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Demand for Democracy

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Buying Quiescence: The Influence of Resource Reliance on Citizens' Demand for Democracy*

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Abstract

Revenues from oil, minerals and gas are important to many states around the world. Some countries rely so heavily on these revenues that they have received the epithet “resource-reliant states.” Controversy remains regarding whether this reliance induces the public to push for less pro-democratic demands in such states. Some argue that resource reliance is likely to undermine citizens’ motivation to demand accountability from - and representation in - their government. Others contend that resource reliance is unlikely to lead to political quietude among citizens in a country. To test these competing claims, this article uses the Varieties of Democracy (V-Dem) dataset on pro-democratic mass mobilization in 153 autocratic countries observed between 1971 and 2016. The regression analysis reveals that there is no statistical association between reliance on resource rents—whether total rents, oil or mineral rents—and pro-democratic mass mobilization in autocratic countries. The findings cut against the long-standing view held by the proponents of the resource curse theory in the rentier state literature that political quiescence is more associated with countries that rely on resource wealth.

Keywords— Rentier state; Resource curse; Pro-democratic demands

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1 Introduction

Revenues from oil, minerals, and gas have become an important source of income for many states around the world. Some countries rely so much on these revenues that they have received the epithet “resource-reliant states.” However, one long-standing concern in political science is whether reliance on such revenues is inimical to building a democratic state. This concern ushered in grand questions of whether resource reliance hinders democratization. Several studies have systematically shown that resource dependence is a “curse” rather than a “blessing” in that it provides no behavioral incentive for those in office to democratize (Ross, 2001; Jensen & Wantchekon, 2004). However, this view has been challenged by a few studies that systematically reveal that governments who fund themselves through resource revenues, in some cases, are just as likely as governments that finance themselves through taxes to become democratic (Gurses, 2009; Haber & Menaldo, 2011).

Equally debated is the prevailing view that resource dependence undermines citizens’ motivation to demand well-functioning democratic institutions from their government (Luciani, 1987; Beblawi, 1987). The explanation about why citizens might be less likely to make this demand is that, in return for the lack of democratic demands, or “political quiescence”, as it came to be known, politicians levy virtually no taxes and increase spending on private and public goods (Entelis, 1997; Herb, 2005; Paler, 2013). However, a few studies challenge this view and contend that citizens in resource-reliant states (also known as rentier states) are not contented with a pact that presumes their willingness to exchange politicians’ provision of goods and services for political quietude (Okruhlik, 1999; Herb, 1999).

To date, however, we have little systematic country-level evidence on the relationship between resource reliance and the demand-side of democratization. This begs the **research question**: Do countries that rely on resource revenues encounter lower demand for democratic institutions? The most probable explanation why this long-standing question has not been systematically addressed is the unavailability of comprehensive spatial and temporal data on demand for democracy. Using the new Varieties of Democracy (V-Dem) data on demand for democratic institutions, this article

test these claims empirically in autocracies. That is, it examines whether the evidence from a time-series cross-national analysis supports either of the competing views concerning whether resource reliance undermines citizens' motivation to demand well-functioning democratic institutions.

I focus on point-source resources and pro-democratic mass mobilization. Point-source resource wealth allows us to accurately capture reliance on resource revenues because these are energy and minerals extracted by a few producers wherein governments are the primary recipients of rents. The V-Dem data on mass mobilization for pro-democratic aims is also carefully thought out to capture demand for democracy as the organization of collective action in favor of well-functioning democratic institutions. This demand is one of citizens' primary means to put pressure on their government to provide a political opportunity for full-fledged democratization (Brancati, 2016; Rosenfeld, 2021; Hellmeier & Bernhard, 2023).

My study adds to a body of literature on the country-level cross-national effect of resource wealth on political engagement (e.g., B. Smith, 2004; Arce & Miller, 2016; Arce et al., 2018). I contribute to this literature by studying pro-democratic demands that lie at the heart of representation and accountability. My finding shows that there is no cross-national association between reliance on resource rents—whether total rents, oil or mineral rents—and demand for democracy in autocracies. My study complements contemporaneous work on the micro-level effect of resource wealth on political actions in autocracies (e.g., Moritz, 2018; de la Cuesta et al., 2022). The finding speaks most directly to the rentier state literature about the larger issue of anti-government demonstrations and democratization. This finding is inconsistent with the views of the advocates of rentier state theory, such as Luciani (1987); Beblawi (1987); Karl (2007), who have long posited that democratic disengagement from the state is associated with resource-reliant countries, although it is consistent with the views of the critics, such as Shambayati (1994); Okruhlik (1999); Herb (1999, 2005), who have long hanged a question mark over the claim that political quiescence is associated with resource-reliant countries.

The rest of this paper is organized as follows. The second section is allocated to reviewing the literature on the relationship between resource wealth and democratization, coupled with the

theoretical explanations for why resource dependence influences citizens' demand for democracy. The third section is devoted to discussing the limited evidence on country-level analysis linking resource reliance to pro-democratic demands as well as the theoretical expectation. The subsequent sections are used to present the research design and, then, the results. The final section is used to discuss the conclusions, implications, and limitations of the findings.

2 Literature Review

The resource curse theory in the rentier state literature (or the *rentier state theory* as it came to be known) describes the influence of resource reliance on the political behavior of state leaders and citizens, respectively, as supply-side effects (that is, politicians' political behavior) and demand-side effects (that is, citizens' political behavior) (Ulfelder, 2007; Oskarsson & Ottosen, 2010). One long-standing issue on the supply side has been whether resource wealth makes government less likely to be representative and accountable to the people.

On the one hand, a number of empirical studies found that certain authoritarian resource-rich countries could withstand the democratic wave that came about between 1980s and 1990s (Ross, 2001; Jensen & Wantchekon, 2004; Andersen & Ross, 2014). On the other hand, a few challenge this view of an adverse effect and contend that governments who fund themselves through resource revenues, in certain instances, are just as likely as governments that finance themselves through taxes to become democratic (Gurses, 2009; Haber & Menaldo, 2011; Liou & Musgrave, 2014; Brooks & Kurtz, 2022). Some have considered the possibility that the effect of resource wealth on democracy differs across phases of transition processes (Ulfelder, 2007; Houle, 2018), dimensions of democracy (Oskarsson & Ottosen, 2010), regions (Jensen & Wantchekon, 2004; Dunning, 2008; B. Smith & Waldner, 2021), and timing of resource discovery (Ross, 2009; Masi & Ricciuti, 2019). One study found that resource wealth has hardly any effects on democracy (Herb, 2005).

The demand side is an equally important and debated inquiry. The prevailing view is that

resource dependence undermines citizen motivation to demand well-functioning democratic institutions from their government (Luciani, 1987; Beblawi, 1987). This argument is based on the idea that citizens trade their political quiescence, defined as a “participation deficit” or political disengagement from the state (Karl, 2007; Arce et al., 2018), for rent distribution. In other words, the regime levies virtually no taxes on the local population but spends generously on welfare services, public, toll and patronage goods. It is even customary to speak of a rentier social contract (Entelis, 1997; Herb, 2005).

This is not to say that citizens in rentier states do not in some way participate in politics. However, participation for the provision of (clientelistic) private goods should not be conflated with participation for the provision of (universalistic) public goods. Mahdavi (2015), for instance, argued persuasively that Members of Parliament (MPs) in the 2008 Iranian parliamentary elections used resource revenues for the provision of private or public goods to their constituents, which encouraged voters to re-elect incumbent leaders rather than opposition candidates. Yet even most democratization scholars would question the claim that an election has been carried out fairly and freely if those in office can “make it impossible for the competing political forces to win next time” (Alvarez et al., 1996, 6). Hence, the voters’ political support for a candidate or party in Iran, participatory though it is, still satisfies the definition of quiescence because the voters tend to care less about well-functioning democratic institutions – here, the alternation of political leadership.

The rentier state literature attributes the reasons behind the relationship between resource reliance and citizens’ demand for democracy predominately to low taxes, social, patronage and, albeit implicitly, military spending – known collectively as the “rentier effect” (Herb, 2005; Ross, 2015). The studies on taxation draw widely on the accepted notion in political science, namely: the lower the taxation level, the less reason the public would have to demand accountability and representation (Huntington, 1993, 65; Ross, 2004; Schumpeter, 1991; North & Weingast, 1989). The “accountability and representation” framework is commonly invoked today in the rentier state literature to reason that the ability of states to finance themselves through resource revenues makes citizens demand well-functioning democratic institutions to a lesser extent.

But the claim of resource reliance translating to a politically quiescent population came under increasing criticism. For critics, citizens in resource-reliant states have various reasons to become politically engaged. For instance, [Herb \(2005\)](#) has long argued that citizens are willing to hold their governments accountable, even if they are not subject to taxation. That is, they “*want their rulers to govern wisely and in their interests*” to receive their share of the resource rents ([Herb, 1999, 259](#); italics in the original). In this respect, citizens reasonably think that democratic institutions are the way to impose accountability on their political leaders. An empirical study by [de la Cuesta et al. \(2019\)](#) has also taken issue with the prevailing view that non-tax revenues make citizens become quiescent. Their contention is that citizens have a sense of ownership to both tax and resource revenues, which is likely to make them see no difference between both sources of income.

As for the studies on rent-based social spending, the central argument is that political leaders buy off quiescence through the provision of social welfare services, public and toll goods ([Anderson, 1987](#); [Entelis, 1997, 141-176](#); [Herb, 2005](#)). The explanation that most scholars of rentier states put forward on the tactical issue of social spending builds on a widely accepted notion of fiscal scholars, namely: paying taxes creates a fiscal contract between the citizenry and the state, where citizens expect, in return, the provision of certain goods and services ([Levi, 1988, 123](#); [Schumpeter, 1991](#); [Bräutigam, 2008](#); [Tilly, 1992, 97-126](#)). Relatively speaking, the distributive policies of rentier states are in essence not financed with income taxes.

Viewed in this way, politicians are said to use rent-derived wealth to buy off popular support in the form of social spending, which undermines citizens’ motivation to demand well-functioning democratic institutions. Instances of how the beneficiaries of welfare policies can be confined to electoral supporters are found in Timor-Leste, a petroleum revenue-dependent country ([Barma, 2014](#)). Furthermore, end-use consumer fuel subsidies are a striking example of the use of public goods for popular support ([Fails, 2019](#)). Finally, a clear-cut case of the use of toll goods to buy popular support is the post-independence period in Trinidad and Tobago, where the state invested oil and gas revenue on roads as a way to garner electoral support ([Jobson, 2018](#)). Even then, [Sham-bayati \(1994\)](#) and, later on, [Moritz \(2018\)](#) called into question the claim that quiescence can be

purchased through rentier wealth by arguing that ideological positions limit the ability to command citizens' loyalty through rent-based wealth. These objections came from the instances in rentier states where a range of secular and religious groups have pushed for political reforms despite the possibility of material benefits.

Conversely, the studies on rent-based patronage spending argue that political elites in rentier regimes often tend to spend resource revenues on clientelism (Fjelde, 2009; Basedau & Lay, 2009). By this, they mean that incumbents try to keep stability through the accommodation of political rivalries. For Fjelde (2009), it is possible that the selective distribution of rents establishes an extensive network of clientelism, where access to power and clientelistic benefits are allocated through personal ties or restricted to leaders of groups that are considered politically important. The view comports with the claim by Basedau & Lay (2009) that patronage may encompass practices commonly called corruption, which are not technically illegal.

For instance, broad-based patronage may include enormous expenditures on state subsidies for domestic industries and public sector employment (Barma, 2014, 266). While it is, in theory, possible that favoring some groups over others with the resource rents can buy off an opposition and "good" civil society, one might ask how politicians can, in reality, choose the "appropriate" set of groups? Okruhlik (1999), for example, questions the proposition that favoring some groups over others to buy off opposition exempts resource-reliant states from social pressures. This part of her critique boils down to the view that citizens who question the inequitable distribution of resource wealth, the improper allocation of resources, and the extravagant lifestyle of state representatives can become the "voices" for democracy.

A final set of studies argues that rentier regimes can make the population acquiescent via military spending. The public purse accrued from resource revenues provide state leaders with abundant financial resources, such that they can generously fund and strengthen the repressive capabilities of the state (Sandbakken, 2006; Basedau & Lay, 2009; Girod et al., 2018). According to Okruhlik (1999, 301), the "security apparatus is so extensive that the belief in and fear of its [states] retribution manifests itself in pervasive self-censorship." In making this comment, Okruhlik implies

that the coercive ability of rentier autocracies reflected in the military spending can suppress the mobilization of pro-democratic civil society.

3 Research Gap and Theoretical Expectation

Debates abound as to whether a country's use of resource wealth to provide public, private and toll goods without the need to levy taxes makes citizens less likely to demand well-functioning democratic institutions in that country. Yet, there is little systematic country-level evidence on these competing claims. Previous work using a lab-in-the-field experiment has shown that citizens who view district government as being in charge of handling "their" tax contributions are just as likely as citizens who see government revenues as being derived from natural resources to participate in a demonstration (Paler, 2013). Related works have studied how resource wealth affects anti-government protests. In a cross-national time-series study that focused on developing countries, B. Smith (2004) found that oil wealth is significantly associated with lower levels of anti-state social protest. The global cross-national time-series study of Arce et al. (2018) also confirmed the findings of B. Smith (2004) that wealth from oil demobilizes citizens. For Arce & Miller (2016) and Arce et al. (2018), increasing levels of mineral wealth, but for Flesken & Kuhn (2019) gas extraction, lead to rising levels of protest. While Arce & Miller (2016) confined their regional analysis to Sub-Saharan Africa, Flesken & Kuhn (2019) restricted their subnational analysis to Bolivia. But, the findings of Arce et al. (2018) on mineral wealth generally apply to democratic countries, though not to autocratic countries.

These related works contribute important insights into how resource extraction can provoke local community protest to prevent the resulting negative externalities from extraction and avert the incoming proceeds from unfair distribution. However, I identify one shortcoming pertaining to my research question on the influence of resource dependence on citizens' demand for democracy. The anti-government protests are unrelated to the act of mobilizing citizens for mass events, organized with the specific aim of advancing democratic institutions. As Brancati (2016, 6) explains, such

mass events are “opposed not only to the government but also to the institutions that make up the political system itself.” In short, these are formal rules of the state that constrain the behavior of political leaders regarding representation and accountability.

3.1 Conceptualizing Demand for Democratic Institutions

Recent research on resource wealth and demand for democracy has made great strides towards a systematic examination of demand for accountability. Central to these studies is the question of whether the sources of revenues (Paler, 2013) and the ownership of revenues (de la Cuesta et al., 2019, 2022) influence citizens’ demand for accountability. On the one hand, Paler (2013) sees demand for accountability as monitoring the government, participating in politics and sanctioning of incumbents. On the other hand, de la Cuesta et al. (2019) explain demand for accountability as monitoring the government, which entails the invitation to sign a petition about anti-corruption, send SMS to reassure MP of one’s stance, and contribute part of the money given to respondents for participating in the survey to an institute that upholds government accountability. A recent study by Armand et al. (2020) also conceive demand for accountability partly as postcard activity, which shares some similarities with Paler’s understanding of participation and de la Cuesta’s view of monitoring.

Protest can also be a good measurement of demand for accountability (Paler, 2013), and even representation, for it is one of the main recourses that the local population resort to as a way of making claims against their states (Tarrow, 1998; Tilly & Tarrow, 2015). Support for this view also comes from those that argue that democracy protests are one of the main recourses that citizens resort to as a way of influencing transitions to democracy (Brancati, 2016; Rosenfeld, 2021; Hellmeier & Bernhard, 2023). Granted, as Moritz (2018, 58) points out, there can be “public expressions of dissatisfaction and demands for reform on social media, online forums, and opinion pages of local newspapers. [Yet] [p]ublic statements are associated with lower levels of political risk than participation in street demonstrations....” In other words, an individual who might be willing to express

democratic support in writing can be reluctant to actively express democratic support in public to put pressure on government to amend institutions. Protests in favor of democratic institutions, after all, increase the vulnerability of protesters to the state's use of force—a force that the state resort to as a way of marginalizing pro-democratic demands.

I define democratic institutions as holding free and fair elections and establishing stable and democratic party systems, parliaments, and courts. For democratization scholars and actors involved in processes of democratization, these are institutions without which one cannot even speak of a democratizing state (Grugel & Bishop, 2014, 110; Linz & Stepan, 1996; North & Weingast, 1989). It might be objected here that building a democratic state also comprises informal rules. This would be true except for the fact that focusing on visible rules of the state allow us to test more clearly the effect of resource reliance on citizens' demand for democracy because, as Grugel & Bishop (2014, 110) have further argued, such rules are readily “amenable to legal and constitutional reform.”

3.2 Conceptualizing the “Resource” Part of the Resource Curse

I define resource wealth as point-source resource wealth. Such resources are extracted by only a few producers from a narrow geographical base (i.e., energy and minerals). This is in contrast to diffuse resource wealth, which are resources produced by several small producers from a broad geographical base (e.g., agriculture and forestry) (Koubi et al., 2014). However, agricultural products and forestry are hardly considered part of the resource curse because they involve production, not extraction (Ross, 2015). Plainly put, the resource curse refers to energy and minerals. While energy comprises oil, gas, and coal, minerals include gold, silver, gemstones, copper, rock, iron ore, bauxite, lead, nickel, phosphate, tin, and zinc (de Soysa & Neumayer, 2007; Koubi et al., 2014).

Previous work on the rentier state theory measure resource wealth in different ways. This view is also shared by Brooks & Kurtz (2022) who argue that resource wealth remain under-theorized, and the measures sometimes do not directly match the concept in question. This point is particularly worth emphasizing given that earlier studies on the relationship between resource wealth

and regime characteristics have used *natural resource abundance* and *natural resource dependence* synonymously, which can have consequences for theoretical findings on the resource curse. One way to measure resource wealth is to look at a country's total value of natural resources production (Haber & Menaldo, 2011) or, for that matter, revenues generated by the resource sector after the deduction of production cost (Brooks & Kurtz, 2022). The strength of both measurement is that just as natural resources production determines whether a country is geologically *endowed/abundant* in natural resources, so too natural resources revenue, after subtracting production cost, captures the real resource income that could be collected by states.

But I lie closest to those who use a rent-dependency measure because the indicators described in the preceding paragraph can hardly determine whether a country is resource reliant. The point I make is that the mechanism that underpins the “resource wealth hinders democratization” hypothesis implies resource dependence, not resource abundance. That is, resource rent should be the predominant source of state revenue; only a small segment of the population should be involved in the rent generation; finally, the government should be the primary recipient of the rent (Mahdavy, 1970; Beblawi, 1987). One should bear in mind that although some countries are abundant in and receive income from natural resources, they are not reliant on revenues from these resources, e.g., the United States, Canada, Australia, and Britain. One can consider such countries as *resource-abundant-non-resource-reliant* states. It could be said that such resource-abundant countries do generate high revenues from natural resources. However, these countries should not be characterized as resource-reliant because they have highly diversified economies and efficient bureaucracies that effectively extract income tax from the local population.

It follows from this distinction that countries rich in natural resources but whose governments rely on rents from these resources are *resource-abundant-resource-reliant* states. To take a case in point, prior to oil discovery in 1956 by Shell-British Petroleum Company (Shell BP) in commercial quantity in Nigeria, agricultural production had remained the cornerstone of the Nigerian economy. Two years later, crude oil production in the country commenced with about 5000 barrels per day (Steyn, 2009), making Nigeria an oil-producing nation. Nigeria can be characterized as a *resource-*

abundant country in this period. In the oil boom era (the 1970s), the Federal Government of Nigeria received colossal revenues from oil production due to the increasing world oil prices, making her the wealthiest African nation. During this oil boom era, Nigeria became a *resource-reliant* country. The Nigerian government increasingly focused on oil; consequently, less and less attention was relatively paid to the agricultural sectors of the economy (Central Bank of Nigeria, Research Department, 2000 as cited in Adedipe, 2004, 1). Nigeria is, therefore, an example of a *resource-abundant-resource-reliant* state.

In sum, little attention has been paid, cross-nationally, to how reliance on resource wealth influences demand for democracy. Even among recently conducted resource curse studies that conceive demand for democracy as accountability, the conceptual focus has been on low-cost democratizing pressures (such as, contacting politicians, signing a petition, monitoring/transparency) as opposed to high-cost democratizing pressures (such as protest related to quality of elections, empowerment of parliament and independence of judiciary). Though rentier state scholars have differed in their arguments about the direction of the effect of resource reliance on a country becoming politically quiescent, most have agreed that it has some sort of effect. This study attempts to provide a clearer picture of this empirical relationship. If the assumption underlying the rentier state theory is correct—namely that resource wealth equips the incumbents with the means to buy citizens' political quietude by levying low taxes and increasing spending on social and patronage goods—then it stands to reason that, on average, one ought to encounter lower events of mass mobilization for pro-democratic aims as reliance on resource revenues goes higher.

4 Research Design

4.1 Operationalization of Core Concepts and Data

I measure the outcome variable, demand for democracy, as mass movements in favor of well-functioning democratic institutions. The data comes from the Varieties of Democracy (V-Dem) mobilization dataset (Coppedge et al., 2023), containing annual estimates of latent mass mobilization for approximately 170 countries between 1900 and 2020. Country experts were asked to gauge the yearly size and frequency of pro-democratic mass mobilization in the form of demonstrations, strikes and sit-ins. Events are pro-democratic if they are particularly aimed at advancing democratic institutions such as free and fair elections with multitude of parties, the judiciary and the legislature as well as support of civil liberties. Responses were recorded on an ordinal scale: first “virtually no events” (0), next “several small-scale events” (1), then “many small-scale events” (2) were recorded, and then “several large-scale and small-scale events” (3), finally “many large-scale and small-scale events” (4).

The V-Dem approach to recruiting country experts has the advantage that it leverages the knowledge of local country experts to record incidences of democracy protests across space and time. As a case in point, the V-Dem annual survey endeavors to get a minimum of five country experts to code each country-year; V-Dem also takes precautions to ensure that local experts, mostly nationals or permanent residents of that country, are diverse, impartial and sufficiently dedicated to the coding task (Coppedge et al., 2022). Further, Hellmeier & Bernhard (2023) lend credence to V-Dem’s new measure of mass mobilization for democracy by comparing the data to existing mass mobilization data sets to gauge the extent to which both data overlap. Their result from validating the measurement shows that incidences of pro-democracy protests data by Brancati (2016), which is conceptually similar to that of V-Dem, largely overlap with pro-democratic mass events reported in the V-Dem data.

Nevertheless, the thresholds may vary temporally and spatially across experts, which can gen-

erate measurement error (Chenoweth et al., 2014) in the operationalization of pro-democratic mass mobilization in ways that are consequential to the research findings. The V-Dem project addresses this issue by processing the expert ratings using a Bayesian item response theory (Pemstein et al., 2018) to compute a latent pro-democratic mass mobilization at the country-year (Hellmeier & Bernhard, 2023).

It is, of course, possible to object to using expert-coded data to estimate pro-democratic mass mobilization on the grounds that event-based protest datasets already exist. The answer to this assertion is that very few of these datasets record protests in favor of well-functioning democratic institutions. In addition, the unit of analysis are not the same across the datasets. For instance, while many data sets comprise incidence of individual protest (e.g. Salehyan et al., 2012; Databanks International Database, 2013), some are campaign data with yearly observations (e.g. Chenoweth et al., 2018). Besides, international media sources and newspapers are popular options for protest scholars in developing their databases. Consequently, Chenoweth et al. (2014, 2) warned that several small or subtle protests are unlikely to make it into such databases, which results in “the systematic under-reporting of protest events.”

After having discussed the measurement of the outcome variable, it is only appropriate next to cover the measurement of the explanatory variable. A question that arises here is, how should one normalize the rent-based measure? One needs to examine the percentages of rents from energy and minerals in government revenues to determine whether a country relies on resource revenues:

$$\text{Resource Reliance} = \frac{\text{Rent Revenues}}{\text{Total Revenues}}$$

Yet, one cause for concern is that information on government revenues are considered one of the most difficult to get. This is as true for revenues from natural resources (Ross, 2015) as it is for the total revenues collected by governments, wherein nearly half of the observations are missing (Anthonsen et al., 2012). To still measure accurately resource reliance, I use rents from point-

source resources (energy and minerals) as a fraction of GDP. This measurement similarly shows a state's dependency on external revenues (that is, resource rents). Such analysis does not distinguish between types of point-source resource revenues, namely oil and mineral rents because at issue here is whether these rents become the predominant source of income in the economy, wherein only a small segment of the populace take part in the generation of the rent, and the government is the primary recipient. This view echoes the traditional approach of some rentier state scholars like [Mahdavy \(1970\)](#), [Beblawi \(1987\)](#), and [Herb \(2005\)](#).

Yet not all rentier state scholars think alike. Some of them may be interested in whether the findings still hold when the explanatory variable is measured as oil rents. As [Ross \(2015, 243\)](#) observed, “many books and articles have analyzed the relationship between resource wealth, especially petroleum wealth, and government accountability.” For this reason, I also estimate the size and direction of the effect when resource rent is coded simply as *oil* revenue. Some scholars of resource extraction and contentious collective action will argue, “mineral wealth encourages forms and scales of mobilization that are distinct from the effects of oil wealth.” (see [Arce et al., 2018, 950](#)). They will remind us that “[o]il and mineral wealth have different societal consequences because they vary on a number of key dimensions, such as the amount of revenues they generate, the degree to which they are run by state-owned enterprises, and the labour intensity of their extraction processes, among other characteristics.” To account for this claim, I also estimate the size and direction of the effect when resource rent is coded simply as *mineral* revenue. Data on resource revenues are collected from the World Development Indicator of the [World Bank \(2022\)](#).

Finally, this brings us to the question of, how far back one needs to go with the data. I choose to begin my analysis from the 1970s because, before this period, resource-exporting economies in developing countries did not exert great influence over their economy. But by the 1970s, the natural resource industry, most notably oil, was transformed by increasing nationalizations and contract revisions that enabled governments of resource-rich countries in the developing world to take control of these rents ([Ross, 2012, 7-8](#)). For [Andersen & Ross \(2014\)](#), this period marks the beginning of oil-producing countries becoming more fiscally dependent on their petroleum sectors.

Figure 1 shows that there was indeed a “big oil change,” that resulted in the greatest increase in cumulative nationalizations between 1960 and 1980.

A crucial part of theory testing is to specify the scope conditions – that is, cases to which the theory is expected to apply. What I am theoretically concerned with is autocracies, for they are most likely to have somewhat defective formal institutions that are central to having a democratically built-up state. These institutions—which include elections, parties, parliaments, judiciary, and interest groups—have long been considered as integral components for constructing a durable democracy (Przeworski, 1995). Admittedly, there are also cases in which democracies are in danger. Nowhere is this more obvious today than the undermining of independent judiciary. What is more, there are also cases of rentier democracies (Herb, 2005), amongst which there can be a risk of democratic breakdown. All the same, the controversy concerning the buying of political quiescence tend to centre on autocracies. Therefore, autocratic countries make for a good setting to put the resource curse theory in the rentier state literature to test. To identify which countries qualify as autocracies, I rely on the Regimes of the World (RoW) classification (Lührmann et al., 2018) and categorize closed autocracies and electoral autocracies more simply as autocracies. Following this classification, the data for analysis comprises 153 autocratic countries between 1971 and 2016.

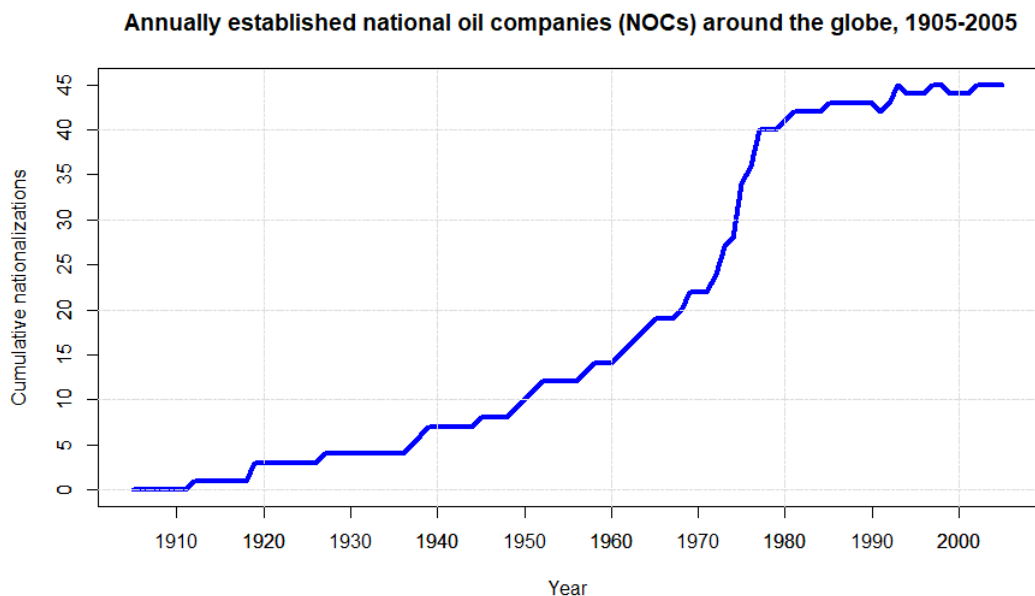


Figure 1: Author’s summary of nationalization data. Data source: (Mahdavi, 2014)

4.2 Covariates and Method

This section begins with an identification of a set of covariates that should be controlled for to estimate the direction and size of the effect of resource reliance on mass mobilization for democracy. A number of studies on the choice of variable inclusion in a model have recommended the application of Directed Acyclic Graph (DAG), developed by the computer scientist Pearl (2009), to identify the relevant set of covariates sufficient to control for confounding (Elwert, 2013; Cinelli et al., 2022). Based on this graphical model, I constructed a DAG using the publicly available web application **DAGitty**. I included on the DAG the exposure (resource reliance) and outcome of interest (pro-democratic mass mobilization), as well as additional variables, theoretically related to the exposure, outcome, or other variables on the DAG.

Although I mention the covariates derived from the DAG model here, the theoretical details of how I think through the relationships among the variables are in the appendix. I account for country

characteristics, namely *population size*. I also include covariates to control for potential economic factors, namely *manufacturing* and *primary* (agriculture, hunting, forestry, fishing). In addition, I account for the possibility of variations in rent dependency and democratic uprisings due to country-specific and time-specific factors. Finally, I include *population density*, *economic inequality* the *quality of democracy*, *military spending* and *repression*. Table 1 provides the definitions, sources, and descriptive statistics of the variables.

Turning now to the estimation strategy, I claim a place among scholars of political resource curse who have put behind them the use of pooled OLS regression on the basis “that it suffers from omitted variables” (Aslaksen, 2010). In other words, there are certain idiosyncratic history of nations affecting why countries become resource reliant and why citizens organize pro-democratic movements, which my data cannot entirely account for. So, I include country-fixed effect in the regressions to principally provide a more nuanced analysis of whether an autocratic country is relatively more likely to become politically quiescent, as it becomes relatively more resource reliant. In addition, there is a possibility of democratic uprisings varying across autocratic countries due to timing effect. Some countries, for instance, were more likely to be resource reliant during “the big oil change” in the 1970s (Andersen & Ross, 2014) or oil boom era (1970s), which is also close to the third wave of democratization. So, I include year-fixed effect to account for possible upward or downward trends in the mass mobilization for democracy that were due to the timing effect.

Table 1: Definitions, Sources and Descriptive Statistics of Variables

Variable	Description	Sources	Mean	SD	Min	Max
Mass mobilization	Protests aimed at advancing democratic institutions	Coppedge et al. (2023)	-0.434	1.444	-3.296	4.433
Total Resource Rents	Government revenues from oil, gas, coal and minerals as a percentage of GDP	World Bank (2022)	8.024	13.573	0.000	87.284
Oil Rents	Government revenues from oil as a percentage of GDP	World Bank (2022)	6.741	13.137	0.000	87.085
Mineral Rents	Government revenues from minerals as a percentage of GDP	World Bank (2022)	0.869	2.667	0.000	39.668
Population Size	Total population (logged)	World Bank (2022)	15.780	1.672	10.910	21.050
Primary	Agriculture, hunting, forestry, fishing as percentage of GDP	World Bank (2022)	21.058	14.616	0.032	79.042
Manufacturing	Sectoral net output of economic activities in industries	World Bank (2022)	12.997	7.111	0.000	49.879
Population density	Population based on a country's total area in square kilometers	World Bank (2022)	206.659	806.578	0.858	7908.721
Quality of democracy	Degree of electoral democracy	Coppedge et al. (2023)	0.219	0.126	0.009	0.760
Income Inequality	Economic inequality among citizens based on the Gini index	Solt (2020)	40.940	7.385	19.300	60.600
Military Spending	Military expenditure as percentage of GDP	World Bank (2022)	3.453	4.049	0.000	117.350
Repression	Violent behavior toward those that are (perceived to be) members of civil society organizations	Coppedge et al. (2023)	-0.543	1.157	-3.759	2.969

5 Results

In response to the competing claims about whether reliance on resource rents decreases pro-democratic demands, this study investigates whether political quiescence is more associated with extensively- or moderately resource-reliant countries than less- or non-resource-reliant countries in autocratic context. The findings in the model 1 of Table 2 show that there is not enough evidence at the .05 level of significance to support the claim that reliance on resource rents is associated with lower levels of mobilization of civil society for pro-democratic aims in autocracies.

As for oil rents in model 2 and mineral rents in model 3, the effects are also insignificant at the .05 level, indicating that there is no evidence of an association between increasing dependence on oil or mineral rents and levels of democracy protests in autocracies. In other words, this finding lends no empirical evidence to the claim that citizens in oil-reliant autocratic countries become politically quiescent than citizens in non-oil-reliant autocratic countries. This finding also gives no credence to the claim that citizens in mineral-reliant autocratic countries become politically quiescent than citizens in non-mineral-reliant countries.

This analysis is not at all complete without examining the robustness of the results when accounting for missing data. Accounting for missing data is crucial, given that I am leaning on incomplete data sets. As a case in point, the data comprises of 7764 observations. For *income inequality*, a total of 2371 (50.75%) observations were missing; for *manufacturing*, a total of 1700 (36.39%) observations; for *military spending*, a total of 1534 (32.83%) observations; for *primary*, a total of 1304 (27.91%) observations; and finally for *total resource rents*, a total of 809 (17.32%) observations were missing.

As with much of the political resource curse literature, I used the listwise deletion to deal with missing data in the main analysis. This process involves omitting observations that have missing values on a specific variable from an analysis. However, this omission can yield inefficient inferences because the complete removal of certain observations from the analyses implies that a high

percentage of qualified countries in the data sets are not adequately represented (Lall, 2017).

Multiple imputation (MI), which means many values are substituted for a particular missing cell using information in the part of the data set that can be observed, is gaining momentum as an alternative to listwise deletion in the social sciences (Lall, 2017). I ran a robustness test with multiple imputed data, using mice (Multivariate Imputation via Chained Equations), developed by Van Buuren & Groothuis-Oudshoorn (2011). I created 5 imputations using the “Predictive Mean Matching” because the pro-democratic mass mobilization is a numeric variable. By convention, I ran a regression on each of the 5 imputed dataset and took the average of the coefficients.

The analysis that addresses the missing observations yielded substantively similar results as the main analysis. Taken together, the findings of my global cross-national time-series analysis suggest, contrary to advocates of the rentier state theory, that relying on resource rents—whether oil, minerals or total rents—is not associated with lower levels of democracy protests. The findings fit with the argument of the critics of rentierism, not that depending on resource revenues is associated with higher levels of democracy protests, but only that autocracies depending on resource revenues are not necessarily able to “buy off” good civil society and opposition in attempt to discentivize the public from making pro-democratic demands.

Table 2: OLS regression with covariates of pro-democratic mass mobilization

Mass Mobilization for Democracy, V-Dem Measure			
	Model 1	Model 2	Model 3
Total Resource Rents	0.008 (0.004)		
Oil Rents		0.006 (0.005)	
Mineral Rents			0.018 (0.013)
Manufacturing	0.012* (0.006)	0.013* (0.006)	0.013* (0.006)
Primary	-0.008 (0.004)	-0.008* (0.004)	-0.008 (0.004)
Income Inequality	0.021 (0.014)	0.021 (0.014)	0.023 (0.014)
Population Size	0.584* (0.250)	0.537* (0.254)	0.569* (0.250)
Population Density	0.0001 (0.0001)	0.0001 (0.0001)	0.0001 (0.0001)
Military Spending	0.046** (0.017)	0.046** (0.017)	0.048** (0.017)
Repression	-0.003 (0.042)	-0.008 (0.042)	-0.006 (0.042)
Quality of Democracy	0.627 (0.375)	0.638 (0.378)	0.693 (0.375)
Year FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
N	1674	1659	1675
R-squared	0.760	0.759	0.759
Adj. R-squared	0.743	0.742	0.742
Residual Std. Error	0.688 (df = 1561)	0.691 (df = 1546)	0.689 (df = 1562)
F Statistic	44.165*** (df = 112; 1561)	43.537*** (df = 112; 1546)	44.012*** (df = 112; 1562)

***p < .001; **p < .01; *p < .05

Standard errors in parentheses below coefficients

Table 3: Regression with covariates of pro-democratic mass mobilization (using MI)

	Mass Mobilization for Democracy, V-Dem Measure		
	Model 1	Model 2	Model 3
Total Resource Rents	0.003 (0.002)		
Oil Rents		0.002 (0.002)	
Mineral Rents			-0.001 (0.006)
Manufacturing	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)
Primary	-0.002 (0.001)	-0.002 (0.001)	-0.002 (0.001)
Income Inequality	-0.003 (0.003)	-0.003 (0.003)	-0.003 (0.003)
Population Size	-0.034 (0.039)	-0.035 (0.039)	-0.035 (0.039)
Population Density	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Military Spending	0.006 (0.004)	0.005 (0.004)	0.005 (0.004)
Repression	0.162*** (0.027)	0.163*** (0.027)	0.164*** (0.027)
Quality of Democracy	1.127*** (0.211)	1.119*** (0.212)	1.125*** (0.212)
Year FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
Num. obs.	4672	4672	4672
R-squared	0.727	0.726	0.726

*** p < .001; ** p < .01; * p < .05

Standard errors in parentheses below coefficients

6 Concluding Remarks

The rentier state theory suggests that reliance on natural resource wealth make citizens become politically quiescent (Luciani, 1987; Beblawi, 1987; Karl, 2007), while critics argue that reliance on resource wealth is unlikely to lead to political quietude in a country (Shambayati, 1994; Okruhlik, 1999; Herb, 1999, 2005). Despite these competing claims, few studies have tested the relationship between resource reliance and pro-democratic demands at the country level. This study uses the V-Dem pro-democratic mass mobilization data from 153 autocratic countries between 1971 and 2016. Using OLS along with country and year fixed effects, I find that there is no systematic difference in citizens' democratic demands between resource-reliant countries and non-resource-reliant countries in autocracies.

This study contributes to the literature on the country-level cross-national effects of resource wealth on political actions by extending far outside the previous empirical studies on resource wealth and anti-government protests (e.g., B. Smith, 2004; Arce & Miller, 2016; Arce et al., 2018) to include democracy protests. In other words, the principal pitfall of the past research is that protests are, sometimes, related to environmental damages from resource extraction or fair distribution of resource revenue. But, in fact, we do not get to see whether resource reliance results in citizens' organization of protests in favor of democratic institutions, which bear closely on the crucial issue of political representation and accountability in the rentier state literature.

Yet, I will admit that this study is subject to methodological and macro-level limitations. For one, the findings are merely conditional associations because the data do not allow me to match resource-reliant countries with non-resource-reliant countries on the observed covariates, which might potentially minimize the inferential problems of non-random distribution of resource rents. For another, our understanding of certain individual-level conditions that shape how resource wealth affect democratic demands within a country, e.g. sense of ownership (de la Cuesta et al., 2022), economic inequality (Mahdavy, 1970; Dunning, 2008) is limited due to the fixation with cross-national level of analysis. In future research, I hope to be able to take up this line of research.

7 Appendix: The Good and the Bad Controls

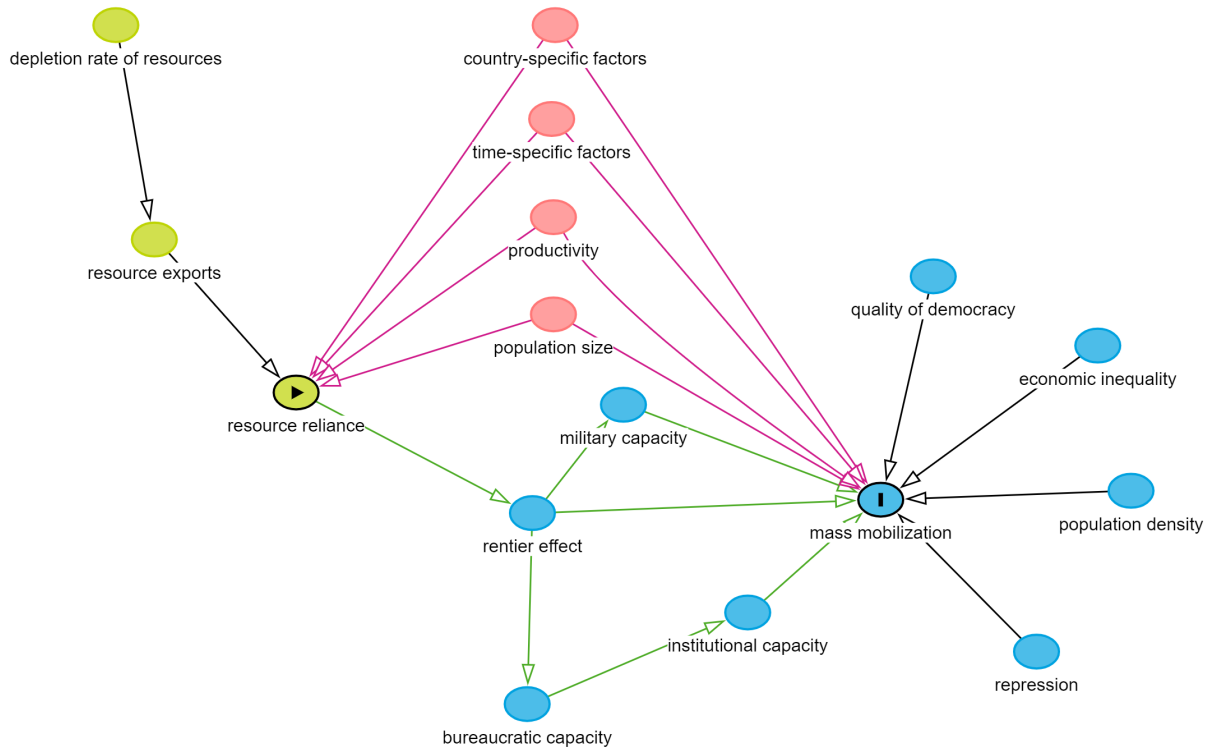


Figure 2: DAG of variables operative in the effect of resource reliance on pro-democratic mass mobilization.

In this appendix, I report how I identified the confounders pertaining to the question of whether resource reliance induces lower levels of mass mobilization for democracy. I attempt to identify the confounders and take away their influence so that the actual relationship between resource reliance and mass mobilization for pro-democratic events becomes evident with observational data (Pearl, 2009; Elwert, 2013; Morgan & Winship, 2014, 77-101; Heiss, 2021; Cinelli et al., 2022).

I constructed a Directed Acyclic Graph (DAG) in Figure 2 to address this research question, including on the DAG the exposure (resource reliance) and outcome variable (mass mobilization), as well as additional variables that are theoretically associated with the treatment, outcome, or other

variables on the DAG. I decided on inclusion of variables based on the literature and theoretical expectations. The relevant confounders are:

population size, productivity, country-specific factors, time-specific factors

I account for country characteristics, namely *population size*, because it is likely to influence the ability of citizens to organize collective actions in favor of more democratic institutions. At the same time, it could affect the extent to which states can use the revenues from natural resources to influence politics. [Anderson \(1987, 10\)](#) agrees when she writes, “for large (resource) revenue, small population countries,...the state is faced with distributing resources which often far exceed not only the society’s absorptive capacity but often the state’s administrative capacity as well.”

Furthermore, I include covariates to control for potential economic factors: *productivity*. Resource rents are unlikely to be the predominant source of income in countries with high economic productivity. The high economic activity induces civil society to take root or, for that matter, leads the emerging social actors to actively call for a participatory democracy ([Gurses, 2009](#)). In this regard, I controlled for economic productivity reflected in revenues from manufacturing and primary (agriculture, hunting, forestry, fishing) because both activities involve production, not extraction.

In addition, I account for the possibility of resource reliance and democratic uprisings varying, whether upward or downward, at the same time in different countries due to timing effect. A case in point is that some countries were more likely to be resource reliant during “the big oil change” in the 1970s ([Andersen & Ross, 2014](#)) or oil boom era (1970s), which is also close to the third wave of democratization. I also account for country-invariant confounders to principally focus on the temporal variations between resource reliance and pro-democratic mobilization within countries.

Further, I include certain covariates that are not confounders on the DAG. Population density, quality of democracy, economic inequality, and repression are not confounding variables. Such variables are considered good “neutral controls” ([Cinelli et al., 2022](#)). By this, it is meant that conditioning on these variables can minimize the variation in the outcome, mass mobilization, and

improve the accuracy of the estimate.

For instance, the density of the population is likely to influence the ability to effectively organize and mobilize social movements. Therefore, I control for *population density*. In addition, I control for the *quality of democracy* using V-Dem's measure of polyarchy. This indicator represents the degree to which elections are free and fair; to which voting rights are conferred to people that are of age, regardless of social and economic background; and to which freedoms are granted to individuals and groups to associate and express their views. My contention is that the possibility for a democratically elected government and respect for civil liberties decreases the likelihood of pro-democratic mass mobilization because of accessible state institutions to a range of individuals and groups in the society. It also seems logical to control for *economic inequality* because politicians can earn public approval due to low economic inequality, making the masses less likely to make democratic demands.

To be sure, depletion rate of natural resources and resource exports are also neutral controls for reducing bias. Exports of natural resources, in particular, have been considered a good predictor of resource rents (Beblawi, 1987; Herb, 2005). The measure varies over time (reflecting the impact of supply and demand in the market for mineral fuels), and it varies by country because of differences in the production of mineral fuels. For example, oil-producing developed countries tend to domestically sell and consume more of their oil, while their counterpart in developing countries tend to majorly export and consume less of their oil (Herb, 2005; Ross, 2009). However, following the logic of Cinelli et al. (2022), these “neutral controls” are “possibly bad for precision” because controlling for resource exports will decrease the variation in the treatment variable, resource reliance, and may lead to an inaccurate estimate.

I also control for *military spending* and *repression*. If resource revenues decline or the regime can no longer buy loyalty and maintain its system of patronage, the resource rents that were spent on a system of repression (Sandbakken, 2006), characterized by an actively violent behavior toward those that are (perceived to be) members of civil society organizations, can make the population acquiescent. The theoretical reason for controlling for military spending and repression is that the

“rentier effect” is a mediator, which comprises low taxation and three types of rentier spending: social, patronage, and military expenditures. However, the military spending component can reflect a system of repression. In that case, the state forces political quietude, not buy political quiescence. Therefore, I remove the effect of military spending from the total effect of resource reliance on mass mobilization by adjusting for military spending. That is to say, the total effect of resource reliance on mass mobilization includes the taxation effect and (without the military component of) the rentier spending.

One may well ask whether rentier states have the administrative capacity to ensure a wider distribution of public goods and welfare services to buy political quietude? After all, if the major part of a state income does not come from the local population, that state is likely to have a weak administrative capacity partly on account of the fact that reliance on external rents disincentivizes political leaders from investing in strong and effective institutions (Luong & Weingast, 2006; A. Smith, 2008). This means that political leaders in such states are likely to lack institutional infrastructure and bureaucratic penetration into the society that would enable them to monitor the economic activity of the populace across the territory.

By implication, not only might the state find it hard to reach the local population to collect taxes, but also it might find it hard to politically commit to the provision of social services due to the difficulty in disseminating resources from the state to the wider population. In the absence of progressive institutional reforms, some even doubt that more expenditure on welfare policies leads to better welfare outcomes (Bellinger & Fails, 2021; Okada & Samreth, 2021). There is also some ambivalent discussion as to the effectiveness of political elites in rentier regimes to privately use resource revenue to “buy off” an opposition and good civil society (Okruhlik, 1999; Sandbakken, 2006; Fjelde, 2009; Basedau & Lay, 2009). Against the backdrop of these competing claims, I empirically provide a clearer picture of the relationship between resource reliance and demand for well-functioning democratic institutions.

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