1. Introduction

heavy losses or even to losing their lives. Therefore, the elite in an autocracy allocate more resources towards oppression as they greatly wish to prevent regime change even by force (Congleton, 1992).

To that effect, the autocratic regime censors information flows and directs decision making in an autonomous fashion resulting in a lack of reporting of environmental degradation by the media to the people (Quan Li, 2006). Evidence even suggests nondemocratic governments frequently abuse the human rights of environmentalists. Repressive regimes are likely to harass, imprison, or otherwise abuse activists working to preserve the rights of indigenous peoples, sustain rainforests, or halt the dumping of hazardous wastes (Payne, 1995).

Democratic governments are accountable to the public and therefore, the people have the opportunity to learn about environmental problems and insist on the government searching for e

A movement from within the United States saw environmental pressure groups successfully motivate the country's negotiators, as well as influence other governments to successfully gain agreement on ozone protection (Payne, 1995). On a global scale, international criminal law can offer the opportunity to spark debate among nations and to tackle these issues in a consistent and effective way. Schwegler (2017) argues that in an autocratic regime, the focus is on minimizing loss even if that entails committing ecocide. Therefore, it should be considered an international crime because of its severity, magnitude, and the potentially lasting effect

The government sells the natural resource at a price of

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democracies (G=1) extraction level results from the discrepancy in how each regime values environmental quality which is directly associated with how they value the lives of their people.

practice is likely more difficult than being a single price setting monopolist. Table 1 summarizes the comparative statistics of our findings under the assumption of single price monopoly behavior.

Table 1: Comparative Statistics

	Solution	Full democracy ($\theta=1$)	Sign	Full Autocracy ($\theta=0$)
Price	$\frac{+}{2}$	$\frac{+}{2}$	>	$\frac{}{2}$
Quantity	$\frac{-}{2}$			

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observations the actual number of country observations is less than 217 in each of our empirical analyses. Our final dataset is a cross-section dataset where all observations are 2010-2021 averages.

Before including our variables in our regressions, we checked their normality and introduced natural log-transformations whenever they improved their distributional characteristics. Table 2 also shows which variable we transformed.

Table 2: Data and Sources

Variable	Abbreviation	Source	Description	Transformation
CO2 emissions	CO2cap	WDI (online)	CO2 emissions (metric tons per capita)	ln(CO2cap)

Table 3: Descriptive Summary Statistics

Variable	Mean	Median	Min.	Max.	Std. Dev.	IQR	Missing Obs.
CO2cap	4.26	2.60	0.04	32.44	5.00	5.36	26
NatResDep	3.60	1.10	0.00	32.74	5.74	4.80	37
NRR	6.19	1.57	0.00	57.58	9.74	7.63	9
mortair	92.21	68.60	7.00	324.10	71.93	115.50	34

Table 6: Regression Results

Independent Variables È	**Dependent Variables**

This is likely capturing the fact that countries relying heavily on natural resource extraction simply lack the manufacturing industries that trigger urbanization. The absence of industries and manufactures then may also explain why our analysis presents lower CO2 emissions.

6. Conclusions

Through election and free market activity, democracies more accurately reflect the views of the people. Democracies account for higher social costs of environmental degradation than autocracies because the people of a democracy have much more power to enact policy that promotes environmental concerns. Autocracies ignore social costs associated with environmental degradation to increase national productivity and in turn profits, resulting in the extraction of natural resource at a price and quantity that might be paradoxically closer to the social optimum, depending on the actual magnitude of social marginal cost and level of authoritarianism. However, the citizens of a democracy benefit from a lower level of extraction farther from the social optimum by internalizing a lower social cost and taking advantage of numerous social benefits due to lower levels of natural resource extraction. These include diverse recreational opportunities, educational opportunities that support valuable nature-based, experiential learning, and the ability to build and enhance community through connection to place. This results in increased social welfare and works as a buffer that counteracts the opportunity cost of consumer surplus lost by democracies' lower level of extraction.

In the literature of regime type related to impact on environmental degradation, existing empirical evidence is mixed and relatively scant. Seeking to contribute to this literature, we focus on natural resource extraction as an activity by government that directly damages the environment. We use an array of empirical measures of environmental degradation, selecting those closely

related to decreased social welfare and quality of human life. The empirical analysis focuses on five important types of environment degradation: CO2 emissions, disability adjusted life years attributed to air pollution, mortality rate by air pollution, natural resource rent, and natural resource depletion.

Our analysis contributes to the literature by empirically testing the net effect of regime type on environmental degradation. Through our research we have found that greater democracy is directly correlated with less environmental degradation due to the democratic regime's ability to better account for the marginal social cost of government activities that directly degrade the environment. The substantive effect of democracy on the environment is considerable, but it varies in size across the aspects of environmental degradation as democracy reduces some types of environmental degradation more than others. In all cases, a rise in democracy produces a noticeable decrease in environmental degradation.

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