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# Natural Resources and the Public's Political Trust

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**Abstract**

Do natural resources affect public trust in political leaders and institutions? In this study, I use a difference-in-differences approach to investigate this question, focusing on Ghana's discovery of high-grade offshore oil in 2007. I find that individuals living close to the oil fields became less trusting of political leaders and institutions after the discovery. The findings suggest that the oil discovery's impact on political trust varies depending on pre-existing social and economic conditions such as educational status, employment status and the level of media exposure. Additionally, individuals located near the oil fields reported more negative views about Ghana's democracy, corruption, government performance, and economic conditions. The results suggest a potential link between increased bribe payments in these locations and declining trust.

*Keywords: natural resources; political trust; governance; corruption; public attitudes; difference-in-differences; Ghana; Afrobarometer*

*JEL codes: D72; H11; O17; Q33; C21*

## 1 Introduction

Over the years, natural resources have played a complex role in shaping economies. While they can be crucial drivers of social and economic growth, their availability and management are also inextricably linked to a range of challenges, including lower economic development, climate change, conflict, corruption, and authoritarianism. Mehlum et al. (2006) showed that

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The views expressed in this paper and all errors are my own.



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the quality of institutions is the primary factor determining the success or failure of resource management outcomes. Despite the extensive literature on natural resource extraction and its socio-economic and political impacts, there's a gap in understanding how these resources shape trust in political leaders and institutions. Political trust, a key indicator of political legitimacy, impacts public participation, policy support, and social cohesion. In resource-rich countries, citizens often expect benefits from resource extraction, and unmet expectations can lead to discontent and a decline in political trust. Thus, understanding the relationship between resource extraction and political trust is critical for resource-rich economies aiming to build and maintain public confidence in their political systems.

In 2007, Ghana discovered its largest reserve of high-quality offshore oil. This research seeks to investigate the impact of oil and gas discovery on the public's political trust. The research questions that I seek to answer are: i) Did natural resources affect the public's trust in political leaders? ii) Did natural resources affect public opinion about political systems? iii) How did the changes in political trust vary among various subgroups? In this paper, I use data on public attitudes to conduct a difference-in-differences analysis which exploits spatial variations by comparing individuals located close to the oil and gas fields to individuals farther away before and after the oil discovery. I find that after the oil and gas discovery, individuals located near the oil fields experienced a decline in trust towards political leaders (president and parliament), reported more negative views on Ghana's democracy and corruption levels, perceived poorer economic management by the president, and expressed dissatisfaction with the overall economic conditions. The results suggest a potential link between increased bribe payments in these locations and declining trust.

This research contributes to an emerging literature on the effect of natural resources on the political economy. Several studies have investigated the effect of natural resources on political regimes and found that resource wealth can allow governments to become less reliant on public taxation, potentially weakening democratic institutions and accountability. In extreme cases, it can lead to authoritarian regimes that control resource wealth for their benefit (Al-

Ubaydli, 2012; Haber & Menaldo, 2011; Ross, 2001; Wantchekon, 2002). Other studies found that resource extraction induces rent-seeking behaviour (Torvik, 2002) and provides an incentive for bribery (Knutsen et al., 2017) and corruption (Busse & Gröning, 2013; Pendergast et al., 2011; Salari & Noghanibehambari, 2021; Vicente, 2010). The level of corruption is influenced by factors such as the abundance of natural resources, government policies, and the centralization of bureaucratic authority (Arezki & Brückner, 2011; Bhattacharyya & Hodler, 2010; Leite & Weidmann, 1999; Zhan, 2017).

Aside from its effect on political regimes and the quality of institutions, natural resources impact other aspects of the political economy that have been relatively unexplored. Natural resource extraction is often accompanied by positive expectations from citizens. This is because most natural resources are publicly owned, hence the residents expect that their management will be in the public's interest (Bright & Manfredo, 1997). When people see tangible benefits from resource wealth, their trust in the government's ability to manage the economy effectively tends to increase. This trust stems from the belief that resource revenues will be used to provide essential services, create jobs, and enhance overall prosperity. However, when people perceive an unequal distribution of resource revenues, whether due to corruption or mismanagement, it can lead to distrust (Miller, 2015).

This paper extends the existing literature by exploring the relationship between natural resources and public political trust. One study closely related to this research is Kolstad and Wiig (2012) which explored the impacts of petroleum and minerals on social trust using cross-country data. While the study found no direct impact of natural resources on social trust, it found a significant effect on trust in intermediate variables like corruption, institutions, civil war, and inequality. This research differs from Kolstad and Wiig (2012) in two ways: First, Kolstad and Wiig (2012) focused on generalized trust which reflects a belief in the trustworthiness of all individuals in a society including friends, family and strangers. This research focuses on public political trust which reflects the level of confidence people have in their political institutions, leaders, and the overall functioning of the political system. It reflects the

belief that those in positions of authority will act in the best interests of the public, uphold democratic values, and effectively address the needs and concerns of the citizenry. Political trust has significant implications for the functioning of economies and the overall stability of a country.

Second, Kolstad and Wiig (2012) conducted a cross-country analysis but I employ a within-country analysis in this research. Within-country analysis recognises heterogeneity across local communities and allows for a more comprehensive understanding of specific economies. Even though natural resource discovery is a national shock, some residents may be disproportionally affected which may result in varying views within the economy. Findings from this research provide insight to policy-makers to help them strengthen public political trust in the context of natural resource utilization and management.

This paper contributes to the development and political economy literature in three main ways. First, it provides causal evidence on how natural resource discovery affects political trust within a relatively stable electoral democracy. Much of the existing literature relies on cross-country variation, which makes it difficult to disentangle institutional differences from resource effects. By exploiting within-country spatial variation in proximity to the Jubilee Field, this study isolates the local political consequences of a national resource shock.

Second, the paper highlights subnational heterogeneity in political responses to resource discovery. Although oil discovery is a national event, its economic consequences are spatially concentrated. This allows for an analysis of differential exposure across districts, contributing to a more granular understanding of how local communities experience resource booms.

Third, the paper explores mechanisms linking resource discovery to declining trust. I document increased economic activity and higher reported bribe payments in districts closer to the oil fields, alongside limited employment effects. These findings suggest that rent-seeking behaviour and unmet local expectations may play a central role in shaping political trust following resource shocks.

The rest of the paper is structured as follows: Section 2 provides an overview of oil and

gas extraction in Ghana. Section 3 discusses the data, methodology and identification strategy. Section 4 reports the main empirical results. Section 5 explores robustness and section 6 concludes.

# 2 Overview of oil in Ghana

Oil was initially discovered in 1896 in the onshore Tano basin in Ghana. Onshore oil extraction continued until 1970 when the first offshore oil discovery occurred in Saltpond. Following this, oil and gas exploration activities increased, although production remained on a small scale until 2007 when Kosmos Energy and Tullow Oil uncovered Ghana's most substantial offshore oil reserves. This site, known as Jubilee Field, commenced oil production in December 2010. Figure 1 provides an overview of Ghana's oil production and consumption history, highlighting the significance of the Jubilee field discovery in the nation's petroleum exploration history[1]. The Jubilee Field has a total reserves of 3 billion barrels, with a daily production rate of approximately 150,000 barrels (Tullow Oil, 2019). It is jointly owned by Tullow Oil, Kosmos Energy, Ghana National Petroleum Corporation (GNPC), EO Group, and Anadarko Petroleum Corporation.

## 2.1 Mechanisms through which natural resources might affect public political trust

Oil and gas extraction might influence the public's political trust through several mechanisms. These include:

**Economic Impact:** If economic gains from resource discovery result in tangible improvements in people's lives, such as job creation, infrastructure development, and increased public services, it can boost citizens' trust in the government. Resource revenues can finance roads, schools, hospitals, electricity expansion, and other visible public goods that signal state capacity and responsiveness. When citizens directly observe improvements in local welfare and

[1] *Source: https://www.worldometers.info/oil/ghana-oil/*

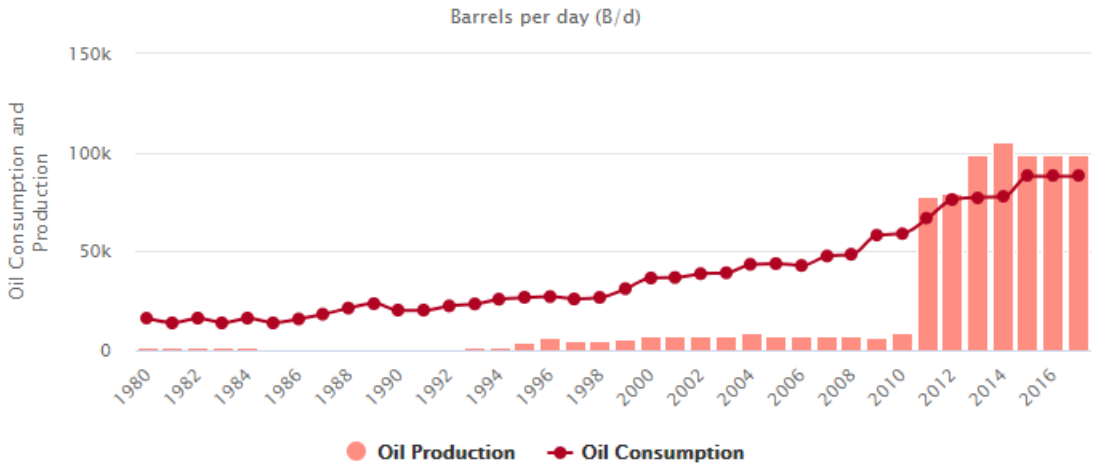



Figure 1: Ghana oil consumption and production (barrels per day)

employment opportunities, they may interpret these outcomes as evidence that political leaders are effectively managing national wealth. However, if economic gains are concentrated in capital-intensive sectors with limited employment spillovers, or if improvements are unevenly distributed across regions, the anticipated positive effect on political trust may not materialize.

**Bribery and corruption:** Resource booms generate significant fiscal revenue for the government and increase the income of workers in the resource sector. This creates incentives for corruption as individuals or groups seek to capture these rents through illicit means. Furthermore, corrupt officials may see this increase in wealth as an opportunity to increase their bribe demands, believing locals can now afford to pay more. Resource revenues may also weaken oversight institutions if political elites gain greater discretionary control over large financial flows. Increased perceptions of rent-seeking, favoritism in contract allocation, or misuse of public funds can erode citizens' confidence in political leaders. Even when corruption levels do not objectively increase, heightened visibility of wealth and inequality may intensify perceptions of corruption, thereby reducing political trust.

**Distribution of Benefits:** The allocation and distribution of oil and gas revenues across sectors and regions impact public trust. Unequal distribution, favouring a small elite or specific regions, can worsen inequalities and diminish trust in the government. In particular, com-

munities located near extraction sites may expect preferential access to jobs, infrastructure, or compensatory transfers. When these expectations are unmet, perceptions of marginalization may arise. Conversely, governance mechanisms promoting equitable sharing of economic benefits, transparent revenue allocation, and targeted local development programs can enhance perceptions of fairness. The extent to which citizens perceive the distribution of benefits as just and inclusive is therefore likely to play a central role in shaping political trust.

**Environmental and Social Concerns:** The extraction of natural resources can result in environmental and social impacts, including pollution, community displacement, and threats to biodiversity, thereby affecting political trust. Oil spills, gas flaring, land degradation, and pressure on local resources can impose costs on nearby communities. If individuals perceive that regulatory institutions fail to prevent environmental harm or adequately compensate affected populations, confidence in government oversight may decline. Social disruptions, such as rising living costs, housing shortages, or increased inequality associated with resource booms, may further intensify dissatisfaction. In such contexts, environmental and social externalities become politically salient, shaping citizens' evaluations of government performance.

**Impact on Governance:** The influx of resource wealth can concentrate power, weaken checks and balances, and shift governance toward less democracy. When governments rely less on taxation and more on resource rents, the fiscal contract between citizens and the state may weaken, potentially reducing incentives for accountability. Political leaders may face fewer pressures to respond to citizen demands if resource revenues provide alternative sources of financing. At the same time, resource wealth can increase competition over political control, intensifying patronage networks and political favoritism. Involving the public in formulating oil and gas policies, strengthening transparency frameworks, and reinforcing institutional oversight mechanisms can help mitigate these risks and sustain political trust.

# 3 Data and Method

## 3.1 Data

To conduct the empirical analysis, I use a repeated cross-sectional data on public attitudes from the Afrobarometer survey for the years 2002, 2005, 2008, 2012, 2014, 2019, 2020, and 2022. The main outcome variable is the public's political trust which includes trust in government, political leaders and institutions as well as perceptions about the political system. The summary statistics are presented in table 1.

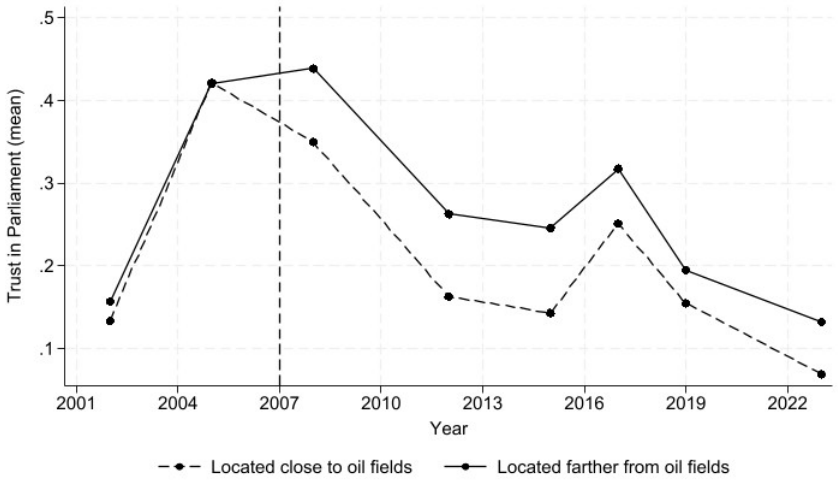
Table 1: Summary Statistics

| Variables | Obs | Mean | Std. deviation |
|---|---|---|---|
| Age | 15,566 | 45.114 | 81.183 |
| Years of education | 15,566 | 3.462 | 4.448 |
| Proportion male | 15,566 | 0.499 | 0.500 |
| Proportion urban | 15,566 | 0.520 | 0.500 |
| Proportion employed | 15,566 | 0.584 | 0.493 |
| | | | |
| Overall trust | 14,440 | 0.393 | 0.489 |
| Trust in president | 15,197 | 0.346 | 0.476 |
| Trust in parliament | 15,015 | 0.200 | 0.400 |
| Trust in local gov't council | 14,760 | 0.158 | 0.365 |
| | | | |
| Democracy | 15,566 | 0.756 | 0.430 |
| Corruption | 11,573 | 0.095 | 0.294 |
| Present economic conditions | 15,327 | 0.270 | 0.444 |
| Government performance | 15,566 | 0.508 | 0.500 |
| Frequency of bribe payments | 6,321 | 0.227 | 0.419 |
| | | | |
| Distance to Takoradi (km) | 15,566 | 260.672 | 163.466 |

The approach that I use in this analysis compares individuals located close to the oil and gas fields to individuals located farther away. To do this, I link the individuals with their

geographic identifiers (GPS coordinates). GPS coordinates are available on the cluster level. A cluster includes 8 households located geographically close to each other. I use the GPS coordinates to calculate the measure of distance. Distance is calculated as the length of the shortest path between an individual's location and the closest main city to the oil and gas fields (Takoradi city)[2].

Figure 2: Trends in political trust




### 3.2 Identification Strategy

The Jubilee Field, located in Ghana's Western region, is closely tied to Takoradi, the regional capital and the nearest main city. Takoradi serves as the primary source for essential oil and gas infrastructure. The port of Takoradi was selected as the support base for offshore service vessels due to its proximity and capacity. It is the main conduit for oil from the Western region and has recently been expanded to accommodate the rise in its business volume since the oil discovery. It is used for loading and unloading oil supply vessels that transport equipment, chemicals, and supplies. Onshore logistics facilities for storage, warehousing, and office accommodation are also situated in Takoradi. I use the distance to Takoradi as a proxy for the

[2]The offshore oil field is located near Takoradi city in the Western region. Since Takoradi is the closest city to the Jubilee Field, most of the basic infrastructure required for the oil and gas industry are obtained there

distance to the offshore oil and gas field due to its proximity to the oil fields and the increase in economic activities since the oil discovery.

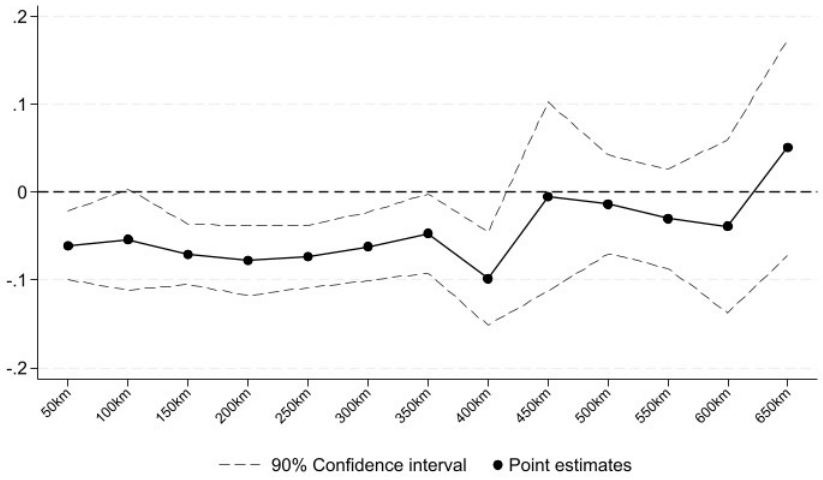
The identification strategy assumes that individuals in areas both close and far from Takoradi would experience similar trends in political trust in the absence of the oil discovery. Because the oil discovery represents a national shock, identification relies on differential exposure rather than simple before–after comparisons. Year fixed effects absorb nationwide macroeconomic and political developments, including election cycles and national policy reforms, ensuring that the estimated coefficient captures variation specific to proximity to the oil sector. The use of district fixed effects further accounts for time-invariant local characteristics. Moreover, short-run internal migration in Ghana during the study period was limited relative to the scale required to drive these results, reducing concerns that selective relocation explains the observed patterns. Taken together, this strategy isolates the local political effects of resource discovery from broader national dynamics.

Figure 2 provides support for the validation of this identification strategy. It shows that the two groups experienced similar trends in political trust prior to 2007. After 2007, there was a divergence in the trends between the two groups. In figure 2, the treatment group comprises those living less than 400km from Takoradi. The main analysis in this paper measures distance as a continuous variable, but the 400km threshold is used solely for constructing the trend graph.

Assigning the treatment group to construct the trend graph was done in two steps: First, I split the households into separate distance bands and grouped them in blocks of 50km. The first group consists of households located less than 50km from Takoradi, the second group consists of households located between 50km to 100km from Takoradi, and so on. Second, I estimate the baseline regression to explore spatial heterogeneity. Figure 3 plots the estimated parameters and the 90 percent confidence interval. The estimates are significant for individuals located near Takoradi. After 400km, they become insignificant (see figure A.1 in appendix).

The baseline regression for this approach is:

Figure 3: Effect of oil discovery on political trust: by distance to Takoradi




$$Y_{icdt} = \alpha + \rho_t + \delta_d + \beta T_i * Post_t + \eta X_{icdt} + \epsilon_{icdt} \tag{1}$$

where $Y_{icdt}$ is the outcome variable (political trust) of individual $i$ in cluster $c$ in district $d$ in year $t$. $T_i$ is a continuous variable which represents the distance to Takoradi. $Post_t$ is a dummy variable that takes the value one in the post oil discovery period (2007). $\delta_d$ and $\rho_t$ are district and time fixed effects respectively. $X_{icdt}$ is a vector of individual level control variables such as age, gender, years of education and an indicator of urban residence.

# 4 Main Results

## 4.1 Effect on public political trust

Table 2 shows the effect of the oil and gas discovery on public political trust of individuals located near Takoradi. Distance is measured in hundreds of kilometres. I use negative distance[3] in my analysis for easier interpretation. The results indicate that, after the oil and gas discovery, individuals near Takoradi experienced a decline in overall political trust[4] as well as

[3]Negative distance is the original distance multiplied by -1

[4]Overall trust is an additive measure of trust in the president, trust in parliament and trust in the local government council

trust in the president and members of parliament. Individuals located 100km closer to Takoradi experienced a 3.8 % and 1.4 % decrease in their probability of trusting the president and parliament respectively. The coefficients show that trust in the president declined more than trust in members of parliament. This could be because the president is seen as the head of state and thus bears the brunt of public frustration, particularly regarding economic issues.

Table 2: Effect on public political trust

| | Overall trust | Trust in president | Trust in parliament | Trust in local government |
|---|---|---|---|---|
| Post * negative distance | -0.029** | -0.038*** | -0.014** | 0.011 |
| | (0.011) | (0.009) | (0.006) | (0.008) |
| Pre-treatment Mean | 0.525 | 0.443 | 0.281 | 0.225 |
| Observations | 14,440 | 15,197 | 15,015 | 14,760 |
| R - squared | 0.112 | 0.121 | 0.089 | 0.087 |

*Notes:* Negative distance is the original distance multiplied by -1. All regressions control for age, gender, years of education and an indicator for urban residence. Robust standard errors clustered at the district level are in parenthesis.
*** Significant at the 1 percent level
** Significant at the 5 percent level
* Significant at the 10 percent level

Table 3: Effect on overall trust: by proportion of subgroups in a district

| | Education | | Media exposure | | Employment status | |
|---|---|---|---|---|---|---|
| | Small % educated | Large % educated | Low | High | Large % Employed | Small % Employed |
| Post * negative distance | -0.026 | -0.041*** | -0.021 | -0.034* | -0.028 | -0.034** |
| | (0.016) | (0.012) | (0.013) | (0.018) | (0.018) | (0.017) |
| Observations | 6,525 | 6,788 | 6,528 | 6,785 | 6,466 | 6,847 |
| R - squared | 0.110 | 0.094 | 0.102 | 0.121 | 0.112 | 0.110 |

*Notes:* Negative distance is the original distance multiplied by -1. Highly educated districts are districts where a large proportion of the population has educational attainment above the median level observed across all districts before the discovery. Districts with high media exposure are those where the level of media exposure is above the median level. Districts with high employment are those where the employment level is above the median level. All regressions control for age, gender, years of education and an indicator for urban residence. Robust standard errors clustered at the district level are in parenthesis.
*** Significant at the 1 percent level
** Significant at the 5 percent level
* Significant at the 10 percent level

The effect of the oil and gas discovery may not be uniformly distributed among different subgroups in the local population. I explore these heterogeneous effects by education status,

employment status, and the level of media exposure[5] at the district level. Since these variables can be influenced by the oil and gas discovery, I use their values prior to the discovery to define a district's status. Highly educated districts are districts where a large proportion of the population has educational attainment above the median level observed across all districts before the discovery. Districts with high media exposure are those where the level of media exposure is above the median level. Districts with high employment are those where the employment level is above the median level.

The results are presented in Table 3. They show that the decrease in political trust after the oil discovery is mostly in highly educated districts and districts with high media exposure. According to Besley and Burgess (2002), educated individuals are more likely to be aware of their rights and the performance of their government, which in turn can lead to greater political engagement and demand for better governance. This suggests that pre-existing knowledge or higher expectations might have led to greater discontent when those expectations weren't met after the oil discovery. Moreover, high media exposure implies that individuals might be more informed and less disconnected from the political process, leading to heightened awareness of economic and political issues.

Also, the findings indicate that individuals in districts with low employment became less trusting of the political leaders. In these districts, economic hardships may lead to increased dissatisfaction towards the government's ability to address their needs and improve their living conditions. This could be especially true when the oil and gas discovery did not lead to as much job creation as expected (see table 5).

These findings suggest that the oil discovery's impact on political trust may vary depending on pre-existing social and economic conditions. This highlights the importance of considering diverse perspectives when evaluating the effects of resource discoveries.

[5]Media exposure is measured by how frequently an individual listens to the radio, watches television or reads the newspaper

### 4.2 Effect on public opinion about the political system

Table 4 presents the effect of the oil and gas discovery on the public's opinion about Ghana's political system and economic conditions. The results suggest that after the oil and gas discovery, individuals located close to Takoradi were more likely to report that Ghana had become less democratic, identify corruption as one of the top three problems in the country, view the government's performance as poor, and rate economic conditions as bad. This shift in public perception highlights the potential socio-political and economic challenges that resource discoveries can bring to local communities.

Table 4: Effect on public opinion

| | Democracy | Corruption | Felt unsafe | Government performance | Economic conditions |
|---|---|---|---|---|---|
| Post * negative distance | -0.016** | 0.011*** | -0.004 | -0.032*** | -0.021*** |
| | (0.006) | (0.004) | (0.008) | (0.009) | (0.007) |
| Pre-treatment Mean | 0.866 | 0.021 | 0.307 | 0.692 | 0.288 |
| Observations | 15,566 | 11,573 | 15,566 | 15,566 | 15,327 |
| R - squared | 0.071 | 0.068 | 0.055 | 0.178 | 0.085 |

*Notes:* Negative distance is the original distance multiplied by -1. All regressions control for age, gender, years of education and an indicator for urban residence. Robust standard errors clustered at the district level are in parenthesis.
*** Significant at the 1 percent level
** Significant at the 5 percent level
* Significant at the 10 percent level

### 4.3 Exploring mechanisms

Section 2.1 discussed potential mechanisms for how resource discovery can erode public trust in political leaders. This section explores two such mechanisms: employment and bribery. Table 5 shows that, after the oil discovery, people near Takoradi reported a higher frequency of bribes paid to government officials for permits and documents. This aligns with the findings by Knutsen et al. (2017) who linked increased mining activity to more frequent bribes. They argue that resource booms create opportunities for officials to demand bribes as they believe locals can now afford to pay more.

Table 5: Mechanisms through which resource extraction can affect public political trust

| | Employment | Bribe payment |
|---|---|---|
| Post * negative distance | -0.008 | 0.018** |
| | (0.009) | (0.008) |
| Pre-treatment Mean | 0.573 | 0.186 |
| Observations | 15,566 | 6,321 |
| R - squared | 0.066 | 0.088 |

*Notes:* Negative distance is the original distance multiplied by -1. All regressions control for age, gender, years of education and an indicator for urban residence. Robust standard errors clustered at the district level are in parenthesis.
*** Significant at the 1 percent level
** Significant at the 5 percent level
* Significant at the 10 percent level

To investigate the link between economic activity and bribery, I followed the approach in Knutsen et al. (2017) and examine the effect of oil discovery on economic activity in districts near the oil fields. Economic activity is measured by the night-time light intensity in a district[6]. I standardized the pixel values to simplify the interpretation of estimates. The results are shown in table 6. I find that, the discovery increased economic activities in districts near the oil fields. Additionally, table A.3 in the appendix shows a positive correlation between economic activity and the frequency of bribe payments at the district level.

Interestingly, despite the increase in economic activities, table 5 showed no significant impact on employment. This suggests that the increase in economic activities might be due to factors like infrastructure development, wage increases for resource workers, or growth in supporting industries. However, the capital-intensive nature of the oil and gas industry and its need for a specialized workforce might limit direct job creation.

These results are consistent with an expectations-based interpretation of political trust. Resource discoveries often generate anticipatory optimism among local communities regarding employment, infrastructure, and public services. When economic gains are concentrated in capital-intensive activities or captured through rent-seeking channels, expectations may re-

[6]Night-time light data is from the Defense Meteorological Satellite Program (DMSP) obtained from the National Oceanic and Atmospheric Administration (NOAA)

main unfulfilled for much of the population. In such contexts, increased economic activity does not necessarily translate into broad-based welfare improvements. Instead, visible disparities and rising bribery may reinforce perceptions of elite capture, thereby undermining confidence in political leaders and institutions.

Table 6: Effect on economic activities

| | |
|---|---|
| Post * negative distance | 0.030** |
| | (0.011) |
| Observations | 2,176 |
| R - squared | 0.962 |

*Notes:* Negative distance is the original distance multiplied by -1. Robust standard errors clustered at the district level are in parenthesis.
*** Significant at the 1 percent level
** Significant at the 5 percent level
* Significant at the 10 percent level

# 5 Robustness Checks

I conduct four robustness checks: First, in section 4, the results show a negative effect of oil and gas discoveries on the public's political trust and their opinions about political systems. However, these results could be driven by the views of individuals located in capital cities, as these cities often have unique economic, social, and political dynamics that differ significantly from rural or suburban areas. This can create the impression of a national trend, even if it is primarily concentrated in specific urban centres. I show that the negative effects of oil discoveries on political trust are not solely concentrated in capital cities in two ways: First, I include a control variable for capital cities in equation 1 and re-estimate it, using overall trust as the dependent variable. The results are presented in table A.2 in the appendix. The estimates still show a negative effect of oil and gas discovery on political trust. Second, I take the analysis a step further and exclude all capital cities from the sample. The estimates, presented in table A.2, are similar to those obtained when capital cities are included.

The second robustness check I conduct accounts for the differences in the district's economic structure. The distribution of employment across different sectors varies between districts. Some districts have a high employment share in one sector and low employment in another. If the oil and gas discovery had a positive (or negative) effect on a sector, then districts with high employment in that sector may experience a corresponding positive (or negative) effect. This could impact the trust and opinions of the local population in these districts. To account for this, I re-estimate equation 1, controlling for districts with high employment in one of the three main sectors (agriculture, manufacturing, and services).

I use the employment share[7] of a sector in a district as a measure of district economic structure. Since employment shares can be influenced by the oil and gas discovery, I use the values prior to the discovery to define a district's economic structure. Agriculture, manufacturing and services are continuous variables measuring a district's percentage of employment in agriculture, manufacturing, and services, respectively. The results are presented in table A.4 in the appendix. The estimates show that the effects of the oil and gas discovery on political trust is not driven by differences in district economic structure.

Third, there might be other underlying differences between districts besides their proximity to the oil fields. For instance, the southern districts (closer to the fields) are predominantly Christian, while the northern districts are mainly Muslim. To address this concern and confirm that the observed effects are driven by proximity, I perform a placebo test using religion as a source of variation. Since there's no established causal link between religion and political trust in the context of resource discovery, any significant difference in trust levels between Christians and Muslims should not appear after the oil discovery. If the observed decline in trust near the oil fields is truly driven by proximity, we wouldn't expect a significant difference in trust levels between Christians and Muslims after the discovery.

I re-estimate equation 1 but substitute religion for proximity to oil fields. This analysis compares the political trust of Christians and Muslims before and after the discovery (results

[7] Employment share is calculated as the total employment of a sector in a district divided by the total employment in a district

are in Table A.5 in the appendix). As expected, the results show no significant effect of oil and gas discovery on the political trust of Christians compared to Muslims. This supports the validity of the original analysis, suggesting that the decline in trust is indeed driven by proximity to the oil fields, not by pre-existing differences between the districts.

Fourth, I explore the sensitivity of the results to the inclusion of district-time trends by re-estimating equation 1 and including an interaction term between year and district. This approach allows for unique time-specific variations within each district, accounting for factors that change over time and differ across districts. The results, shown in Table A.6 in the appendix, are similar to those obtained when district-time trends are excluded. This suggests that the observed effect of oil discovery on political trust is not driven by districts being on different trends. Column 2 in Table A.6 includes region-time trends[8] and obtains similar results.

# 6 Conclusions

Natural resources present a multifaceted dilemma for resource-rich economies. While they offer the potential for significant economic growth, they can also have unintended political consequences, including eroding public trust in political leadership. This paper examines the effects of oil and gas discoveries on the public's confidence in political leaders and institutions, using Ghana's 2007 offshore oil discovery as a natural experiment.

The findings show that individuals living near the oil fields experienced a significant decline in political trust following the discovery. This decline is linked to more negative perceptions of Ghana's democracy, increased perceptions of corruption, poorer evaluations of economic management, and greater dissatisfaction with economic conditions. The results suggest that unmet expectations and increased bribe payments in resource-rich areas contribute to this erosion of trust. Importantly, the findings indicate that even in a relatively stable electoral democracy, resource discoveries can generate localized political discontent when economic

[8] A region is the largest sub-national administrative division in Ghana. It is divided into districts, municipalities, metropolitan areas, and towns/cities. Ghana has 16 regions, 216 districts, and 260 Metropolitan and Municipal Assemblies

gains are not broadly shared or when governance concerns become salient.

Beyond the Ghanaian case, these results contribute to a broader understanding of how resource shocks shape political attitudes in emerging democracies. They suggest that the political consequences of natural resource discoveries depend not only on aggregate revenue generation, but also on citizens' expectations, perceived fairness in distribution, and the visibility of governance practices. In contexts where resource wealth is highly visible yet unevenly experienced, perceptions of elite capture may undermine political legitimacy.

For resource-rich countries aiming to foster and maintain public trust, several policy implications emerge. Governments could prioritize transparency and accountability in the management of natural resource revenues, ensuring that benefits are visibly translated into public goods and local development projects. Strengthening anti-corruption institutions, improving revenue disclosure mechanisms, and enhancing communication between governments and citizens can mitigate negative perceptions and reinforce institutional credibility. Additionally, investing in inclusive local economic development strategies in resource-producing regions may help align public expectations with tangible outcomes. By adopting such measures, resource-rich countries can better harness their natural wealth to promote sustainable economic growth while preserving political trust and social cohesion.

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# Appendix

Table A.1: Description of variables

| **Variable** | **Description** |
|---|---|
| Overall trust | Additive measure of trust in the president, trust in parliament, trust in the local government council |
| Trust in president/parliament /local government | How much do you trust each of the following, or haven't you heard enough about them to say? |
| Democracy | In your opinion, how much of a democracy is Ghana today? |
| Corruption | In your opinion, what are the most important problems facing this country that the government should address? |
| Felt unsafe | Over the past year, how often, if ever, have you or anyone in your family: Felt unsafe walking in your neighbourhood? |
| Government performance | How well or badly would you say the current government is handling the following matters or haven't you heard enough to say: Managing the economy |
| Economic conditions | Looking back, how do you rate economic conditions in this country compared to 12 months ago? |
| Media | How often do you get news from the following sources: Radio, Television or Newspaper |
| Bribe payment | How often, if ever, did you have to pay a bribe, give a gift, or do a favour for a government official to get the document you needed? |

Table A.2: Effect on overall trust: controlling for and exclusion of all the capital cities

| | (1) | (2) |
|---|---|---|
| Post * negative distance | -0.032*** | -0.026** |
| | (0.011) | (0.013) |
| Control for capital cities | Yes | No |
| Exclude capital cities | No | Yes |
| Observations | 14,440 | 11,187 |
| R - squared | 0.112 | 0.119 |

*Notes:* Negative distance is the original distance multiplied by -1. All regressions control for age, gender, years of education and an indicator for urban residence. Robust standard errors clustered at the district level are in parenthesis.
*** Significant at the 1 percent level
** Significant at the 5 percent level
* Significant at the 10 percent level

Table A.3: Correlation between economic activity and bribe payment at the district level

| | Economic activity | Bribe payment |
|---|---|---|
| Economic activity | 1.000 | |
| Bribe payment | 0.386*** | 1.000 |

*Notes:* Economic activity is measured by the night-time light intensity in a district. Bribe payment is the frequency of bribe payment at the district level.
*** Significant at the 1 percent level
** Significant at the 5 percent level
* Significant at the 10 percent level

Table A.4: Effect on overall trust: by district economic structure

| | |
|---|---|
| Post * negative distance | -0.034*** |
| | (0.011) |
| Post * agriculture | -0.006 |
| | (0.165) |
| Post * manufacturing | -0.033 |
| | (0.368) |
| Post * services | 0.069 |
| | (0.208) |
| Observations | 13,454 |
| R - squared | 0.108 |

*Notes:* Negative distance is the original distance multiplied by -1. Agriculture, manufacturing and services are continuous variables measuring a district's percentage of employment in agriculture, manufacturing, and services, respectively. All regressions control for age, gender, years of education and an indicator for urban residence. Robust standard errors clustered at the district level are in parenthesis.
*** Significant at the 1 percent level
** Significant at the 5 percent level
* Significant at the 10 percent level

Table A.5: Effect on overall trust: Using religion as source of variation

| | |
|---|---|
| Post * religion | -0.010 |
| | (0.015) |
| Observations | 13,377 |
| R - squared | 0.111 |

*Notes:* Religion is a dummy equals to one if an individual is a Christian and zero if an individual is a Muslim.All regressions control for age, gender, years of education and an indicator for urban residence. Robust standard errors clustered at the district level are in parenthesis.
*** Significant at the 1 percent level
** Significant at the 5 percent level
* Significant at the 10 percent level

Table A.6: Effect on overall trust: including district and region-time trends

| | (1) | (2) |
|---|---|---|
| Post * negative distance | -0.029** | |
| | (0.011) | |
| Post * negative distance | | -0.031*** |
| | | (0.011) |
| Includes district-time trends | Yes | No |
| Includes region-time trends | No | Yes |
| Observations | 14,440 | 14,440 |
| R - squared | 0.112 | 0.112 |

*Notes:* Negative distance is the original distance multiplied by -1. All regressions control for age, gender, years of education and an indicator for urban residence. Robust standard errors clustered at the district level are in parenthesis.
*** Significant at the 1 percent level
** Significant at the 5 percent level
* Significant at the 10 percent level

Figure A.1: Districts in Ghana : by distance to Takoradi