THE UNIVERSITY OF CHICAGO

Fueling Change:
What Makes U.S. Universities Prime for Successful Student-Led Fossil Fuel Divestment?

By

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ABSTRACT

In response to the ongoing climate crisis, a new generation of college students is joining the global environmental movement. By creating fossil fuel divestment campaigns (FFDCs) on university campuses, students pressure their institution to divest funds from the fossil fuel industry. Due to the novelty of FFDCs, there is limited research on institutional decision-making aspects of the movement. This thesis will reframe the FFD movement quantitatively by examining institutional characteristics that can shape whether these campaigns succeed. Drawing on the Global Fossil Fuel Divestment Commitments Database (GFFDCD) and the National Center for Education Statistics' Integrated Postsecondary Education Data System (IPEDS), I examine a selection of variables to address the question: What characteristics of U.S. universities, if any, predict successful student-led fossil fuel divestment campaigns? Overall, the statistical analysis revealed that: (1) Public universities are more likely to divest than private ones; (2) Universities in the Northeast and West are more likely to divest than Midwest institutions, with institutions located in Southern or suburban areas being least likely to divest from fossil fuels; (3) Universities with a higher percentage of African American/Black students are less likely to divest from fossil fuels, whereas a higher percentage of Asian students or students with two or more races is associated with a greater likelihood of divestment; and (4) More selective schools (those with lower acceptance rates) are more likely to divest. Future researchers should examine FFDCs qualitatively to better understand the unique circumstances that each campaign faces in their pursuit of divestment.

Keywords: environmental movement, fossil fuel divestment campaigns, student-led activism, institutional characteristics

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INTRODUCTION

From the anti-apartheid movement to women's rights, higher education institutions (HEIs) have been a critical venue for activism and movements for social change. On many campuses, student activism is a response triggered by institutional betrayal or broader social injustices. Institutional betrayal, a term originally coined in the context of campus sexual assault activism, is described as “feelings of treason that occur when an institution fails to prevent or respond appropriately to wrongdoings” (Linder & Myers, 2018, p. 1). This sense of betrayal can be applied to many causes and summons passionate students with the aim to raise awareness, expose institutional shortcomings, and create lasting change (Conner et al., 2024).

In the context of the climate change movement, student-led organizations emerged in the 2010s forming fossil fuel divestment campaigns (FFDCs). Such campaigns target their own schools, pressuring HEIs to withdraw their investments from companies operating within or profiting from the fossil fuel industry (Manulak, 2024). This emerging form of environmental institutional betrayal, as perceived by some students, serves as an important motivator for critical engagement with their universities’ insufficient responses to climate-related social injustices. The message is simple: students will not be complicit in their institutions’ role in sustaining environmental harm. To achieve divestment, student activists leverage popular social action strategies and tactics such as sit-ins, marches, picketing, and protests on campus. As seen in the apartheid divestment movement, using visible and targeted action can successfully create extensive political and economic impacts on the international government systems involved (History of Divestment on College Campuses, 2024).

Due to the novelty of FFDCs, there is limited research on both the student-led activism and institutional decision-making aspects of the movement. In addition, qualitative methods are

the dominant technique employed to study social movements (Harutyunyan, 2022). While some scholarship exists on the characteristics (e.g., strategies, tactics, etc.) and history of FFDCs, the literature has yet to examine the characteristics of universities in this discussion. Thus far it has been observed that institutions with smaller endowments and who share institutional values of environmental sustainability and social justice are most likely to divest from fossil fuels (Grady-Benson & Sarathy, 2015). However, extensive work is needed to ascertain what institutional attributes are associated with successful FFDCs. This thesis will reframe the fossil fuel divestment movement quantitatively by turning to the characteristics of HEIs that help predict whether these campaigns sink or swim. Drawing on the Global Fossil Fuel Divestment Commitments Database (GFFDCD) and the National Center for Education Statistics' Integrated Postsecondary Education Data System (IPEDS), I investigate a selection of variables to address the question: What characteristics of U.S. universities, if any, predict successful student-led fossil fuel divestment campaigns? This research analysis aims to provide clear, data-driven insights into the institutional factors that significantly influence students' pursuit of achieving divestment. As adverse impacts of climate change become irreversible, time is of the essence to create meaningful, transformative social change (IPCC, 2023). Emerging literature on FFDCs must turn its focus from the tactics of student activists toward the characteristics and administrations of universities. Students and administrators alike will learn from adopting a new lens to frame how success is achieved.

LITERATURE REVIEW

The Origin of Fossil Fuel Divestment

The first documented student-led U.S. fossil fuel divestment campaign was established in 2011 at Swarthmore College in Pennsylvania (Grady-Benson & Sarathy, 2015). After visiting Appalachian community members experiencing the adverse effects of coal mining related mountaintop removal, students returned with a mission to create real change. This case is a prime example of the environmental justice movement finding its roots in community-based politics and the protection of marginalized communities (Pellow & Brulle, 2015). Swarthmore students went on to found the group Swarthmore Mountain Justice (SMJ), which quickly increased recognition of the fossil fuel divestment movement nationwide—so much so that a collection of students from across the country established the Claremont Colleges Fossil Fuel Divestment Campaign (CCFFDC). CCFFDC consisted of five adjoining colleges in California who demanded their institutions freeze new fossil fuel investments immediately and commit to complete divestment within five years (O'Hanlon, 2015). The CCFFDC garnered global recognition, planting the seed for environmental activists worldwide to join the fight against fossil fuel corporations.

Shortly after the inception of CCFFDC, the international climate action organization 350.org launched a Fossil Free campaign in 2012 that sparked rapid growth in the fossil fuel divestment movement on college campuses (Grady-Benson & Sarathy, 2015). This helped catalyze an international climate network, including hundreds of HEI campaigns across the U.S., that allowed student environmental activists to support one another in their fight for divestment on campus. The theory underlying such efforts is that divestment will lead to damage in both reputation and legitimacy of fossil fuel companies, disrupting their operations and the market,

ultimately rendering them undesirable to investors (Bergman, 2018; Johansmeyer, 2022). The impact of successful large-scale divestment would be global, changing the existing economic, political, and societal structures we know today (Bergman, 2018).

Divestment's Contested Impact

Critics of FFDCs claim that the movement makes a statement but does not have a real impact on greenhouse gas (GHG) emissions (Johansmeyer, 2022; Braungardt et al., 2019; Plantinga & Scholtens, 2024; Richardson, 2017). In the context of FFD, when one institution divests from the fossil fuel industry, those assets are commonly transferred to another actor within the financial system (Johansmeyer, 2022). The new owner seeks to enhance the value and productivity of the investment, potentially reinforcing harmful environmental practices. From a sociological perspective, this dynamic highlights how divestment may unintentionally support the damaging capitalist systems it seeks to challenge. As such, for divestment to constitute a socially transformative act, the divesting institution's reinvestment must produce outcomes—both materially and symbolically—that outweigh the possibility of ongoing fossil fuel development under new ownership. Ultimately, HEIs that divest from fossil fuel companies are left wondering "what's in it for me?" as they lose the economic benefits of those investments.

Academics continue to discuss a variety of arguments both for and against the FFD movement, primarily focusing on whether divestment is an effective strategy for addressing climate change (Apfel, 2015; Bergman, 2018; Hiltner et al., 2024; Mikkelson et al., 2021; Plantinga & Scholtens, 2024). Authors' criticisms against the FFD movement highlight that student campaigns draw attention away from more effective climate action. In addition, critics claim that FFDCs are primarily symbolic with little real environmental impact, and that FFDCs could cause a rapid economic transition within unwanted societal consequences (Braungardt et

al., 2019). It is also important to acknowledge that not every campaign is successful – student activists may face barriers to success while pursuing divestment despite their continuing efforts. Many HEIs have rejected divestment, citing fiduciary responsibilities to their endowment and a lack of meaningful impact on fossil fuel companies among other reasons (Barron et al., 2023).

However, FFDCs have effectively influenced the fight against climate change in several ways. FFDCs have had several powerful impacts such as their ability to reduce the fossil fuel industry's power over policy via stigmatization, capitalizing on divestment as an opportunity to educate and engage young people, and promoting new low-carbon technologies through reinvestment. Some activists argue that simply making a statement is the point, not the tangible environmental impact. By using "evidence first" and "climate justice" discourse typologies, FFDCs spread statements that center science as an unquestionable truth and highlight how the fossil fuel industry perpetuates racial injustice (Pavenstädt & Rödder, 2024). While divestment might not result in a significant reduction of GHG emissions, these campus campaigns also educate fellow students and faculty who may be unaware that their universities are supporting harmful environmental practices. Such campaigns may lead also to further inquiry about social and environmental impact. More importantly, the movement has created a global narrative that fossil fuel companies are an "enemy" to humanity and raises awareness of the overall climate crisis and environmental movement (Richardson, 2017).

The Power of Stigma

In spite of debates regarding the usefulness of FFDCs at reducing GHG emissions, there is consensus among scholars that such campaigns are successful at stigmatizing HEIs for being associated with the fossil fuel industry. As mentioned previously, institutional betrayal describes students' sense of treason that arises when their education institution fails to adequately address

wrongdoings or social injustice (Linder & Myers, 2018). Strong feelings of frustration become motivation for activism that is then directed toward both the fossil fuel industry and complicit HEIs (Hiltner et al., 2024). Often to the dismay of HEI authority figures, a primary tactic used by FFDCs is to shame and disgrace HEIs by drawing significant media and public attention toward the negative environmental impacts of fossil fuel investment (Apfel, 2015; Barron et al., 2023; Bergman, 2018; Braungardt et al., 2019; Richardson, 2017; Rye, 2024). These student activists use climate science to adopt a scientific worldview, legitimize their claims, and spread awareness of empirical knowledge to the public (Rödder & Pavenstädt, 2022). Authority figures of HEIs (e.g., President, Board of Trustees, etc.) become angered by these demonstrations and media coverage as they effectively besmirch the image of institutions that are financially associated with the fossil fuel industry. Successively, HEIs are often cornered into making a moral statement or distancing themselves from the issue so as not to draw further negative attention. Ultimately, administrators are left vulnerable to legitimacy and moral claims as they are pushed into the public spotlight by FFDC student activists and demonstrations on campus (Schneiberg & Lounsbury, 2008).

In addition to the uncomfortable moral and political standing HEIs face from FFDCs, these institutions experience greater tension and threats of decreasing prestige as other HEIs begin divesting. Just as the world witnessed during the anti-apartheid movement, HEIs become more likely to divest when pressure from students and peer institutions becomes too strong. In addition, researchers have found that not only do higher-ranked universities divest at higher rates compared to lower-ranked universities, but world university rankings and status improve with commitments to divest endowments from the fossil fuel industry (Mikkelson et al., 2021). Even when controlling for possible correlates with divestment such as size and type of endowment and

U.S. region, researchers determined that universities would have a static or worse international reputation if they do not commit to divest endowments from fossil fuel holdings. While successful divestment campaigns may not lead to significant reductions in overall GHG emissions, both the academic and activist world agree that its ability to raise awareness of fossil fuel damage is palpable.

Rooted deep within debates around the effectiveness of divestment campaigns, academics are clearly still disputing what "success" means (Green, 2022). As discussed, some scholars consider successful divestment to be a measurable decrease in GHG emissions as a result of HEIs breaking financial ties with the fossil fuel industry (Johansmeyer, 2022; Braungardt et al., 2019; Plantinga & Scholtens, 2024; Richardson, 2017). On the other hand, many activists believe that FFDCs derive power from their ability to influence the international status of HEIs by stigmatizing universities that are financially associated with the fossil fuel industry.

Institutional Patterns for Divestment

The institutional characteristics most studied in relation to divestment include HEI endowment size and stated university values. These factors have been highlighted because institutions tend to reference them in both divestment acceptance and rejection announcements, leading to their heightened sense of importance in HEI decision-making.

In terms of institutional values, researchers have found that universities that express values of environmental sustainability and social justice—mostly liberal arts colleges—have been more likely to divest from the fossil fuel industry (Beer, 2016; Grady-Benson & Sarathy, 2015). This framing is both strategic and genuine in most cases. Although divesting initially appears to be in conflict with the powerful financial logic of the market, universities use their

mission and values of "social responsibility and commitment to environmental sustainability" to justify their decision. In doing so, such HEIs make an effort to frame their mission as being in alignment with their actions, creating consistency and trust among their stakeholders (Beer, 2016). Ultimately, specific institutional values such as social responsibility, social justice, and environmental sustainability emerge as key indicators in determining whether an HEI is committed to confronting the fossil fuel industry.

Though formal documentation of endowment for all divested HEIs is lacking, researchers agree that HEIs with smaller endowments initially expanded the fossil fuel divestment movement (Beer, 2016; Grady-Benson & Sarathy, 2015). Grady-Benson and Sarathy (2015) tracked U.S. HEIs with successful divestment outcomes in the movement's early stages, which led to their discovery that small liberal arts colleges with smaller endowment sizes emerged as the common denominator among divested schools. However, more recent work conducted by Barron et al. (2023) revealed that a large endowment size or dependency on endowment no longer seems to be a decisive limiting factor for fossil fuel divestment for most institutions. Although endowment plays a highly relevant role in an HEI's decision to divest, scholars concur that it is crucial to investigate the qualitative factors influencing divestment.

DATA AND METHODS

Data

Using the Global Fossil Fuel Divestment Commitments Database (GFFDCD), I focus on 117 cases within the United States Fossil Fuel Divestment Movement. This database, now maintained by Stand.earth, is the most comprehensive global database of fossil fuel divestment commitments made by institutions. Its website is accessible to the public and provides a voluntarily reported list used to verify instances of divestment among U.S. universities. Each of these cases have taken place on U.S. college/university campuses and have been successful at securing fossil fuel divestment to some degree. The database provides information regarding each case's "type of divestment" and an online news source (e.g., newspaper or magazine article) that highlights either the campaigns' actions, progress, or concluding decision. "Type of divestment" includes classifications such as full, partial, fossil-free, coal and tar sands, etc. For the purposes of this project, I will be recategorizing "type of divestment" as a binary response variable (1=any type of divestment, 0=no divestment). The primary limitations of this database are that (1) it does not include unsuccessful/failed, stagnant, or disbanded fossil fuel divestment campaigns, and (2) the GFFDCD is not downloadable.

The second database I will be using in my quantitative analysis is the National Center for Education Statistics' Integrated Postsecondary Education Data System (IPEDS). The IPEDS database includes a comprehensive institutional profile for nearly all U.S. HEIs, recording data on university characteristics, enrollment, finances, aid, outcome measures, and so on. A limitation of IPEDS is that it does not report the endowment funds of every university within the database, which would ideally be used as a predictor in my analysis. The relevant statistics that were available for universities within the IPEDS database, and therefore the selected explanatory

variables, were state location, control of institution, degree of urbanization, racial/ethnic composition of university, total admissions, and total applications. Using campaign data from GFFDCD, along with IPEDS, I will evaluate these characteristics from each HEI listed to determine what patterns emerge among institutions to achieve divestment. Lastly, it is important to note that IPEDS uses the term "control of institution" to categorize colleges and universities as public, private not-for-profit, or private for-profit. Throughout this thesis, the IPEDS classification of "control" will be referred to as *institutional governance*, a term that more accurately reflects differences in ownership structures, funding sources, and decision-making authority among these types of institutions.

Table 1

Descriptive Statistics for IPEDS Predictor Variables Used in this Study

Variables	Obs	Mean	SD
Institutional Governance			
Private	2,360	.662	.473
Public	2,360	.338	.473
Region			
Midwest	2,360	.253	.435
Northeast	2,360	.254	.435
South	2,360	.314	.464
West	2,360	.179	.384
Degree of Urbanization			
City	2,360	.511	.500
Rural	2,360	.089	.284
Suburb	2,360	.240	.427
Town	2,360	.160	.366
Acceptance Rate	1,615*	72.057	22.71
Racial/Ethnic Composition			
White %	2,360	52.871	24.031
AA/Black %	2,360	12.899	17.545
Asian %	2,360	5.438	7.603
Hispanic/Latino %	2,360	12.779	13.336
American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander %	2,360	1.635	8.426
Two or More Races %	2,360	3.640	2.941
Race/Ethnicity Unknown %	2,360	4.908	7.843

Note. *The study's final sample size is n = 1,615 due to missing admissions and acceptance data in IPEDS. Mean and standard deviation (SD) values for institutional governance, region, and degree of urbanization fall between 0 and 1. Mean and SD values for acceptance rate and racial/ethnic composition fall between 0 and 100.

Methods

There were four steps to my initial methods process of gathering the data. First, I downloaded an Excel file from IPEDS in Stata format that contained 2023 data on the following variables: state location, institutional governance, degree of urbanization, total admissions, and

total applications. The Excel file contained a unique ID for each university as well as corresponding institution names. Second, I downloaded a separate Excel file from IPEDS in Stata format that contained 2023 data of the racial/ethnic composition of universities. Third, after downloading both Excel files and converting them into individual datasets in Stata, I merged the two datasets using the unique IDs of each university. Fourth, I added a divested binary response variable to the dataset based on the GFFDCD data.

Although there are over 6,000 postsecondary education institutions in IPEDS, the sample size of my analysis was limited based on select variables relevant to my research question and their availability. To begin, I restricted the subsequent analysis to currently operating 4-year U.S. higher education institutions, as 2-year institutions typically follow very different business models (e.g., trade schools), often have little or no endowment to divest, and were far less commonly targeted by FFD campaigns. Additionally, IPEDS revealed that institutions offering degree programs less than 2 yrs (below associate) had zero cases of divestment. Following that same logic, I then restricted the analysis more by removing "Private for-profit" institutions. Not only were there zero cases of divestment at "Private for-profit" universities, but such institutions operate like a business with the goal of generating profit for its owners or investors. In other words, for-profit schools are not engaging in such discourses because that is not what they do or prioritize as a business. The "for-profit" business model opposes divestment from the fossil fuel industry as it can lead to a focus on maximizing revenue, potentially at the expense of academic quality and student outcomes. Lastly, as shown in **Table 1**, it is important to note that 745 of the 2,360 remaining schools did not report, or were missing, the necessary data to calculate acceptance rate. This lack of data further restricted the subsequent analysis to n=1,615 HEIs.

By searching the IPEDS dataset for GFFDCD cases of divested universities, I determined that 117 of the sample n=1,615 schools have divested from the fossil fuel industry in some way according to the GFFDCD. Next, I individually recoded these variables: state location, institutional governance, degree of urbanization, racial/ethnic composition of university, total admissions, and total applications.

To capture regional variation, the state location of universities was grouped into "Northeast," "Midwest," "South," or "West" based on U.S. Census divisions, with the Midwest serving as the reference category. Institutions were also classified by degree of urbanization, recoded from locale codes into four categories: "City," "Suburb," "Town," and "Rural," using "City" as the reference. Institutional governance was simplified into "Public" or "Private," with for-profit institutions excluded and "Private" used as the reference category. Acceptance rate was calculated by dividing total admissions by total applications and multiplying by 100. Additionally, I incorporated a dummy variable (1 = California university, 0 = otherwise) as a robustness check to account for geographic bias and the potentially higher Asian student presence in commonly divested California schools.

For each racial/ethnic identity, I considered creating a baseline group for race/ethnicity combining total American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, two or more races, race/ethnicity unknown, and U.S. nonresident students into one category labeled "Minority." Several of the groups under the label "Minority" had limited representation, which has the potential to make the model noisier, more unreliable, and unable to detect statistically significant differences even while meaningful differences exist. In addition, lumping together these groups typically increases statistical power by increasing the number of observations in a combined group, leading to more stable estimates and less model complexity

and variance. However, it is also important to acknowledge that lumping racial/ethnic identities can lead to a loss of nuance and masking of disparities. Different racial/ethnic groups can have very different experiences and outcomes and combining select "non-White" groups into a "Minority" category may hide group-specific effects. Furthermore, combining distinct identities risks (1) reinforcing structural bias, (2) unintentionally prioritizing statistical convenience over equity, and (3) obscuring meaningful differences in political orientation, student activism, and administrative responsiveness to fossil fuel divestment efforts.

Different racial and ethnic student groups may engage with divestment campaigns in unique ways, shaped by their specific political priorities, experiences of marginalization, and relationships to institutional power. Some groups may be more likely to mobilize around environmental justice due to overlapping concerns with racial and economic justice. Alternatively, some groups may face barriers to participation due to international status, underrepresentation, or institutional neglect. Similarly, university administrations may be more or less responsive to divestment demands depending on which student groups are leading the efforts, particularly if those groups are perceived as politically legitimate, well-resourced, or aligned with the institution's public image. By collapsing diverse identities into a single "Minority" category, the model risks flattening these complex dynamics and missing key variation in how race, power, and activism intersect on campus. This could ultimately limit our understanding of how racialized political engagement shapes the outcomes of divestment campaigns and how administrations differentially respond to student pressure based on who is applying it.

For this thesis, the decision to create a lumped "Minority" group was carefully considered and found ultimately unnecessary for statistical power in the analysis. I ran Akaike's Information

Criterion (AIC) and Bayesian Information Criterion (BIC) for goodness of fit between models, comparing racial/ethnic identities as independent predictors versus combined under a single "Minority" variable. For both the AIC and BIC, lower values indicate superior fit relative to comparison models. After comparing the values given by the AIC and BIC, the AIC produced lower values for the model that included each individual racial/ethnic identity while the BIC did not. This suggests that the LRM model with every racial ethnic group accounted for (even smaller identity groups) may be a better fit to the data than it would be if several racial/ethnic minority groups were lumped into one category. Because this thesis is focused on the prediction of FFDCs, I decided to prioritize the AIC value as it is concerned with the prediction accuracy of the model while sacrificing some model parsimony. However, I did combine the racial/ethnic identities American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander as their individual estimates were quite imprecise and I did not have enough variation in these measures to estimate their association with the outcome accurately.

With this information, I moved forward using a model that factors for every racial/ethnic identity while consolidating American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander (White, AA/Black, Asian, Hispanic/Latino, American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander, two or more races, race/ethnicity unknown, and U.S. nonresident students). The category "U.S. nonresident students" was used as the racial/ethnic baseline group for the remainder of the analysis. Additionally, the results of each racial/ethnic group category was coded by dividing total racial/ethnic group of students by total students at a university and multiplying by 100 (e.g., (total African American/Black students at a university/total students at that university) x 100).

RESULTS

Analysis

After recoding, redefining, and briefly cleaning the dataset, I ran a logistic regression model. Then, I computed the average marginal effects of each predictor because this makes the results easier to interpret given the non-linear model. In other words, I ran a logistic regression model of divested (Y_i) against institutional governance(X_{i1}), region (X_{i2}) with K=4 categories, degree of urbanization (X_{i3}) with L=4 categories, California schools (X_{i4}), acceptance rate (X_{i5}), and institutional racial/ethnic composition (White percentage = X_{i6}; African American/Black percentage = X_{i7}; Asian percentage = X_{i8}; Hispanic/Latino percentage = X_{i9}; American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander percentage = X_{i10}; two or more races percentage = X_{i11}; race/ethnicity unknown percentage = X_{i12}; and U.S. nonresident student percentage = X_{i13}). For context, logistic regression is a model for the conditional expectation of a binary response variable, that is, for the conditional probability that a binary response variable is equal to one. The model proposed is:

$$\log\left(\frac{P(Y_i = 1)}{1 - P(Y_i = 1)}\right) = \eta_i$$

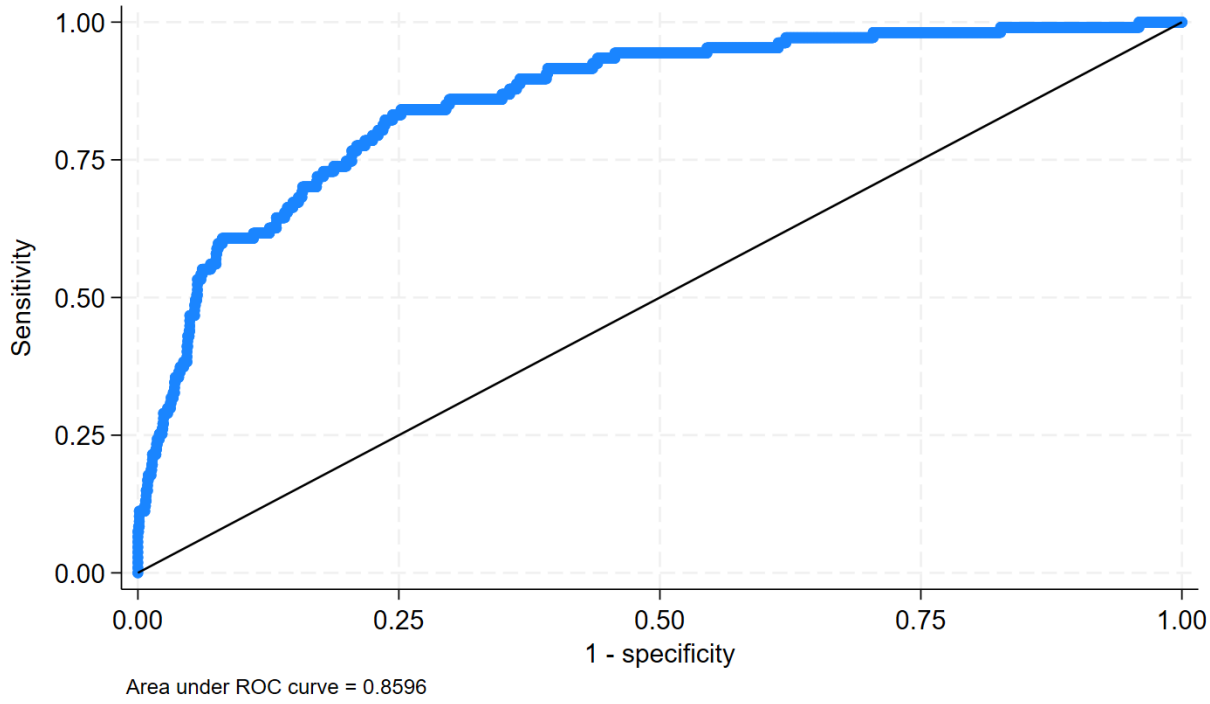
$$= \theta_0 + \theta_1 X_{i1} + \sum_{k=4}^{K} \theta_{2k} X_{i2} + \sum_{l=4}^{L} \theta_{3l} X_{i3} + \theta_4 X_{i4} + \theta_5 X_{i5} + \theta_6 X_{i6} + \theta_7 X_{i7}$$

$$+ \theta_8 X_{i8} + \theta_9 X_{i9} + \theta_{10} X_{i10} + \theta_{11} X_{i11} + \theta_{12} X_{i12} + \theta_{13} X_{i13}$$

I estimate this model by maximum likelihood and compute heteroscedasticity robust standard errors.

Next, I computed odds ratios (see **Table 2**) from the model. **Table 2** displays multiple versions of the logistic regression model, including with and without the California dummy variable and with a California-Asian% interaction term. The model proposed above, and whose results are displayed in the middle column of **Table 2** ("LRM w/ California Dummy"), was then tested using one of the best measures of predictive accuracy with a binary outcome model called the Area Under the Receiver Operating Characteristic curve (AUC-ROC). An AUC-ROC value of 1 means a model can perfectly predict binary classifications. The LRM model used in this analysis produced the AUC-ROC curve shown in **Figure 1**. The key metric observed in this figure is AUC=0.8596, which means that there is an 85.96% chance that the model will correctly rank a randomly chosen divested school higher than a randomly chosen non-divested school. These results indicate that the proposed LRM model has strong predictive power for distinguishing between divested and non-divested institutions.

Figure 1. LRM Model's Area Under the Receiver Operating Characteristic Curve



Lastly, **Figure 2** and **Figure 3** display the average marginal effects from the logistic regression model predicting probability of divestment using dot whisker plots. Dot whisker plots show us the variable estimates (dots) and their confidence intervals as horizontal lines (whiskers). Each dot whisker plot has an X-axis that displays the average marginal effect on the probability of divestment, our binary response variable, while the Y-axis displays each predictor. Positionality on the X-axis represents the change in the predicted probability of divestment associated with each category (compared to its reference in **Figure 3**).

Table 2

Logistic Regression Model (LRM) for Divestment with and without California Variable and California-Asian% Interaction Term

	LRM w/o California Dummy		LRM w/ California Dummy	
Explanatory Variables	Odds Ratio	Robust SEs	Odds Ratio	Robust SEs
Public	3.155***	.793	3.384***	.904
Region				
Northeast	.966	.296	1.046	.320
South	.238***	.106	.250***	.109
West	.939	.385	.614	.355
Degree of Urbanization				
Rural	1.759	.823	1.727	.785
Suburb	.602	.185	.553	.170
Town	.994	.345	.978	.338
California School	---	---	2.327	1.283
Acceptance Rate	.976***	.004	.976***	.004
Racial/Ethnic Composition				
White %	.987	.008	.987	.008
AA/Black %	.948	.027	.948	.026
Asian %	1.046**	.016	1.038*	.017
Hispanic/Latino %	1.014	.012	1.009	.012
AmIAKNatHIPI %	1.000	.000	1.000	.000
TwoOrMore %	1.116***	.035	1.125***	.034
REUnknown %	.978	.020	.979	.020

Note. n=1,615. Entries are odds ratios and heteroscedasticity-robust standard errors (SE). (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$)

Selectivity and Racial/Ethnic Composition

In **Figure 2**, the model's average marginal effects of institutional selectivity and racial/ethnic composition are displayed.

According to Figure 2, for every 1 percentage point increase in university acceptance rate, the probability of divesting decreases by approximately 0.12 percentage points. This estimate is based on average marginal effects, which reflect changes in predicted probability while holding all other variables constant at their observed values across institutions. This suggests that more selective institutions (meaning those with lower acceptance rates) are more likely to divest. Additionally, **Table 2** shows that acceptance rate remains a consistently strong and statistically significant predictor across all model specifications, including those with and without the California dummy variable.

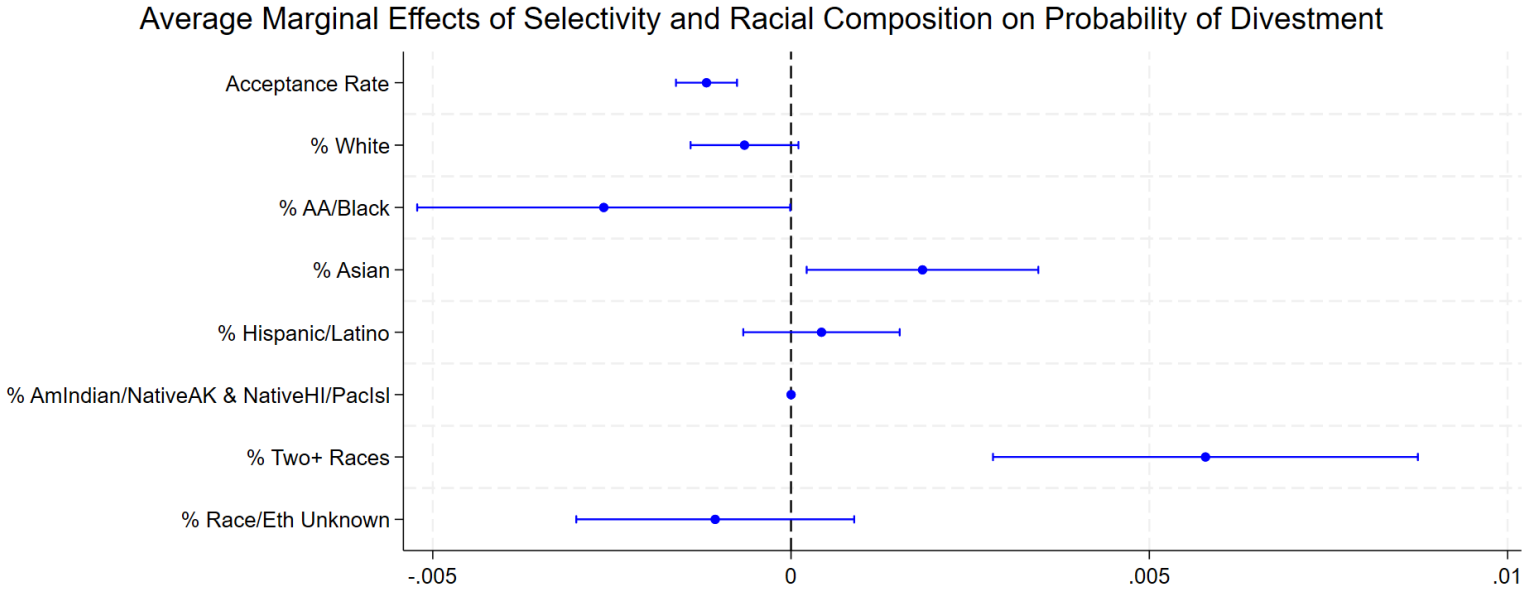
Interestingly, the average marginal effects of the model indicate that racial demographics affect the probability of divestment within HEIs. In **Figure 2** we see that for every 1 percentage-point increase in the proportion of African American/Black students at a university, the probability of divesting decreases by approximately 0.26 percentage points, holding all other variables constant at their observed values. Alternatively, for every 1 percentage-point increase in the proportion of Asian students, the probability of divesting increases by approximately 0.18 percentage points. We also see that for every 1 percentage point increase in the proportion of students with two or more races, the probability of divesting increases by approximately 0.58 percentage points.

It is important to note that a California-Asian% interaction term was tested as a robustness check during the analysis. This was initially motivated by concerns about potential biases due to California schools having both higher Asian student enrollment and higher rates of

divestment. However, this interaction term tests a more specific hypothesis: whether the effect of the proportion of Asian students on divestment differs between California and non-California institutions.

As shown in **Table 2**, the proportion of Asian students is a statistically significant predictor of divestment both when the California dummy variable is included and when it is omitted. However, the interaction term itself is not statistically significant, indicating that the relationship between Asian student representation and divestment does not vary meaningfully by geographic location. This suggests that while California schools are distinct in their divestment behavior, their effect does not moderate the influence of Asian student enrollment. Instead, Asian representation appears to have a positive association with divestment that is consistent across institutional contexts.

Figure 2. Dot Whisker Plot of AMEs of Selectivity and Racial Composition on Probability of Divestment

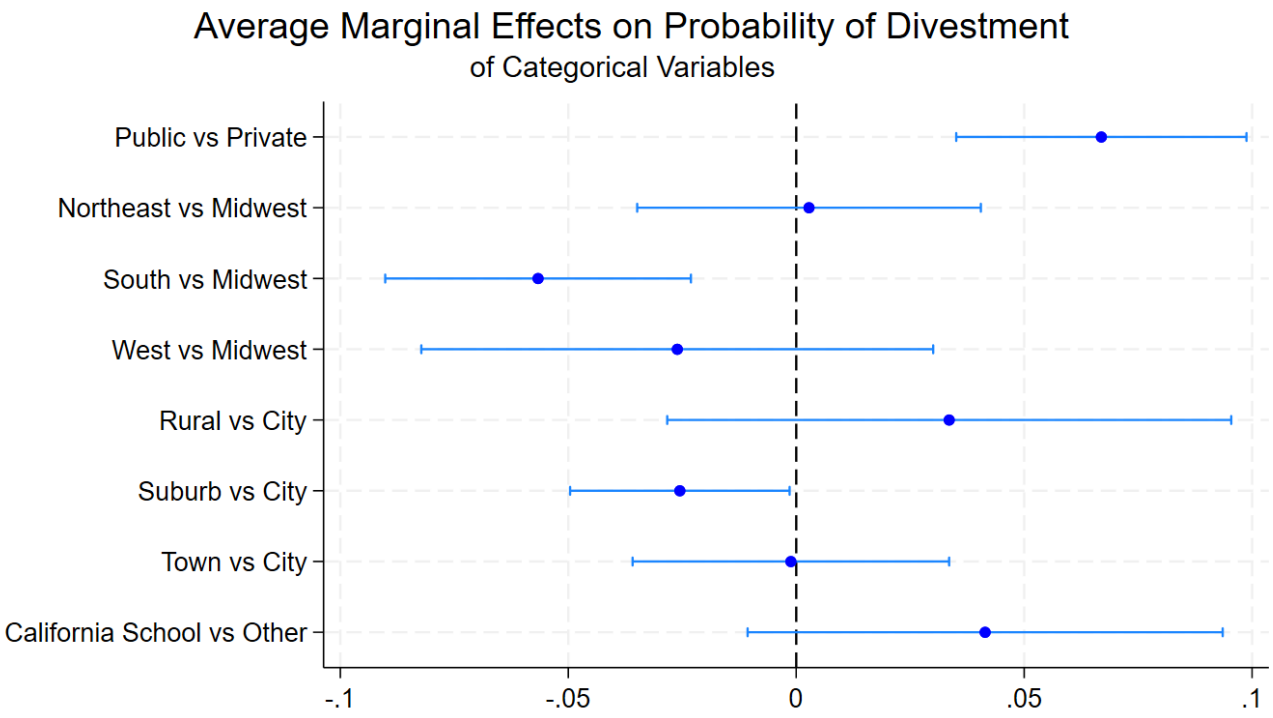


Governance, Region, and Degree of Urbanization

In **Figure 3**, the model's average marginal effects of categorical variables—institutional location, degree of urbanization, and institutional governance—are displayed.

In terms of governance, we see that .067 is the estimated average difference in the probability of fossil fuel divestment at a public institution compared to a private institution, holding all other variables constant at their observed values. In other words, on average, public institutions are about 7 percentage points more likely to divest than private institutions. In terms of region, on average, Southern institutions are 5.7 percentage points less likely to divest than Midwest institutions. For degree of urbanization, on average, Suburban institutions are 2.6 percentage points less likely to divest than City institutions. Overall, public institutions are more likely to divest from fossil fuels whereas institutions geographically located in the south or suburban areas are least likely to divest.

Figure 3. Dot Whisker Plot of AMEs of Categorical Variables on Probability of Divestment



Key Findings

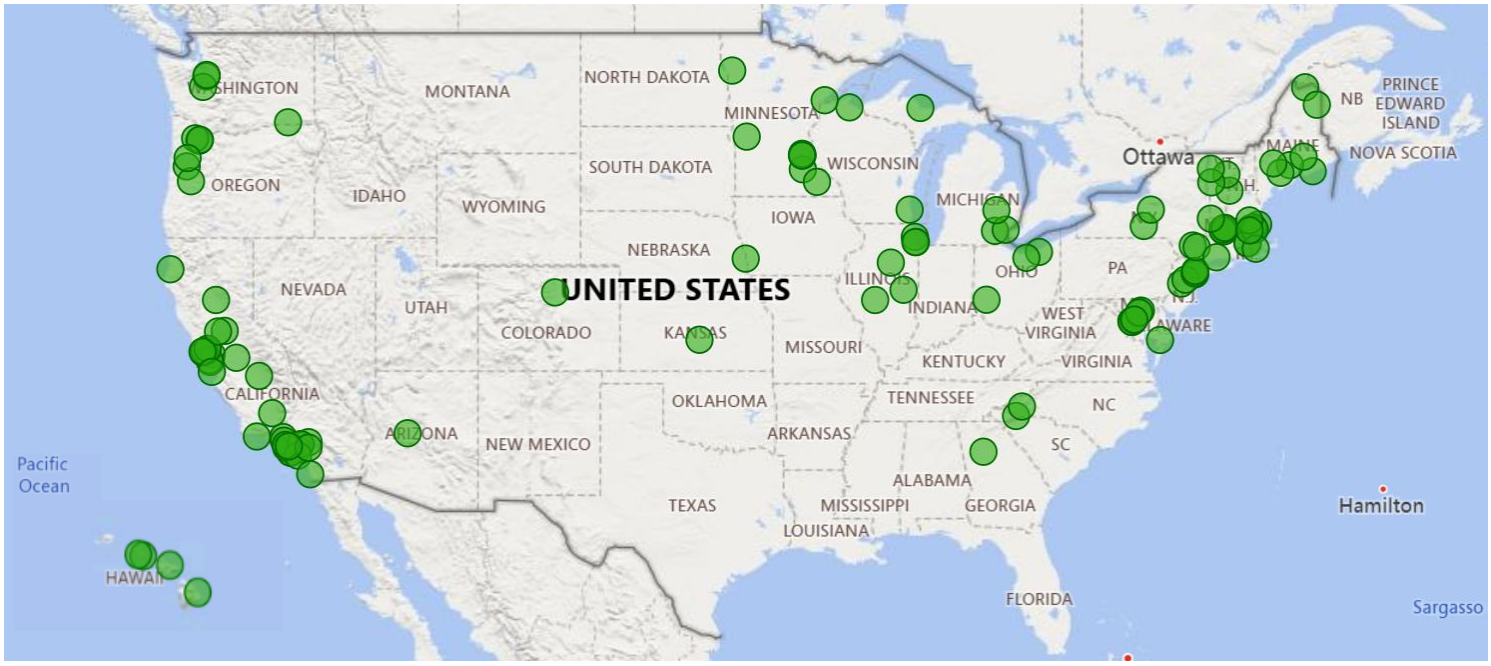
Overall, models yielded the following results: (1) Public universities are more likely to divest than private ones; (2) Universities in the Northeast and West are more likely to divest than Midwest institutions, with institutions located in Southern or suburban areas being least likely to divest from fossil fuels; (3) Universities with a higher percentage of African American/Black students are less likely to divest from fossil fuels, whereas a higher percentage of Asian students or students with two or more races is associated with a greater likelihood of divestment.; and (4) More selective schools (those with lower acceptance rates) are more likely to divest. Additionally, our AUC-ROC value of 0.8596 confirms that the proposed LRM model has strong predictive power for distinguishing between divested and non-divested institutions. However, considering how rare the outcome of fossil fuel divestment is (117 out of n=1,615 cases) our

analysis suggests that in the absence of independent variables, there is a small probability of institutional divestment.

DISCUSSION

Despite its rarity, we can say that institutional divestment is at least partially shaped by institutional characteristics, selectivity, racial/ethnic composition, and regional factors.

Figure 4. Map of Divested U.S. Universities



Racial/Ethnic Composition and Geography

It is vital to understand that racial/ethnic composition and region are closely related in the context of fossil fuel divestment. This relationship reveals not only patterns of institutional behavior but also broader social and structural dynamics at play across the United States.

Figure 4 displays a map of all currently divested universities in the U.S. One can observe a clear trend in the distribution of divestment: more institutions on the West and East coasts of the U.S. have divested whereas the South is conspicuously underrepresented. This observation is not only visible but statistically significant—Southern institutions are the least likely to divest from the fossil fuel industry, as evidenced by the data in **Table 2** and **Figure 3**. While California

and New York lead the nation in the number of degree-granting postsecondary institutions, several Midwestern and Southern states—such as Texas, Ohio, Florida, and Illinois—also rank among the most institutionally dense (Degree-Granting Postsecondary Institutions, by Control and Classification of Institution and State or Jurisdiction: Academic Year 2022-23, 2022). Therefore, it is insufficient to attribute these regional differences in divestment behavior solely to the geographic concentration of HEIs. The dearth of divested Southern institutions is particularly concerning given that the South is not only home to a substantial share of the nation's college student population, but also the most rapidly growing region in the U.S. (US Census Bureau, 2023). From a movement-building perspective, failing to gain traction in this expanding and demographically significant area risks leaving a critical gap in national momentum.

More nuanced patterns emerge when considering racial and ethnic composition. Specifically, the statistical results revealed that institutions with a higher percentage of African American/Black students are statistically less likely to divest. At first glance, this finding might seem counterintuitive, particularly considering the disproportionate environmental burdens that communities of color often face (Rödder & Pavenstädt, 2022). However, this outcome becomes more comprehensible when geographic distribution is factored in.

The regional and racial components of this analysis are not merely coincidental—they are structurally linked. In the U.S., a majority (56%) of the U.S. Black population lives in the South (Martinez & Passel, 2025). Furthermore, Historically Black Colleges and Universities (HBCUs), which serve a significant portion of Black students in higher education, are disproportionately located in the southern states (Morris & Monroe, 2009). Therefore, the reduced likelihood of divestment at institutions with larger Black student populations may be less about race or

ethnicity itself and more a result of these institutions being concentrated in a region where divestment is generally less common.

However, the new wave of FFD and environmentalism has not been well attuned to the factor of race, particularly in the U.S. South. Opportunities for climate justice organizing in the South are shaped by the region's historical legacies of white supremacy and the racial politics of mainstream environmentalism (Thomas Black et al., 2016). In a study by Thomas Black et al. (2016), researchers emphasized that effective alliances must engage with the South's specific histories of racism and antiracist resistance, which are essential to building inclusive movements. Attending to these dynamics allows activists to craft more grounded and transformative climate justice narratives than those developed solely at global scales. In terms of student-led divestment, HBCUs played a significant role in the anti-apartheid divestment movement during the 1970s and 80s. In fact, Black student organizers at predominantly White institutions expanded on the foundational efforts of HBCU activists. These organizers helped shift White-led organizations toward a global-local framework—connecting South African apartheid with racial, economic, and institutional justice—that ultimately defined the national divestment (Hall, 2023). While HBCUs have shown a capacity to engage in divestment campaigns, the anti-apartheid movement likely resonated more deeply due to a shared history of racial oppression. In contrast, the fossil fuel divestment movement, though important, has not carried the same immediate or visceral connection to HBCUs' institutional identity and mission. Ultimately, further research is needed to understand the lack of engagement in the FFDM by HBCUs and HEIs in the South generally.

The intersection of geography and race/ethnicity complicates any simplistic interpretation of divestment patterns. It raises important questions about equity and environmental justice: are institutions that serve historically-marginalized communities systematically hindered from

engaging in sustainability efforts such as fossil fuel divestment? Today, researchers find that there is "marginal" progress toward racial diversity at selective colleges, with White and Asian/Pacific Islander students comprising the majority of enrollment (Strohl et al., 2024). This pattern reflects the historic exclusion of AA/Black, Hispanic/Latino, and Indigenous students from elite institutions and the ongoing structural barriers that limit their access to these spaces. Moreover, this pattern suggests that regional culture, political climate, and resource constraints—factors more prevalent in the South—may disproportionately affect the capacity or willingness of these institutions to divest. Southern culture in the U.S. is characterized by a more conservative socio-political orientation, where traditional views on energy, industry, and economic development dominate public discourse (Pasquini et al., 2023). Additionally, the political climate in the South often reflects skepticism or opposition toward climate change mitigation strategies, especially those perceived as aligned with liberal or progressive agendas. For example, state legislatures in several Southern states have introduced or passed laws discouraging or even penalizing environmental, social, and governance (ESG) investing, including fossil fuel divestment, particularly in public institutions (Houston et al., 2023; *Survey of State Law Restrictions on ESG*, 2025). Overall, the U.S. South is historically more business friendly, less unionized, has lax environmental regulations, and is the birthplace of many 'right to work' states. Together, these interconnected factors form a structural barrier to fossil fuel divestment in the South—one not rooted merely in lack of interest, but in a layered set of cultural, political, and economic realities.

Earlier statistical analysis also revealed that universities with a higher percentage of Asian students are more likely to divest from the fossil fuel industry, as shown in **Table 2** and **Figure 2**. This relationship was tested using a California school dummy variable and a

California-Asian% interaction term used as a robustness check for the sample. A significant portion of the Asian student population in U.S. higher education is concentrated in states like California (see **Figure 4**), which also happens to be a national leader in fossil fuel divestment among public and private universities (Karthick, 2025). However, the relatively large Asian population in these areas is likely the result of historical immigration and settlement patterns that have shaped regional demographics over time, rather than indicating a unique causal link between Asian student representation and divestment behavior (Tang, 2013). Furthermore, California's progressive political culture, robust environmental legislation, and active student climate movements create a highly conducive environment for fossil fuel divestment.

Given this overlap, the California-Asian% interaction term was included to test whether the relationship between Asian student representation and divestment reflects a substantive relationship or is simply due to their shared concentration in California. Crucially, however, the California-Asian% interaction term was not statistically significant. This result suggests that the positive association between Asian student representation and divestment is consistent across both California and non-California institutions. In other words, although schools in California are generally more likely to divest, the impact of Asian student enrollment on divestment decisions is not significantly stronger within the state. These findings may point to broader cultural, political, or organizational factors associated with Asian student populations that can foster more active climate engagement or institutional responsiveness to climate-related advocacy. Still, this association should be interpreted with caution, as it may largely reflect demographic concentrations rooted in regional history rather than a direct causal relationship.

Ultimately, these findings reinforce the need for a nuanced understanding of how student demographics interact with geography, institutional type, and political culture in shaping

universities' willingness or capacity to engage in fossil fuel divestment. It also invites future research into the mechanisms by which student-led advocacy, racial/ethnic identity, and institutional responsiveness converge around environmental justice initiatives.

Institutional Governance

As shown in **Table 2** and **Figure 3**, the statistical analysis reveals another significant institutional predictor of fossil fuel divestment: public universities are substantially more likely to divest than private ones. The positive association between public university status and divestment may initially seem counterintuitive, given that public institutions often operate under more bureaucratic environments compared to private universities. However, several factors may explain this trend. Public universities tend to be more responsive to democratic forms of accountability, including student activism, faculty governance, and public opinion (Gready & Jackson, 2025). These institutions often face direct pressure from student bodies and local communities, particularly in progressive states where climate advocacy is part of the broader political landscape. Furthermore, public universities are often required to disclose more detailed information about their endowment holdings and governance practices, making them more susceptible to transparency-driven activism around fossil fuel investments. When institutions are compelled to report controversial information, such as their financial investments, students may experience a sense of institutional betrayal in response to how their higher education institution allocates its funds (Conner et al., 2024). Public institutions have public information. Both legal requirements for transparency and the public's right to information help to hold HEIs accountable. Ultimately, the relative openness of public institutions creates opportunities for activism to be recognized on a larger scale.

Another factor to consider is the scale and mission of many public universities. Flagship public institutions often see themselves as serving the public good, and sustainability (e.g., fossil fuel divestment) can be framed as an extension of that mission. Divestment campaigns at public universities have also received attention from state-level policymakers, who in progressive states may support such efforts as part of broader climate goals (Yona & Lenferna, 2016; Nazarova, 2025). For example, University of California and University of Maine systems have implemented divestment policies that align with state-level sustainability commitments, reinforcing the idea that public universities are not only responsive to but sometimes aligned with climate policy developments (Mello, 2019; Hall, 2025).

In contrast, private universities, particularly elite ones, may exhibit more conservative investment strategies due to their stronger reliance on large, diversified endowments to support operating budgets, scholarships, and research (Lerner et al., 2008). Private institutions often have more autonomy over their endowment decisions and may prioritize financial returns over social impact. Furthermore, governance structures at private universities can be less transparent and more centralized, making them less susceptible to student or faculty pressure for divestment (Luo et al., 2024). These schools may also face pushback from influential trustees or donors who have ties to the fossil fuel industry or who oppose politicizing investment practices. A similar dynamic is observed in the political sphere: while U.S. Congress members spend more of their time fund-raising and growing close relationships with lobbyists, they become more invested and concerned with the interests of lobbyists and donors while letting the interests of the broader public fall to the wayside (McAdam, 2017).

Selectivity

In addition to level of institutional governance, selectivity emerges as another consistently strong predictor of divestment behavior. The statistical analysis indicates that schools with lower acceptance rates—which are often more prestigious and resource-rich—are significantly more likely to divest from fossil fuels (see **Table 2** and **Figure 3**). This relationship can be understood through multiple lenses.

First, selective institutions often have larger endowments, which afford them more financial flexibility (Barron et al., 2023). These schools can absorb potential short-term losses or transition costs associated with divestment more easily than less-resourced institutions. Selective HEIs may also have dedicated investment offices and sustainability staff who can navigate the technical complexities of implementing fossil-free portfolios (Unglesbee, 2019; Ely, 2024). In contrast, institutions with relatively small endowments may lack both the administrative capacity and the perceived financial stake to justify such efforts. As a result, students at HEIs with smaller endowments may be less inclined to organize around divestment, perceiving such efforts as unlikely to generate meaningful impact or institutional change.

Second, selective universities typically attract students who are highly engaged in political and environmental issues. These student populations are often well-organized and effective at mobilizing around campus causes, including divestment. In some cases, student activism has been a direct catalyst for administrative action on divestment. For example, HEIs such as Harvard University, Princeton, and Stanford all faced pressure from student and faculty groups before announcing divestment-related commitments from apartheid to fossil fuels (Kim, 2020; *Our Proposal | Divestprinceton*, 2020; Cohen, 2021).

Third, highly selective universities are more attuned to reputational concerns. As leaders in higher education, they often seek to maintain or enhance their image as socially responsible institutions. As previously discussed, researchers have found that highly ranked universities—which often have lower acceptance rates and greater prestige—are not only more likely to divest from fossil fuels, but also tend to see improvements in global rankings and institutional status following divestment commitments (Mikkelson et al., 2021). Even when controlling for factors such as endowment size, type, and geographic location, the study suggests that universities that fail to divest risk stagnating or declining in international reputation. Public commitments to sustainability, including divestment, can serve both symbolic and strategic purposes, positioning the institution as forward-thinking, ethically driven, and responsive to global challenges like climate change.

Overall, the statistical findings of this thesis illustrate that institutional type and selectivity are not just administrative characteristics—they shape the political, financial, and cultural environments in which divestment decisions are made. While public and selective institutions may differ in their motivations, mechanisms, and constraints, the data suggests they are more likely to act on fossil fuel divestment than their private or less selective counterparts.

LIMITATIONS

While the findings from this thesis fill gaps in FFD scholarship, they are bounded by methodological shortcomings. This thesis contributes to sociological literature —specifically environmental sociology and the sociology of organizations and social movements—as student-led FFDCs are primarily assessed through qualitative methods. However, fossil fuel divestment campaigns cannot be measured solely using quantitative methods—their goals, values, and membership vary widely. Consequently, there is limited information on the nuanced strategies, tactics, obstacles, and experiences of activists that have led to both failed and successful campaigns. Future research should continue to investigate the qualitative aspects of fossil fuel divestment campaigns due to the intricate and contextual nature of their outcomes. More specifically, participant observation and ethnographic methods would allow researchers to capture the complex lived experiences of activists and the social, cultural, and political dynamics of movements in a way that other methods, notably quantitative ones, often cannot.

Additionally, there were variables unavailable or unreported in the IPEDS database that would have benefited the study's analysis and increased the sample size. During this thesis, I considered additional variables including university endowment, average SAT and ACT test scores for each institution, cost of attending, etc. Unfortunately, each of these variables were either excluded from the IPEDS database, unreported, or missing a significant portion of data despite attempts to use imputed data in their place. I ultimately moved forward excluding these variables rather than cutting the sample size down even more substantially to accommodate for the missing data. Future quantitative research would benefit from committing more time and resources toward collecting valuable variables such as endowment and university test scores because they allow for a more complete, critical, and equity-focused analysis of the fossil fuel

divestment landscape in higher education. Furthermore, such additional variables offer critical insights into the institutional capacity and priorities of universities—factors that strongly influence whether a school is likely to divest.

Lastly, one predictor that was left unexplored in this quantitative analysis was the role of political orientation of HEIs. Studying the culture of universities is crucial when analyzing fossil fuel divestment campaigns because divestment is inherently a political act—one that challenges powerful industries, confronts climate inaction, and signals a public stance on environmental justice. A university's culture often shapes how it engages with this kind of activism, both internally and externally. Fossil fuel divestment is not just a financial decision; it is a political act with moral and symbolic weight. Future research would benefit from studying how university political orientation impacts campus culture, administrative responsiveness, and student activism. Because universities are embedded in broader political contexts, their decision-making is inherently influenced by the local, state, and national political environments surrounding them.

CONCLUSION

Epstein (2008) argues that words and ideas are powerful tools in crafting political identities and framing global issues. By extension, language and discourse used by social–speaking actors such as activists have a significant influence on shaping policies, norms, public opinion, and so much more. Fossil fuel divestment is a social field made up of many actors competing for gains and dominance within the discourse. Despite debates around the effectiveness of the fossil fuel divestment movement, scholars agree that student-led FFDCs have successfully stigmatized the fossil fuel industry and the HEIs that continue to invest in its companies. This thesis illuminates how student-led divestment campaigns function not just as financial interventions, but as sites of moral struggle, institutional contestation, and cultural production.

The models conducted identify key predictors of fossil fuel divestment among U.S. universities. First, public institutions are significantly more likely to divest than private ones, likely due to differences in governance and accountability. Second, regional disparities are notable: divestment is more common in the Northeast and West, and least common in the South, reflecting broader political and cultural influences. Third, racial/ethnic demographic composition matters: schools with higher proportions of African American/Black students are less likely to divest, while those with more Asian or multiracial students are more likely to do so. Fourth, more selective institutions show a greater propensity to divest, possibly due to financial resources, activism, and reputational considerations. The model demonstrates strong predictive accuracy (AUC-ROC = 0.8596), though divestment remains rare, emphasizing the exceptional institutional conditions required for such action.

In terms of climate activism, activists should target public institutions and urban campuses for divestment efforts as they are structurally more likely to succeed. Additionally, students should tailor their strategies by region, recognizing the lower likelihood of success in the South and potential cultural and political barriers there. Lastly, activists should aim to develop inclusive strategies that empower diverse student groups and understand different barriers to engagement. In terms of academic and policy insight, the findings of this thesis help illuminate where and why divestment campaigns succeed, adding important nuance to the literature on campus activism and institutional change. More importantly, this thesis emphasizes that understanding the role of race, public status, selectivity, and geography provides critical context for designing equitable and effective fossil fuel divestment campaigns and climate justice movements.

Ultimately, understanding this intersectionality is crucial to understanding fossil fuel divestment. It highlights the need for targeted policy support, coalition-building across regions, and inclusive climate activism that acknowledges and addresses the systemic factors shaping institutional decisions. People should attend to the role of institutional characteristics in determining the success of fossil fuel divestment campaigns because these characteristics directly shape whether, how, and how quickly institutions can adopt meaningful climate action—which in turn has global environmental and financial implications. In short, understanding institutional dynamics is essential for translating climate activism into lasting structural change.

BIBLIOGRAPHY

Apfel, D. C. (2015). Exploring Divestment as a Strategy for Change: An Evaluation of the History, Success, and Challenges of Fossil Fuel Divestment. *Social Research: An International Quarterly*, *82*(4), 913–937. https://doi.org/10.1353/sor.2015.0054

Barron, A. R., Venator, R. C., V. H. Carlson, E., Andrews, J., Ding, J., & DeSwert, D. (2023). Fossil fuel divestment in U.S. higher education: Endowment dependence and temporal dynamics. *Elementa*, *11*(1). https://doi.org/10.1525/elementa.2023.00059

Beer, C. T. (2016). Rationale of early adopters of fossil fuel divestment. *International Journal of Sustainability in Higher Education*, *17*(4), 506–519. https://doi.org/10.1108/ijshe-02-2015-0035

Bergman, N. (2018). Impacts of the Fossil Fuel Divestment Movement: Effects on Finance, Policy and Public Discourse. *Sustainability*, *10*(7), 2529. https://doi.org/10.3390/su10072529

Braungardt, S., van den Bergh, J., & Dunlop, T. (2019). Fossil fuel divestment and climate change: Reviewing contested arguments. *Energy Research & Social Science*, *50*, 191–200. https://doi.org/10.1016/j.erss.2018.12.004

Cohen, I. (2021, September 14). *How Students Pressured Harvard to Divest From Fossil Fuels–and Won*. Www.thenation.com. https://www.thenation.com/article/activism/harvard-fossil-fuel-divestment-won/

Conner, Jerusha, Rachel Stannard, and Angela Upright. 2024. "College Student Activism in the United States." In *The Bloomsbury Handbook of Student Politics and Representation in Higher Education*, edited by Manja Klemenčič, 404–16. Bloomsbury Publishing.

https://library.oapen.org/bitstream/handle/20.500.12657/87502/9781350375987.pdf?sequence=1#page=437.

Degree-granting postsecondary institutions, by control and classification of institution and state or jurisdiction: Academic year 2022-23. (2022). Ed.gov; National Center for Education Statistics. https://nces.ed.gov/programs/digest/d23/tables/dt23_317.20.asp

Ely, T. (2024). *Divesting university endowments: Easier demanded than done*. University World News. https://www.universityworldnews.com/post.php?story=20240513104444767

Epstein, C. (2008). *The Power of Words in International Relations*. MIT Press.

Grady-Benson, J., & Sarathy, B. (2015). Fossil fuel divestment in US higher education: student-led organising for climate justice. *Local Environment*, *21*(6), 661–681. https://doi.org/10.1080/13549839.2015.1009825

Gready, P., & Jackson, E. (2025). Universities unbound: Universities as sites of human rights activism and protection in an era of democratic crisis. *Journal of Human Rights*, *24*(1), 1–17. https://doi.org/10.1080/14754835.2024.2439262

Green, T. (2022). *Understanding the Research-Practice Gap in Social Movements and Activism*. [Doctoral dissertation, University of Arizona]. UA Campus Repository. https://repository.arizona.edu/bitstream/handle/10150/666158/azu_etd_19856_sip1_m.pdf?sequence=1

Hall, A. J. (2023). Students Are the Spark: Anti-apartheid in the Long 1980s. *Journal of African American History*, *108*(3), 369–397. https://doi.org/10.1086/725828

Hall, J. (2025). *UMaine System to divest its fossil fuel holdings*. Mainebiz. https://www.mainebiz.biz/article/umaine-system-to-divest-its-fossil-fuel-holdings

Harutyunyan, G. (2022). Researching Social Movements: Methodological Choice. *Banber Erevani Hamalsarani. Sots'iologia*, *13*(1 (35)), 55–65. https://doi.org/10.46991/bysu:f/2022.13.1.055

Hiltner, S., Eaton, E., Healy, N., Scerri, A., Stephens, J. C., & Supran, G. (2024). Fossil fuel industry influence in higher education: A review and a research agenda. *Wiley Interdisciplinary Reviews Climate Change*, *15*(6). https://doi.org/10.1002/wcc.904

History of Divestment on College Campuses. (2024, January 31). Everytown Support Fund. https://everytownsupportfund.org/history-of-divestment-on-college-campuses/

Houston, C., Holland, E. B., & Malone, L. (2023, March 11). *ESG Battlegrounds: How the States Are Shaping the Regulatory Landscape in the U.S.* The Harvard Law School Forum on Corporate Governance. https://corpgov.law.harvard.edu/2023/03/11/esg-battlegrounds-how-the-states-are-shaping-the-regulatory-landscape-in-the-u-s/

IPCC. 2023. "Climate Change 2023: Synthesis Report, Summary for Policymakers. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (Eds.)]. IPCC, Geneva, Switzerland." *IPCC*, July, 1–34. https://doi.org/10.59327/ipcc/ar6-9789291691647.001.

Johansmeyer, T. (2022). How Fossil Fuel Divestment Falls Short. Harvard Business Review. https://hbr.org/2022/11/how-fossil-fuel-divestment-falls-short

Karthick. (2025, March 25). *By The Numbers: Education in California - AAPI Data*. AAPI Data. https://aapidata.com/issue-focus/by-the-numbers-education-in-california/

Kim, J. (2020). *Stanford Students campaign for divestment from apartheid South Africa, U.S., 1977 | Global Nonviolent Action Database*. Nvdatabase.swarthmore.edu.

https://nvdatabase.swarthmore.edu/content/stanford-students-campaign-divestment-apartheid-south-africa-us-1977

Lerner, J., Schoar, A., & Wang, J. (2008). Secrets of the Academy: The Drivers of University Endowment Success. *Journal of Economic Perspectives*, *22*(3), 207–222. https://doi.org/10.1257/jep.22.3.207

Linder, C., & Myers, J. S. (2017). Institutional Betrayal as a Motivator for Campus Sexual Assault Activism. *NASPA Journal about Women in Higher Education*, *11*(1), 1–16. https://doi.org/10.1080/19407882.2017.1385489

Luo, Z., Junfeng, M., Abbasi, B. N., & Zilong, L. (2024). Institutional structure and governance capability in universities: an empirical study from the perspectives of time, space, and quantity dimensions. *Humanities and Social Sciences Communications*, *11*(1). https://doi.org/10.1057/s41599-024-03558-5

Manulak, D. (2024, August 22). *Student Protests and Lessons from the Anti-Apartheid Movement*. Harvard.edu. https://epicenter.wcfia.harvard.edu/blog/student-protests-and-lessons-anti-apartheid-movement

Martinez, G., & Passel, J. S. (2025, January 23). *Facts About the U.S. Black Population*. Pew Research Center. https://www.pewresearch.org/race-and-ethnicity/fact-sheet/facts-about-the-us-black-population/

McAdam, D. (2017). Social Movement Theory and the Prospects for Climate Change Activism in the United States. *Annual Review of Political Science*, *20*(1), 189–208. https://doi.org/10.1146/annurev-polisci-052615-025801

Mello, F. (2019, September 18). *Citing "financial risk," UC pledges to divest from fossil fuels*. CalMatters. https://calmatters.org/education/higher-education/2019/09/uc-divests-fossil-fuels-citing-finance-renewable-energy-climate-change/

Mikkelson, G. M., Avidan, M., Conevska, A., & Etzion, D. (2021). Mutual reinforcement of academic reputation and fossil fuel divestment. *Global Sustainability*, *4*(e20), 1–4. https://doi.org/10.1017/sus.2021.19

Morris, J. E., & Monroe, C. R. (2009). Why Study the U.S. South? The Nexus of Race and Place in Investigating Black Student Achievement. *Educational Researcher*, *38*(1), 21–36. https://doi.org/10.3102/0013189x08328876

Nazarova, L. (2025, February 25). *Fueling change: UIUC students vote on fossil fuel divestment this week - IPM Newsroom*. Illinois Newsroom. https://ipmnewsroom.org/fueling-change-uiuc-students-vote-on-fossil-fuel-divestment-this-week/

O'Hanlon, S. (2015). *Pitzer College Students Win Fossil Fuel Divestment 2012-2014*. Global Nonviolent Action Database. https://nvdatabase.swarthmore.edu/content/pitzer-college-students-win-fossil-fuel-divestment-2012-2014

Our Proposal | divestprinceton. (2020). Divestprinceton. https://www.divestprinceton.com/our-proposal

Pasquini, G., Spencer, A., Tyson, A., & Funk, C. (2023, August 9). *Why Some Americans Do Not See Urgency on Climate Change*. Pew Research Center; Pew Research Center. https://www.pewresearch.org/science/2023/08/09/why-some-americans-do-not-see-urgency-on-climate-change/

Pavenstädt, C. N., & Rödder, S. (2024). Between evidence first and political fight – understanding dynamics of (de-)politicization in US climate movements' future

narratives. *Environmental Politics*, 1–22. https://doi.org/10.1080/09644016.2024.2324710

Pellow, D. N., & Brulle, R. J. (2015). Environmental Justice. In J. Goodwin & J. M. Jasper (Eds.), *The Social Movements Reader: Cases and Concepts* (Third) (pp. 391–397). Wiley Blackwell.

Plantinga, A., & Scholtens, B. (2024). The finance perspective on fossil fuel divestment. *Current Opinion in Environmental Sustainability*, *66*(101394). https://doi.org/10.1016/j.cosust.2023.101394

Richardson, B. J. (2017). Divesting from Climate Change: The Road to Influence. *Law & Policy*, *39*(4), 325–348. https://doi.org/10.1111/lapo.12081

Rödder, S., & Pavenstädt, C. N. (2022). "Unite behind the Science!" Climate movements' use of scientific evidence in narratives on socio-ecological futures. *Science and Public Policy*, *50*(1), 30–41. https://doi.org/10.1093/scipol/scac046

Rye, D. (2024). Activists and activism success: towards a grounded conceptualisation. *Interest Groups & Advocacy*, *13*, 123–145. https://doi.org/10.1057/s41309-024-00204-y

Schneiberg, M., & Lounsbury, M. (2008). Social Movements and Institutional Analysis. In R. Greenwood, C. Oliver, R. Suddaby, & K. Sahlin-Andersson (Eds.), *The SAGE Handbook of Organizational Institutionalism* (pp. 648–670). SAGE.

Strohl, J., Nyhof, E., & Morris, C. (2024). *Progress Interrupted: Evaluating a Decade of Demographic Change at Selective and Open-Access Institutions Prior to the End of Race-Conscious Affirmative Action.* Washington, DC: Georgetown University Center on Education and the Workforce,. https://cew.georgetown.edu/wp-content/uploads/cew-progress_interrupted-2024-fr.pdf

Survey of state law restrictions on ESG. (2025, May 29). Davis Polk. https://www.davispolk.com/insights/client-update/survey-state-law-restrictions-esg

Tang, L. (2013). *Geographical Spread of Asians in California* [Bachelor's thesis, California Polytechnic State University]. DigitalCommons@CalPoly. https://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?params=/context/socssp/article/1126/&path_info=auto_convert.pdf

Thomas Black, S., Anthony Milligan, R., & Heynen, N. (2016). Solidarity in Climate/Immigrant Justice Direct Action: Lessons from Movements in the US South. International Journal of Urban and Regional Research, 40(2), 284–298. https://doi.org/10.1111/1468-2427.12341

Unglesbee, B. (2019, March 19). *How the wealthiest colleges manage their endowments in a financial crisis*. Higher Ed Dive. https://www.highereddive.com/news/how-the-wealthiest-colleges-manage-their-endowments-in-a-financial-crisis/550796/

Yona, L., & Lenferna, A. (2016, May 15). *The Fossil Fuel Divestment Movement within Universities*. E-International Relations. https://www.e-ir.info/2016/05/15/the-fossil-fuel-divestment-movement-within-universities/