resource abundance. This relationship will be stronger in less democratic countries.

H2: Size of rents and the level of media freedom will not have the same relationship when the source of rents is foreign aid.

H3: Unlike with traditional media freedom, the relationship between internet freedom and resource rents will be indeterminate because the logic of the dictator's choice is unclear.

H4: Countries with more traditional media freedom are likely to have a higher quality of governance, but quality of governance will have a weaker relationship with internet freedom.

## EMPIRICAL ANALYSIS

EGS explore the empirical relationship between oil rents and media freedom. Their primary measure of oil rents is proven oil reserves in billions of barrels, from BP's Statistical Review of World Energy; however, they find the same central result using alternative measures of oil abundance, such as oil production in thousands of barrels daily and oil reserves/production valued at the global price. EGS use a one-year lag of the Press Freedom index from Freedom House, which has detailed data starting in 1993, to proxy media freedom in their primary panel regressions (hence their data runs from 1992 to 2007). To differentiate their argument from the theory that natural resource abundance allows a dictator to “buy off” citizens who would otherwise demand free media, EGS controls for GDP per capita and government expenditure as a portion of GDP. EGS also control for a country's population, arguing that the number of people may influence the importance of media as a coordination tool. These three control variables all use data from the World Bank. All regressions also include country and year-fixed effects to control for global price fluctuations and time-invariant country-specific characteristics.

To avoid conflating the effects of natural resource abundance with the effects of overall democracy level on media freedom, EGS account for democracy level proxied by Polity2 score using two primary strategies. First, in whole panel regressions, Polity2 score is included as a control variable, and an interaction term between oil reserves/oil production and Polity2 is included to see whether the effect of oil on media freedom is stronger in less democratic countries. Second, subsets of more and less democratic countries are created based on Polity2 score, and identical regressions are run on each subset.

My analysis builds on this empirical strategy. I replicate the dataset of EGS but extend it horizontally by adding new dependent and independent variables and vertically by adding new years

<sup>5</sup> In network theory, assortative networks (in which highly-connected nodes are more likely to be connected to other highly-connected nodes) demonstrate a lower “epidemiological threshold” or tipping point than disassortative networks. While the initial spread of a signal is slower in such networks, they are overall more prone to system-wide spread (Agostino, et al., 2012). Social media networks and other online communication technologies seem to be organized in this way; users with a high number of “friends” or “followers” are more likely to be friends with other users with a high number of friends. If a signal starts at the “edges” of a network, such as when content is created and disseminated by a user with a low number of friends, it will spread slowly at first. Most likely, it's spread will stagnate after a short period of time. But it is also possible that such a signal would happen to spread to a highly-connected user in this initial slow period, leading to a cascade effect wherein many highly-connected users end up spreading the signal extensively throughout the network.

of data. However, BP, World Bank, and Polity periodically revise historical data, meaning that data on all the main variables discussed above could have been subject to change since EGS published their paper. Therefore, before exploring new variables, I first want to check whether the results of EGS hold using updated data for 1992 to 2007, and second whether the results of EGS hold beyond 2007. After demonstrating this, I will turn to new variations in economic rents as an independent variable and finally to internet freedom as an alternative dependent variable. Lastly, I examine the relationship between internet freedom and quality of governance and compare it to the relationship that EGS found between media freedom and quality of governance.

Table 1: Fixed Effects Regressions for Media Freedom on Oil Production in Two Periods

	Media Freedom					
	All Countries 1992-2007 (1)	Autocracies 1992-2007 (Polity < 7) (2)	Democracies 1992-2007 (3)	All Countries 2008-2017 (4)	Autocracies 2008-2017 (Polity < 7) (5)	Democracies 2008-2017 (6)
Log oil production	-0.899*** (0.141)	-2.535*** (0.234)	-0.564*** (0.146)	-1.081*** (0.166)	-2.079*** (0.270)	-0.634*** (0.227)
Log oil production x Polity	0.073*** (0.013)			0.036** (0.017)		
Polity	1.899*** (0.068)			2.067*** (0.092)		
Log GDP per capita, PPP	5.492*** (0.348)	2.538*** (0.638)	7.019*** (0.491)	7.024*** (0.413)	1.873*** (0.708)	8.027*** (0.554)
Log population	-1.137*** (0.242)	1.105** (0.487)	-0.836*** (0.303)	-0.135 (0.281)	0.840 (0.549)	-0.344 (0.389)
Log of gov. exp/GDP	4.177*** (0.676)	2.611*** (1.002)	8.260*** (1.166)	5.228*** (1.000)	1.887 (1.577)	7.199*** (1.603)
Observations	2,125	1,114	973	1,149	525	604
R <sup>2</sup>	0.612	0.133	0.338	0.678	0.151	0.358
Adjusted R <sup>2</sup>	0.588	0.066	0.288	0.651	0.045	0.290
F Statistic	526.402*** (df = 6; 2002) (p = 0.000)	39.773*** (df = 4; 1033) (p = 0.000)	115.279*** (df = 4; 905) (p = 0.000)	371.079*** (df = 6; 1059) (p = 0.000)	20.687*** (df = 4; 466) (p = 0.000)	76.096*** (df = 4; 545) (p = 0.000)
Significance levels	$p < 0.1$ ; $p < 0.05$ ; $p < 0.01$					

### Replicating the Main Finding

In the first three columns of Table 1, I replicate EGS's original finding using updated data for the years included in their study. Note that I reproduce their results with oil production rather than oil reserves, even though reserves are the preferred measure for EGS, because historical oil reserve data has been subject to more change over time than oil production data<sup>6</sup>. Column 1 demonstrates that after controlling for GDP per capita, population, and democracy level, media freedom is negatively correlated with oil reserves. Additionally, the interaction term between democracy and oil production returns a positive and statistically significant coefficient, suggesting that the negative correlation between oil and media freedom is stronger in less democratic countries. Similarly, when I divide the data into two subsets of autocracies and democracies (autocracies being countries with a Polity2 score less than the median of 7) in columns 2 and 3, we see that there is a larger negative coefficient on oil production among autocracies. In columns 4 through 6, I replicate these regressions with data after the time of EGS's publication<sup>7</sup>. I find again that oil production has a negative and statistically significant effect on media freedom and that the size of the effect is bigger in more autocratic countries.

6 The correlation between my and EGS's data for oil reserves (before log transformation) was 0.939, compared to 0.999 for oil production.

7 This data ends in 2017 because it's the last year that Freedom House published their media freedom index



While these regressions do in fact demonstrate the same central result as EGS, it should be noted that the magnitude of the coefficient is smaller across every regression than what is actually reported in their paper. This is not due to any error in specifying the regressions (as running EGS's unmodified data set with my code yields the exact coefficients that they publish), but because, as I previously discussed, all the data sources used to revise their historical data. Additionally, rather than use the EGS strategy of creating subsets based on Polity2 score in the first year of data, I subset based on each year's Polity2 scores. Thus, countries may have observations distributed into both the autocracies and democracies subsets if their Polity2 score crosses the cutoff during the dataset. This reflects that countries may see significant changes to their political institutions even in a short period. After this adjustment, the central result is still preserved.

**Table 2: Fixed Effects Regressions for Media Freedom on Oil Rents and Natural Resource Rents as % of GDP, from 1992 to 2017 with Autocracies Only (Polity < 7)**

	Media Freedom		
	Oil Rents (1)	Total Natural Resource Rents (2)	Seperated Oil and Non-Oil Rents (3)
Log oil rents % GDP	-3.401*** (0.386)		-2.709*** (0.393)
Log total natural resource rents % GDP		-4.146*** (0.341)	
Log total non-oil resource rents % of GDP			-3.331*** (0.472)
Log GDP per cap, PPP	0.332 (0.443)	-1.188*** (0.358)	-0.940** (0.472)
Log population	-2.571*** (0.303)	-2.794*** (0.298)	-2.628*** (0.298)
Log of gov. exp/GDP	0.449 (0.757)	1.881** (0.739)	1.148 (0.752)
Observations	1,687	1,688	1,687
R <sup>2</sup>	0.112	0.152	0.140
Adjusted R <sup>2</sup>	0.050	0.093	0.079
F Statistic	49.856*** (df = 4; 1576) (p = 0.000) 70.831*** (df = 4; 1577) (p = 0.000) 51.086*** (df = 5; 1575) (p = 0.000)		
Significance levels	p<0.1; p<0.05; p<0.01		

### Variations in Economic Rents

Having established that the results of EGS hold using updated data for 1992 to 2007 and also hold beyond 2007, I now turn to new variations of the independent variable. World Bank calculates oil, natural gas, coal, forestry, and mineral rents, as well as a sum measure of total natural resource rents, by finding the difference between the estimated market price and estimated production cost of one unit of the commodity, multiplying this by the quantity a country produces, and converting this value to a percent of GDP. The advantage of using this measure is that it automatically controls for the total size of the economy, and that I can easily scale the World Bank's data on foreign aid in the same way to allow for comparison.

In Table 2, I explore the relationship between total natural resource rents and media freedom and compare this to the relationship between total oil rents and media freedom. All regressions in this table are performed on a subset of "autocracies," or countries with a Polity2 score < 7. Column 1 demonstrates that after controlling for GDP per capita, population, and government expenditure, log of oil rents as a percent of GDP negatively and significantly affects traditional media freedom. Interpreting the size of the coefficient is difficult since the primary regressor is a log transformation of a percent measure. Essentially, for every percentual change in oil rents as a percent of GDP, there is, on average, a 0.03 point decrease in media freedom score<sup>8</sup>. Column 2 similarly demonstrates that log of total natural resource

8 This effect seems small, but it is important to keep in mind the meaning of a percentual change in oil rents as a percent



rents as a percent of GDP has a negative and significant effect on traditional media freedom; for every percentual change in total natural resource rents as a percent of GDP, there is, on average, a 0.04 point decrease in media freedom score.

To check that the coefficient on total natural resource rents is not being driven by the contribution of oil rents to the measure, I run a third regression where I separate the effects of oil and non-oil rents (calculated by subtracting oil rents from total natural resource rents). I find that non-oil rents have a statistically significant negative effect on media freedom. Similarly, we see that the regression using total natural resource rents as an independent variable yields a higher R-squared value than the regression using oil rents, meaning more of the variation in media freedom is explained. This supports my first hypothesis that countries with higher natural resource rents overall, not just those with higher oil rents, are more likely to have less free media.

In Table 3, I examine how foreign aid rents, measured as net official development assistance and official aid received as a percent of GDP, predict media freedom<sup>9</sup>. In column 1, I regress media freedom on aid as a percent of GDP for all countries and find a small positive correlation significant at an  $\alpha = 0.10$  level. However, consider the following interpretation: for a 1% increase in the proportion of GDP accounted for by foreign aid, the true increase in media freedom is between 0.008 and 0.12 points with 90% certainty. Given that almost all countries have foreign aid as a portion of their GDP falling between zero and one percent and that media freedom scores range from 0 to 100, the size of this effect is essentially negligible. Furthermore, columns 2 and 3 do not provide convincing support that foreign aid significantly impacts media freedom. Column 2 runs the same regression on a subset of autocracies and Column 3 on the remaining democracies, both finding that the coefficient on aid as a percent of GDP is not significantly different from zero. This table supports my second hypothesis, that there is no clear relationship between foreign aid and media freedom.

**Table 3: Fixed Effects Regressions for Media Freedom on Foreign Aid as % of GDP, from 1992 to 2017**

	Media Freedom		
	All Countries (1)	Autocracies (Polity < 6) (2)	Democracies (3)
Aid % GDP	0.064* (0.034)	0.088 (0.054)	0.161 (0.102)
Aid % GDP x Polity	-0.007 (0.005)		
Polity	1.308*** (0.063)		
Log GDP per capita, PPP	4.303*** (1.004)	-2.444*** (0.458)	2.315*** (0.726)
Log population	4.634** (2.209)	-0.959*** (0.363)	-2.159*** (0.357)
Log of gov. exp/GDP	0.779 (0.621)	2.638*** (0.774)	2.521* (1.348)
Observations	2,548	1,361	1,187
R <sup>2</sup>	0.190	0.059	0.070
Adjusted R <sup>2</sup>	0.137	-0.013	-0.016
F Statistic	93.594*** (df = 6; 2390) (p = 0.000)	19.894*** (df = 4; 1263) (p = 0.000)	20.503*** (df = 4; 1085) (p = 0.000)
Significance levels	p<0.1; p<0.05; p<0.01		

of GDP. For example, a country that goes from having 3% to 4% of GDP comprised by oil rents undergoes a 33% change, not a 1% change. Realizing this, we see that the effects on media freedom are more substantial than initial interpretation suggests.

<sup>9</sup> Note that for this measure the World Bank codes donor countries as NAs rather than zero or negative outflows, and consequently, there is no way to distinguish donor countries from recipient countries that are actually missing data. The regressions, therefore, contain only countries that receive aid, which shifts the sample median for Polity2 score downwards and excludes many wealthy democracies. This is why the cutoff I use to create subsets for columns 2 and 3 is Polity2 score < 6 instead of 7, as it was in Table 2.

### Internet Freedom

I now turn to my new variation of the dependent variable, internet freedom. I first considered using Freedom House's internet freedom index as a measure because it is compiled with the same methodology and scaling as their media freedom index, so the results could be compared to my previous regressions. However, I found that early years of the data for this index include very few countries, and there are not many years of data available to start with. Instead, I opted to use data from V-DEM's Digital Society Survey (hereafter DSS). The DSS uses a more statistically legitimate aggregation strategy; for each questionnaire item, the responses of multiple country experts are combined with a Bayesian factor analysis model, with the resulting scores following a normal distribution. More negative scores indicate higher repression (as is relevant to the individual question), and more positive scores indicate more freedom. The DSS also has more years and countries of data available and reports the scores for individual questionnaire items, allowing the user to explore specific facets of online repression. I choose to focus only on questions related to the ability of users to create and access content that may contain political information, as this is the role of the internet that my theoretical argument centers around. Specifically, I construct two composite indices that measure censorship and internet shutdowns, respectively. I measure censorship by averaging the scores of three survey items on government internet filtering in practice (V-DEM codebook 6.2.2), government social media monitoring (6.2.7), and government social media censorship in practice (6.2.8). I measure shutdowns by averaging two survey items on government internet shutdowns in practice (6.2.4) and government social media shutdowns in practice (6.2.5). The exact wording of these questions can be found in the V-DEM codebook.

In Table 4, I regress these two factors on oil production. Columns 1 and 2 contain a subset of democracies (countries with a polity score  $\geq 7$ ), and columns 3 and 4 include a subset of autocracies (with a polity score  $\leq 6$ )<sup>10</sup>. We see that in democracies, censorship and shutdowns are both positively correlated with oil production, whereas in autocracies, both measures are negatively correlated with oil production (all at an  $\alpha = 0.01$  significance level). In other words, producing more oil in relatively more autocratic countries increases the likelihood that a country will censor and shut down social media platforms and the internet. So contrary to my expectations, in autocracies, the relationship between oil and internet freedom seems to follow the same logic as that between oil and media freedom, regardless of whether censorship or shutdowns are being used to measure online repression. For robustness, I recreate these regressions using oil reserves instead of oil production and find the same results.<sup>11</sup>

Table 4: Fixed Effects Regressions for Internet Freedom on Oil Production, 2000 to 2020

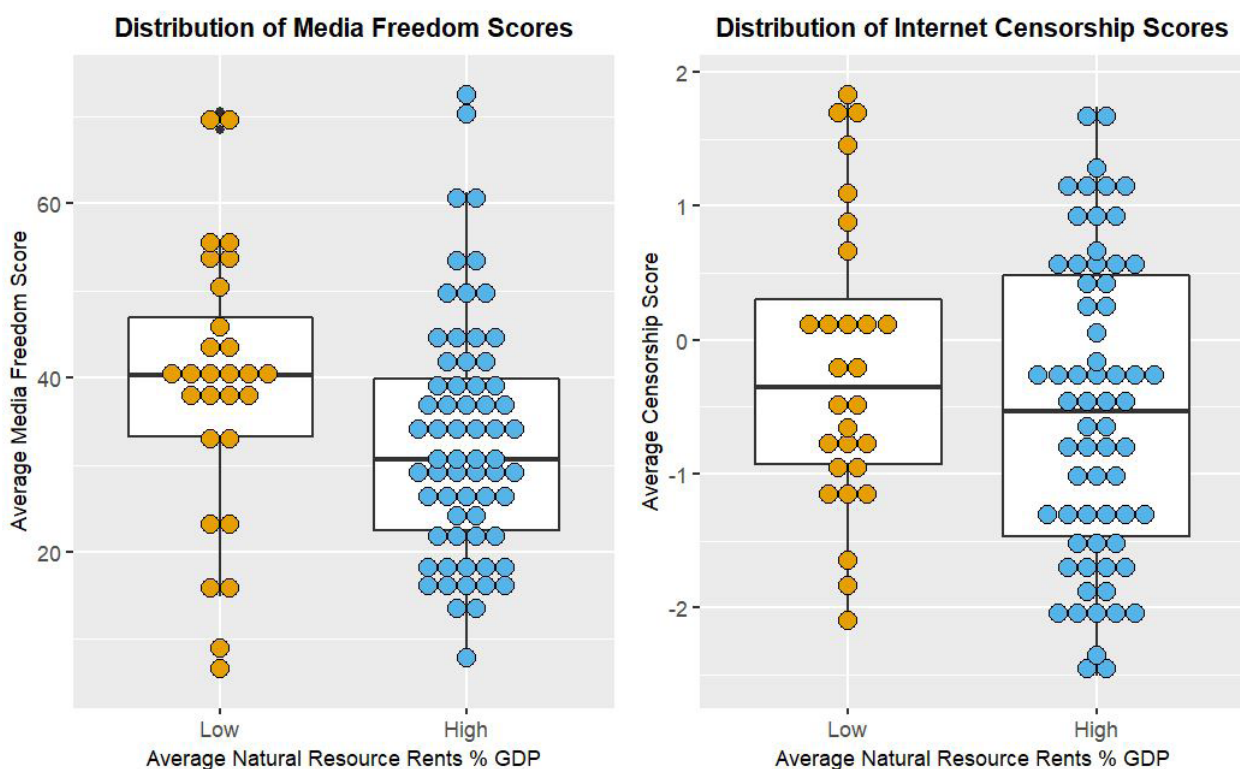
	Internet Freedom			
	Censorship, Democracies (1)	Shutdowns, Democracies (2)	Censorship, Autocracies (3)	Shutdowns Autocracies (4)
Log oil production	0.067*** (0.008)	0.058*** (0.006)	-0.095*** (0.011)	-0.192*** (0.013)
Log GDP per capita, PPP	0.240*** (0.022)	0.274*** (0.017)	-0.222*** (0.027)	0.133*** (0.031)
Log population	-0.183*** (0.014)	-0.102*** (0.011)	0.021 (0.023)	0.041 (0.026)
Log of gov. exp/GDP	0.384*** (0.058)	0.100** (0.045)	0.220*** (0.058)	0.076 (0.065)
Observations	1,525	1,525	1,403	1,403
R <sup>2</sup>	0.230	0.255	0.209	0.185
Adjusted R <sup>2</sup>	0.177	0.203	0.149	0.123
F Statistic	106.674*** (df = 4; 1425) (p = 0.000)	121.763*** (df = 4; 1425) (p = 0.000)	86.221*** (df = 4; 1303) (p = 0.000)	73.961*** (df = 4; 1303) (p = 0.000)
Significance levels	p<0.1; *p<0.05; **p<0.01			

10 Since Polity data is only available through 2018, I use each country's 2018 polity and polity2 score to fill in its scores for 2019 and 2020, so that these two years of data are not dropped in the process of creating subsets.

11 Figures available from the author upon request.

However, interpreting the size of these coefficients is not straightforward because of V-DEM's aggregation method for the DSS items. For example, we could interpret column 3 as saying that a 1% increase in the portion of GDP accounted for by total natural resource rents leads to, on average, a decrease in internet freedom equivalent to moving 0.011 left along a standard normal distribution. But this does not give a concrete meaning of the size of the effect, nor does it allow us to make comparisons with the effect of oil production on traditional media freedom. Instead, to make such a comparison, I take country averages for media freedom score, internet censorship score, and natural resource rents as a percent of GDP<sup>12</sup>, then compare the distribution of scores between groups of autocracies with low and high resource levels. Autocracies with a "low" resource level are those whose average annual value of natural resource rents as a percent of GDP is below the global median of 3.4247%, and autocracies with a "high" resource level are those falling above the median.<sup>13</sup>

The resulting distributions are displayed in Figure 2. We see that the difference in median traditional media freedom score between low- and high-resource countries is large (with the median score among high-resource countries being much lower, as is consistent with the rest of my findings). The third quartile of the high resource group is about the same as the median of the low resource group. In contrast, the difference in median censorship score between low and high-resource countries is much smaller relative to the total range of scores, and the third quartile of the high-resource group is actually higher than that of the low-resource group. This demonstrates that, while natural resource rents have a negative effect on both traditional media freedom and internet freedom in autocracies, the effect is bigger for traditional media freedom. Combined with the findings in Table 5, this analysis does not clearly support or reject H3.



*Figure 2: Difference in Median Scores Between High and Low Resource Autocracies for Traditional Media Freedom and Internet Freedom*

<sup>12</sup> For media freedom each country's data is averaged over 1992 to 2017. For internet freedom, data is averaged over 2000 to 2020 and for natural resource rents as a percent of GDP, 1992 to 2020.

<sup>13</sup> Note the global median I use as a cutoff is computed from all countries, not just autocracies, and as a result there are not an even number of countries in the low and high resource level groups.



Table 5: Fixed Effects Regressions for Quality of Governance Indicators on Media Freedom vs. Internet Freedom, All Countries 2000 to 2017

	Quality of Governance					
	Regulatory Quality	Government Effectiveness	Control of Corruption	Regulatory Quality	Government Effectiveness	Control of Corruption
	(1)	(2)	(3)	(4)	(5)	(6)
Media freedom/100	0.491*** (0.088)	0.134 (0.088)	0.465*** (0.083)			
Censorship scaled				0.169** (0.083)	-0.163** (0.083)	0.118 (0.078)
Log oil production	0.010 (0.021)	-0.059*** (0.021)	-0.022 (0.020)	0.031 (0.021)	-0.030 (0.021)	-0.011 (0.020)
Polity	-0.004 (0.002)	-0.0004 (0.002)	0.003 (0.002)	0.0003 (0.002)	0.003 (0.002)	0.007*** (0.002)
Log GDP per capita, PPP	0.516*** (0.035)	0.497*** (0.035)	0.446*** (0.033)	0.494*** (0.034)	0.444*** (0.034)	0.452*** (0.032)
Log population	0.201*** (0.058)	0.274*** (0.058)	0.167*** (0.055)	0.186*** (0.056)	0.208*** (0.056)	0.154*** (0.053)
Log of gov. exp/GDP	0.127*** (0.023)	0.029 (0.023)	0.094*** (0.021)	0.136*** (0.022)	0.039* (0.022)	0.094*** (0.021)
Observations	2,125	2,125	2,125	2,270	2,270	2,270
R <sup>2</sup>	0.127	0.095	0.112	0.110	0.090	0.105
Adjusted R <sup>2</sup>	0.052	0.016	0.035	0.038	0.016	0.032
F Statistic	47.504*** (df = 6; 1955) (p = 0.000)	34.094*** (df = 6; 1955) (p = 0.000)	41.111*** (df = 6; 1955) (p = 0.000)	43.261*** (df = 6; 2099) (p = 0.000)	34.407*** (df = 6; 2099) (p = 0.000)	41.031*** (df = 6; 2099) (p = 0.000)

Significance levels

$p < 0.1$ ;  $p < 0.05$ ;  $p < 0.01$

### Quality of Governance

EGS also use two of the World Bank's "Worldwide Governance Indicators" (hereafter WGI), specifically government effectiveness and regulatory quality, to demonstrate that media freedom in fact improves the quality of governance. I perform the same analysis on my updated dataset and then repeat it using internet freedom rather than media freedom as an independent variable. I also include WGI's control of corruption measure as a third dependent variable. The World Bank uses 30 data sources, including survey institutes, think tanks, NGOs, international organizations, and private sector experts, to compile the WGI using an unobserved components model. Similar to V-DEM's methodology, the combined scores end up following a standard normal distribution running from approximately -2.5 to 2.5, with higher values indicating better governance in terms of the relevant indicator. The government effectiveness indicator attempts to capture the quality of public services, the civil service, and policy formulation and implementation. In practice, the individual variables used to construct it measure factors like the provision of infrastructure, the availability of health and education services, the quality of budgetary and financial management, the handling of emergencies, etc. The regulatory quality indicator attempts to capture "the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development" and reflects factors such as discriminatory taxes/tariffs, ease of starting a business, state subsidies/unfair competitive practices, etc. Finally, I include the control of corruption indicator, which attempts to capture "the extent to which public power is exercised for private gain." This indicator includes variables such as the probability that firms will face bribery while carrying out business, the frequency of irregular payments in several key sectors, and the public's trust in politicians. Full lists of variables for each index can be found on the WGI website.

EGS find that even after controlling for oil and democracy levels, there is a significant and positive correlation between media freedom and government effectiveness and media freedom and regulatory quality. In Table 5, I reproduce these results with updated data for 1992 to 2017. Column 1 regresses

regulatory quality on media freedom and returns a positive and statistically significant coefficient. Similarly, column 2 finds a positive correlation between media freedom and government effectiveness<sup>14</sup>. Additionally, in column 3, I demonstrate a positive and statistically significant relationship between media freedom and control of corruption, an indicator that EGS did not originally consider. Together, these findings support the conclusion that having greater media freedom improves a country's overall quality of governance on three key indicators.

However, the data shows that the relationship between internet freedom and quality of governance is not as predictable. In column 4, I regress regulatory quality on my internet censorship indicator and find a positive correlation significant at the  $\alpha = 0.05$  level. Recall that V DEM codes its DSS items such that lower scores represent higher repression, so a positive correlation here means that less censorship leads to better regulatory quality. Similarly, in column 6, I regress control of corruption on censorship and find a positive although only weakly statistically significant correlation. However, in column 5, I regress government effectiveness on censorship and find a negative correlation significant at the  $\alpha = 0.05$  level, meaning that, on average, having less censorship corresponds to worse government effectiveness. I recreate these regressions controlling for oil reserves rather than oil production and find that my results are robust.

## DISCUSSION

Even with the new evidence I present, I realize that this story about natural resources is only part of the explanation for why some dictators repress information more than others. For example, it does not help to explain a regime like China, which has achieved tremendous economic growth not through resource extraction but by mobilizing its enormous population to work, all while maintaining one of the world's most repressive media environments. Going forward, studying outliers like this could provide answers about what sorts of political institutions allow dictators to adequately collect information about the performance of their bureaucrats in the absence of free media. Additionally, this paper only touches on forms of internet repression related to the ability of users to access politically relevant information: censorship and shutdowns. Other mechanisms such as trolling, using state-controlled social media alternatives, and collecting user data are likely not subject to the same tradeoff between political control and bureaucratic incentives. Future research should explore the benefits and costs a dictator faces when considering these strategies and identify factors that make their use more likely.

Finally, just as EGS could not have predicted how governments would adapt to the age of social media when they published their paper 14 years ago, it is difficult for us now to imagine life in a post-oil future. As climate change looms, the demand for fossil fuels seems destined to fall; oil-rich dictators can no longer depend on their resource rents as a predictable source of income. Saudi Arabia and the United Arab Emirates, for example, seem to be preparing for this future by removing fuel subsidies and allowing greater social freedoms ("Arab Petrostates," 2023). But the next step for such regimes is uncertain. Perhaps economic reform will be accompanied by political liberalization; greater informational freedom will illuminate government inefficiency and allow citizens to select officials capable of such a huge restructuring process. Or perhaps economic reform will happen under tight authoritarian control, as it did in a number of Asian countries, and leaders will have to seek institutions that provide the same feedback as independent media without the same risks. Either way, it will be interesting to see how informational freedom changes in these places over the next couple of decades. And what if oil is supplanted as the world's most valuable resource? The profile of countries with prized resources may change, and patterns of informational freedom (and repression) may shift to new regions.

<sup>14</sup> The p-value of this coefficient, not reported in the table, is 0.12. So, it fails to be statistically significant at an  $\alpha = 0.1$  level. I still discuss the direction of the coefficient and the relationship it implies.



## REFERENCES

- Agostino, G. D., Scala, A., Zlatic, V., & Caldarelli, G. (2012). Robustness and assortativity for diffusion-like processes in scale-free networks. *Europhysics Letters*, 97(6). <https://doi.org/10.1209/0295-5075/97/68006>
- Chen, Y., & Yang, D. Y. (2019). The impact of media censorship: 1984 or Brave New World? *American Economic Review*, 109(6), 2294–2332. <https://doi.org/10.1257/aer.20171765>
- Daniel, P., Keen, M., & McPherson, C. (Eds.). 2010. *The taxation of petroleum and minerals: principles, problems and practice*. Routledge.
- The Economist. (2023, February 9). Arab petrostates must prepare their citizens for a post-oil future. <https://www.economist.com/leaders/2023/02/09/arab-petrostates-must-prepare-their-citizens-for-a-post-oil-future>
- Edmond C. (2013). Information manipulation, coordination, and regime change. *Review of Economic Studies*, 80(4), 1422–58. <https://doi.org/10.1093/restud/rdt020>
- Egorov, G., Guriev, S., & Sonin, K. (2009). Why resource-poor dictators allow freer media: A theory and evidence from panel data. *American Political Science Review*, 103(4), 645–668. <https://doi.org/10.1017/S0003055409990219>
- Geddes, B., Wright, J., & Frantz, E. (2018). *How dictatorships work: Power, personalization, and collapse*. Cambridge University Press.
- Gehlbach, S., & Sonin, K. (2014). Government control of the media. *Journal of Public Economics*, 118, 163–71. <https://doi.org/10.1016/j.jpubeco.2014.06.004>
- Gehlbach, S., Sonin, K., & Svolik, M. W. (2016). Formal models of nondemocratic politics. *Annual Review of Political Science*, 19(1), 565–584. <https://doi.org/10.1146/annurev-polisci-042114-014927>
- Islam, R., & Winer, S. L. (2004). Tinpots, totalitarians (and democrats): An empirical investigation of the effects of economic growth on civil liberties and political rights. *Public Choice*, 118(3/4), 289–323. <https://doi.org/10.1023/B:PUCH.0000019912.48692.29>
- King, G., Pan, J. & Roberts, M. E. (2013). How censorship in China allows government criticism but silences collective expression. *American Political Science Review*, 107(2), 326–343. <https://doi.org/10.1017/S0003055413000014>
- King, G., Pan, J. & Roberts, M. E. (2017). How the Chinese government fabricates social media posts for strategic distraction, not engaged argument. *The American Political Science Review*, 111(3): 484–501. <https://doi.org/10.1017/S0003055417000144>
- Kuran, T. (1989). Sparks and prairie fires: A theory of unanticipated political revolution. *Public Choice*, 61(1), 41–74. <https://www.jstor.org/stable/30025019>
- Kuran, T. (1991). Now out of never: The element of surprise in the East European Revolution of 1989. *World Politics*, 44(1), 7–48. <https://doi.org/10.2307/2010422>
- The Levada Center. (2022, May 27). Internet, social networks and blocking. <https://www.levada.ru/en/2022/05/27/internet-social-networks-and-blocking/>
- Lohmann, S. (1994). The dynamics of informational cascades: The Monday demonstrations in Leipzig, East Germany, 1989–91. *World Politics*, 47(1), 42–101. <https://doi.org/10.2307/2950679>
- Lorentzen, P. (2013). Regularizing rioting: Permitting public protest in an authoritarian regime. *Quarterly journal of political science*, 8(2), 127–158. <https://doi.org/10.1561/100.00012051>
- Lorentzen, P. (2014). China's strategic censorship. *American Journal of Political Science*, 58(2), 402–414. <https://doi.org/10.1111/ajps.12065>
- Stein, E. (2017). Are ICTs democratizing dictatorships? New media and mass mobilization. *Social Science Quarterly*, 98(3), 914–941. <https://doi.org/10.1111/ssqu.12439>
- Wintrobe, R. (1998). *The Political Economy of Dictatorship*. Cambridge University Press.