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ABSTRACT

This paper examines the relationship between elite identity and political outcomes from a theoretical and empirical perspective. Elite members with distinct economic and social identities vote for or against an extractive policy, which benefits them at the expense of the citizenry. Voting is disciplined by the threat of citizen revolt, with some elite members being more accountable than others. The relationship between elite identity and political accountability is complex and non-monotonic. As their share in the elite grows, accountable elite members are more likely to vote for extractive policies. When the elite becomes too accountable as a whole, elite members may pursue extractive policies by altering the institutional framework. The model is grounded in an empirical exploration of ten British Caribbean sugar colonies where the emancipation of slaves in 1838 created a mixed local and British elite and for which we have unique data on elite composition and voting. Voting behavior depends on an individual's identity and the overall composition of the elite in a manner predicted by the theory. In all but one of the islands elites eventually dissolved their legislative assemblies, ceding their formal powers to the British Crown. Consistent with the theory, we find evidence linking this to rising accountability of the islands' elites.

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1 Introduction

Extractive behavior by political elites is one of the chief concerns of political economy. Economists tend to believe that it is constrained primarily by formal and informal institutions, including constitutional constraints, separation of power, checks and balances, elections and popular revolt (North and Weingast, 1989; Acemoglu and Robinson, 2006, 2012). On this basis one could propose an *anonymity principle* in political economy which holds that political outcomes are independent of the identities of those in power.[1] In this paper, we find to the contrary that elite identity is a critical determinant of political outcomes. The anonymity principle fails because elite members vary both in their interests and in how constrained they are in pursuing those interests. The relationship between elite identity at the individual level and equilibrium political outcomes that we characterize is complex and possibly non-monotonic.

The issue of political accountability has recently gained prominence as inequality is increasingly being viewed as a political problem stemming in part from a disconnect between governing elites and the citizenry (e.g. Shiller, 2006; Murray, 2013; Atkinson, 2015). Piketty (2014, p.418) for example argues that elites today in both the U.S. and in France are less identified with and accountable to the societies in which they live than just thirty years earlier (see also references therein). According to a recent Wall Street Journal article, "this is something we are seeing all over, the top detaching itself from the bottom, feeling little loyalty to it or affiliation with it. [...] The children of the global business elite marry each other and settle in London or New York or Mumbai. And those elites, of Mumbai and Manhattan, do not often identify with, or see an obligation toward, the rough, struggling people who live at the bottom in their countries" (Noonan, 2016).

This paper examines the relationship between elite identity and political outcomes from both a theoretical and empirical perspective. Theoretically, we model policymaking by an elite which is heterogeneous in terms of economic interests and social identity, e.g. race, country of birth, religion. This is in contrast to the workhorse models of oligarchy which divide society into a monolithic elite and a disenfranchised citizenry and largely abstract from within-elite differences (Bourguignon and Verdier, 2000; Acemoglu and Robinson, 2001, 2006). Some elite members have a larger economic interest in extractive policies than others. We label the former 'landowners' and

[1] A related notion is the 'iron law of oligarchy' (Michels, 1911) under which every organization evolves to oligarchy.

the latter 'merchants', in keeping with the Caribbean context.[2] In addition, social identities entail different levels of *accountability*, making some groups subject to greater discipline by the citizenry than others.[3] Elite members vote for or against an extractive policy, which benefits them at the expense of the citizenry. The policy is determined by majority voting among the elite. Voting for an extractive policy is disciplined by the threat of citizen revolt.[4] In the event of revolt, elite members who voted for the extractive policy are expropriated with positive probability. Accountable types have a higher likelihood of being expropriated than unaccountable types.

An elite member's support for extractive policies is determined both by his own identity and the overall composition of the elite. Unaccountable landowners are the most likely to vote for the extractive policy. Accountable merchants are the least likely. Hence a larger share of accountable types in the elite reduces the likelihood of the extractive policy being passed. But the effect is not as straightforward as one might expect. The reason is as follows. The basic insight on which we build the analysis is that implementing the extractive policy through majority voting among the elite is akin to providing a threshold club good (Schelling, 1960, 1978; Palfrey and Rosenthal, 1984). Only a majority of elite members need vote for the extractive policy for all members to benefit (some more than others). When accountable types are rare, they are likely to vote against the extractive policy, since there is a large number of unaccountable types who are likely to vote for it. As the share of accountable types in the elite increases, they need to 'step up' and contribute to the policy being passed. Hence accountable types become more likely to vote for extractive policies as their share in the elite grows. By contrast, an increase in the threat of revolt lowers support for the extractive policy by accountable types. In this case, unaccountable types step up and are more likely to vote for the extractive policy. Finally, when the elite becomes too accountable—either the share of accountable types in the elite or the threat of revolt becomes large—elite members may pay to lower the threat of revolt (e.g. cede power to the military) in pursuit of extractive policies. In this way, policies may become more extractive as elite accountability rises.[5]

[2]The voting model can easily handle more general forms of heterogeneity in economic interests.

[3]'Social identity' can have many meanings, shaping a group's norms, loyalties and social network (Akerlof and Kranton, 2000). Our focus is on accountability as the aspect of elite members' social identity that we believe to be particularly important politically.

[4]A number of empirical studies provide evidence that the threat of citizen revolt disciplines elites. See Brückner and Ciccone (2011), Chaney (2013), and Aidt and Franck (2015). With some changes to the model, we could analyze other disciplinary mechanisms such as electoral turnover.

[5]This is related to but distinct from the idea in Acemoglu and Robinson (2008) that elites may invest in de facto power through collective organization if they are forced to cede formal institutional power to the citizenry.

We view our theory as having general applicability to a broad set of historical and contemporaneous settings.[6] But we ground it specifically in an empirical analysis of elite identity and policymaking in the British Caribbean sugar islands after the emancipation of slaves in 1838. This context has considerable advantages. First, all relevant politics was conducted inside each island's locally elected representative assembly, where we can observe the identities and behavior of elite members. Second, due to the history of slave-based plantation agriculture, economic identity (landowner or merchant) and social identity (white or colored) are unusually well defined. Third, there is a clear mapping between social identity and accountability in the Caribbean context. Colored elites were more accountable to the citizenry than their British counterparts because as creole residents and citizens of their islands their social network, wealth and status were confined to them. In contrast, British planters frequently visited Britain, held assets there and sometimes lived there as absentee proprietors represented by local estate managers. They could also count on the support of the British naval garrison. Fourth, while the social composition of elites generally changes slowly and varies mostly between countries that differ along a number of other dimensions including institutional quality, in our context Emancipation rapidly and exogenously altered the composition of the islands' elites. Prior to Emancipation, the islands' assemblies, and elites more generally, were entirely dominated by white British plantation owners. On the eve of Emancipation, the *Colonial Office* estimated that the islands' population consisted of 2–3% "whites, mostly landed," 8% "coloreds, who had been freed earlier and possessed, in many cases, substantial property," and almost 90% "blacks, recently emancipated" (Taylor, 1885, p. 207). The post-slavery decades saw a fast-expanding mercantile economy and the development of a colored elite in both the plantation and mercantile sectors.[7]

We painstakingly compiled an array of novel archival data: From the *Colonial Office Records* in the British National Archives we photographed and digitized the colonies' handwritten *Assembly*

[6] For example, historical colonialism continues to shape the social composition of elites today: As a result of it, elites in the developing world are often a mix between indigenous local elites, European-origin elites (e.g. British farmers in Zimbabwe) and 'transplanted' elite groups (e.g. East Indians in Fiji, Lebanese in Haiti).

[7] Colored elites depended on the votes of the recently emancipated blacks. Blacks did not have the property required to run for elected office, but did soon obtain enough property for the right to vote, and then overwhelmingly voted for propertied coloreds (Rogers, 1970, p. 187). The labels 'colored elite' and 'black citizenry' are true to Caribbean social history and are rooted in the fact that non-white Caribbean elites were usually (the descendants of) the children of a white slave-owning father and a black slave mistress whom their father subsequently freed and bequeathed property to, see e.g. Lowes (1995, p.37). For our purposes the distinction between colored and black plays no role in either the theory or the empirical analysis. We refer the reader to the excellent social histories on this topic in Carmichael (1833), Smith (1953) and Cox (1984). See also Bodenhorn (2015) for a similar discussion for the U.S. South.

Minutes and assembled the scattered roll-call information for the six islands that reported them, Barbados, Jamaica, Montserrat, Dominica, Tobago, and Grenada. From the *Colonial Blue Books*, we separately collected the names and election dates of all assemblymen in each island, including the four that did not report roll-call data, i.e. Antigua, St. Kitts, Nevis, St. Vincent.[8] To assign economic and social identity to assemblymen, we combined information on plantation ownership from the 1820s *Slave Registries*, the 1835 *Emancipation Compensation Tables*, and 43 distinct primary sources on post-Emancipation plantation records, as well as an extensive collection of individual islands' social histories.

In the roll-call data, we pool over all votes to create an 'assemblyman-year' observation, where the key outcome is his voting agreement with the white planter coalition as a function of his economic and social identity. We find support in the data for all of our key theoretical predictions. First, we find that colored merchants consistently displayed the lowest voting agreement with the white planter coalition. White merchants and colored planters displayed more agreement than colored merchants but less than white planters among themselves. Second, we find that exogenous increases in the threat of revolt, proxied by the incidence of riots, changed voting behavior. Allowing individual fixed effects to absorb unobserved policy preferences, we find that colored merchants and colored planters, i.e., accountable elites, responded by agreeing less with white planters. Second, we find that exogenous increases in the threat of revolt reduced colored elites' support for the white planter coalition, allowing for individual fixed effects to absorb unobserved policy preferences. In contrast, white merchants increased their agreement with white planters, consistent with a need to step up to maintain the existing policies. Third, we find that exogenous reductions in the size of the white planter bloc increased colored elites' agreement with the white planter coalition, again consistent with the theory which predicts they had to step up to maintain the extractive policies. To gain statistical identification on this size effect, we use the introduction in 1854 of the *Caribbean Encumbered Estate Act* (EEA), a change in bankruptcy law which led to an exodus of white planters, interacted with time-variation in islands' electoral cycles.

We also explain the great puzzle of Caribbean politics in the 19th century: Although Emancipa-

[8]There were a further four British Caribbean sugar islands, the Virgin Islands, Trinidad, St. Lucia, and British Guyana, for a total of 14. The Virgin Islands were the smallest and we found no usable information on the identity of the elite. The other three colonies were founded later than the rest (ceded from Napoleon) and from the beginning had no locally elected assemblies.

tion freed 90 percent of the Caribbean population from slavery, and led to growing representation of colored elites in the assemblies, it did not alter the extractive political and economic system. In fact "each major inquiry [by English Parliament] into the British West Indies noted with amazement that nothing had been changed since the last report" (Craton 1988, p. 165). Even as colored elites continued to gain in influence, the islands did not move to a more representative political system, e.g. universal suffrage as in Acemoglu and Robinson (2000).[9] Instead, between 1861 and 1877, elites in all but one of the islands voluntarily voted their assemblies out of existence and invited the British Crown to take over all local legislative functions under *Crown Rule*. In explaining this, the Caribbean historical literature has largely concluded that Emancipation did not affect politics because white elites retained control of the assemblies, and has therefore viewed the assemblies' abolition as an attempt by white elites to prevent a colored majority taking control (Ashdown 1979, p.34, Lowes 1994, p.35). We find that this view is not consistent with the data. On several islands, the proposal for the assemblies' dissolution was passed by a colored majority, and in the limited roll-call information on that proposal colored elites voted largely in favor of it. In addition, in four islands the assemblies' dissolution appears to have been a direct response to increases in the threat of revolt, although white elites had apparently successfully dealt with such threats for the previous two centuries. The evidence is thus more consistent with the nuanced explanation suggested by our theory: white and colored elites largely cooperated in enacting extractive policies, and dissolved the assemblies only when their coalition became collectively too accountable to continue to do so.

Our paper is connected to various strands of the political economy literature. In terms of modeling, Acemoglu and Robinson (2000) and Lizzeri and Persico (2004) decompose the elite into groups with different economic interests. Our approach is closest to that of Bisin and Verdier (2015) who model heterogeneity along both economic and cultural dimensions. Their focus is not on political accountability, however. There is a substantial literature on political accountability as a product of institutional constraints (North and Weingast, 1989; Persson, Roland, and Tabellini, 1997; Besley, 2006) and pro-social norms among citizens (Tabellini, 2008; Nannicini, Stella, Tabellini, and Troiano, 2013). In contrast, we examine how political accountability depends

[9] In 1860, more than three-quarters of Montserrat's assemblymen were colored (Rogers, 1970, p. 164) and in Dominica they were a majority (Honychurch, 1984, p.70).

on the identity of elite members.[10] This is relevant in a number of contexts, especially where colonialism produced a mixed elite with varying proximity to the citizenry. For example, Iyer (2010) argues that India's 'princely states' were better governed than states under direct British rule because local princes were more accountable to the citizenry.[11] A related empirical literature exists on the impact of leaders on political and economic outcomes (Jones and Olken, 2005, 2009; Besley, Montalvo, and Reynal-Querol, 2011). By examining the entire composition of the political elite, we find that identity matters in more complex ways than revealed by prior work on individual leaders. Esteban and Ray (2008) argue that complementarity in money and time inputs makes ethnic conflict salient vis-á-vis class conflict. Here we find that the salience of racial identity in extractive politics depends crucially on the political environment, in particular the threat of citizen revolt.[12] In addition, we are not aware of any other paper that has theoretically explored the idea that an elite faction inside the government may abolish democratic institutions to protect it from popular pressure. Yet this appear to be common. Beyond the Caribbean assemblies, examples include but are not limited to the military coups in Greece in 1967, Turkey in 1971, and Thailand in 2014.[13]

In what follows, section 2 presents our theory of elite identity and voting behavior. Section 3 provides an historical account of the islands after Emancipation. In section 4, we discuss the data and analyze the interaction between white and colored landowners and merchants. Section 5 concludes.

2 The Theory

Consider voting by a finite set of individuals E which we call the elite.[14] The elite E has cardinality $n > 2$ and typical member i.

Based on majority voting among the elite, a policy $x \in \{0, 1\}$ is implemented, where $x = 1$ denotes an 'extractive policy'. For example, $x = 1$ could be a policy which artificially depresses

[10] There is also a literature on the selection of political elites (Besley, 2005). Our paper is not concerned with how the composition of the elite is generated, but how it affects political outcomes.

[11] More recently, power sharing between European and local elites has shaped the post-colonial history of many African countries. Acemoglu and Robinson (2012, p. 368-372) describe how the Mugabe regime initially maintained land policies that helped Zimbabwe's white British landowners, until this arrangement fractured in 2000 when increasing citizen unrest put pressure on the regime.

[12] Naturally, our paper also makes specific contributions to the historical literature on political conflict in the Caribbean. See Rogers (1970); Heuman (1981); Brizan (1984); Craton (1988); Holt (1991).

[13] While this is not our focus, for completeness we discuss these events in some detail in Online Appendix A.

[14] To preserve the flow of the paper and the connection with the empirical analysis, all proofs are in Appendix A.

wages and thereby enables the elite to extract rents from the citizenry. Voting for the extractive policy is disciplined by the threat of revolt by the citizenry in manner to be specified below.

Unlike standard political economy models, the elite is heterogenous and may not act in a unified manner. Specifically, elite members differ along two dimensions, economic and social.

First, each elite member is either a landowner P or a merchant M, in keeping with our Caribbean case study.[15] The occupation of elite member i is denoted by $g_i \in \{P, M\}$. Plantation production is especially labor intensive. Hence, while both economic types derive an economic benefit from lower wages, we assume that landowners derive a larger benefit. Denote the profit to occupation g under policy x by $\pi_g(x)$. The assumption is

$$\pi_P(1) - \pi_P(0) > \pi_M(1) - \pi_M(0) > 0. \tag{1}$$

In Appendix B, we describe an economy in which this ordering of profits holds.

The specific descriptions, which are tailored to the Caribbean case, should not distract the reader from our model's applicability to more general forms of heterogeneity among the elite.[16] Second, some elite members are more *accountable* than others. The accountability of elite member i is denoted by $\theta_i \in \{a, u\}$. Voting for the extractive policy has consequences. In the event of citizen revolt, accountable elites $\theta = a$ who voted for the extractive policy face a larger expected cost of expropriation than unaccountable elites $\theta = u$ who voted for the policy.[17] Specifically, citizen revolt occurs with probability δ. In the event of revolt, an elite member who voted for the extractive policy bears a cost of expropriation of $h(\theta_i)z_i$, where z_i is the realization of the random variable Z_i and $h(a) > h(u) > 0$ so that accountable elites bear a larger expected cost.[18] The cumulative distribution function for Z_i is F which is common across $i \in E$. In addition, F is continuous and strictly increasing on $[0, \infty)$.

Hence each elite member $i \in E$ has a two-dimensional type (g_i, θ_i) which is common knowl-

[15] In the Caribbean case, we think of landowners more specifically as owners of sugar plantations.

[16] For example, we could consider the case where merchants' economic incentives are aligned with the citizenry, i.e. $\pi_P(1) - \pi_P(0) > 0 > \pi_M(1) - \pi_M(0)$. If we allow transfer payments within the elite, a portion of merchants may then still support the extractive policies in equilibrium.

[17] In the Caribbean context, accountability coincides with social identity. White elite members were less accountable than colored elite members for reasons discussed in the introduction as well as in section 3.

[18] The results are the same when revolt occurs if and only if the extractive policy is implemented and all elite members (regardless of their voting record) bear a cost of expropriation in the event of revolt, with accountable elites bearing a larger cost.

edge. An elite member's type is also referred to as his identity. The number of type (g, θ) elite members is denoted by $n_{g\theta}$.

The timing of the game is as follows:

1. Each elite member's cost of voting for the extractive policy z_i is determined by an independent draw from the distribution F. The realized distribution $z = (z_i)_{i \in E}$ is publicly observed.

2. Each elite member votes either for the extractive policy $v_i = 1$ or against it $v_i = 0$.

3. The policy x is determined by majority voting among the elite. For convenience, ties are broken in favor of $x = 1$.

4. Profits are received based on the policy x.

5. With probability δ, the citizenry revolts. In the event of revolt, if $v_i = 1$, i bears a cost of $h(\theta_i)z_i$. Otherwise, he bears no cost.

The structure of the game is common knowledge.

Let us now analyze voting over x focussing on pure strategy equilibria throughout. Denote the profile of voting choices by $v = (v_i)_{i \in E}$. The realized payoff to a type (g, θ) individual i is

$$u(v; g, \theta) = \pi_g(0) + I(v)[\pi_g(1) - \pi_g(0)] - v_i \delta h(\theta) z_i, \tag{2}$$

where $I(v)$ is an indicator variable which equals 1 if $\sum_{i \in E} v_i \geq \lceil \frac{1}{2} n \rceil$, that is if a (weak) majority of the elite vote for the extractive policy, and zero otherwise.

Define the *interest in extractive policy* of elite member i with occupation $g \in \{P, M\}$ as

$$D_i \equiv \pi_g(1) - \pi_g(0) - \delta h(\theta_i) Z_i. \tag{3}$$

This is the economic benefit from the extractive policy enjoyed by occupation g minus the expected cost to i of voting for the policy. Recall that $h(a) > h(u) > 0$. Hence accountable elites have a smaller interest in the extractive policy, holding occupation constant. The realization of the random variable D_i (which depends on the cost realization z_i) is denoted by d_i. Across all $i \in E$, we denote the $\lceil \frac{1}{2} n \rceil$th largest value of d_i by d^*.

The voting game played at date 2 is determined by the realization z at date 1. A Nash equilibrium of the voting game consists of a profile of voting choices $v^* \in \{0,1\}^n$ from which there is no profitable unilateral deviation. Let V^* denote the set of pure-strategy Nash equilibria and $\bar{V} \equiv \{v \in \{0,1\}^n : \sum_{i \in E} v_i = \lceil \frac{1}{2} n \rceil\}$ denote the set of profiles in which the number of individuals voting for the extractive policy is the minimum number required to win the vote.

Proposition 1 *Nash equilibrium voting behavior is:*

(i) *If* $d^* < 0$, *then* $V^* = \{\mathbf{0}\}$.

(ii) *If* $d^* \geq 0$, *then* $V^* = \{\mathbf{0}\} \cup \bar{V}$.

When $d^* < 0$ so that a strict majority of elite members has a negative interest in extractive policy (i.e., $d_i < 0$), there is a unique Nash equilibrium. In this equilibrium, the elite votes unanimously against the extractive policy, $v_i = 0$ for all $i \in E$, and the policy is not implemented. When $d^* \geq 0$ so that a weak majority of elite members has a nonnegative interest in extractive policy (i.e., $d_i \geq 0$), there are multiple equilibria. Either the minimum number of elite members required to win the vote (i.e., $\lceil \frac{1}{2} n \rceil$) votes for the extractive policy or every elite member votes against it.[19]

It should be clear now, if it were not already from the setup, that rent extraction through voting is akin to the provision of a threshold club good, the club here being the elite E. A subset of the elite needs to contribute to the good (i.e., vote for the extractive policy) for it to be provided. All elite members benefit from provision of the club good (i.e., extractive policy), but only contributors bear the cost of provision, in terms of discipline by the citizenry. For the good to be provided, the benefit must exceed the cost for the threshold number of club members. This is a simple but powerful insight which we exploit for the remainder of the theoretical analysis and the empirical analysis below.

Proposition 1 characterizes Nash equilibria for a given realization z. Since we are interested in voting across different contexts, i.e., for different realizations of z, and because z is not always observable by the analyst, we need to take expectations over z. We call this the *ex ante* perspective.

[19] The same results can be generated by removing the uncertainty over z and focusing on mixed strategies. However, the usual justification for mixed strategies in this game, that the mixed Nash equilibrium is the unique symmetric Nash equilibrium (Palfrey and Rosenthal, 1984), does not apply here. Agents are heterogeneous, so there are no symmetric Nash equilibria.

To compute the *ex ante* likelihood that the extractive policy is implemented, we need to perform equilibrium selection so that we have a unique prediction for each realization z. We focus on equilibria with the following structure:

Definition 1. A *voting equilibrium* is a function $v^* : \mathbb{R}^n \to \{0,1\}^n$ which specifies a Pareto efficient, pure-strategy Nash equilibrium for each cost realization z.

When $d^* < 0$, $v = \mathbf{0}$ is Pareto efficient. When $d^* \geq 0$, all equilibria in $\bar{V}$ are Pareto efficient. It follows from Proposition 1 then that a voting equilibrium exists.

Confining attention to Pareto efficient Nash equilibria partly reduces the multiplicity of equilibria in Proposition 1(ii). In particular, it rules out the $v^* = \mathbf{0}$ equilibrium which is Pareto dominated by all Nash equilibria in $\bar{V}$ when $d^* > 0$. Therefore, the extractive policy is implemented whenever $d^* > 0$ in any voting equilibrium.

This still leaves open the identity of the players voting for the extractive policy in such an equilibrium. Thus, we further restrict attention to voting equilibria that satisfy the following condition:

Definition 2. *Monotonicity*: Voting is monotone if for all z and i such that $v_i(z) = 1$, $d_i \geq d^*$.

Monotone voting means the individuals voting for the extractive policy are those with the largest interest in extractive policy. Clearly, whenever a voting equilibrium exists there exists a monotone voting equilibrium.

We find this to be more natural and convenient than other conditions. For example, suppose voting were monotone in the cost z_i, so that $v_i(z) = 1$ for individuals with the lowest cost of voting for the extractive policy. Such an equilibrium could fail to exist even when voting equilibria exist. To verify this, consider the following example:

Example 1. $n_{Pu} > \frac{1}{2}n$, $n_{Pa} = n_{Ma} = 0$, $h(u) = 1$, $\pi_P(1) - \pi_P(0) = 4$, $\pi_M(1) - \pi_M(0) = 1$, $\delta = 1$, $z_i = 3$ if $g_i = P$ and $z_i = 2$ if $g_i = M$.

By Proposition 1(ii), there exists a Nash equilibrium in which the extractive policy is implemented because $d_i > 0$ for all unaccountable landowners and these individuals comprise a strict

majority of the elite. Notice, however, that merchants have a lower cost of voting for the extractive policy. But there exists no Nash equilibrium in which merchants vote for the extractive policy because $d_i < 0$ for all such individuals.

2.1 Elite Identity & Political Accountability

In this section we shall examine how elite identity affects (i) the *ex ante* likelihood that the extractive policy is implemented and (ii) the *ex ante* likelihood that a given elite member votes for the extractive policy.

Across all elite members $i \in E$, we have n random variables $(D_i)_{i \in E}$. The $\lceil \frac{1}{2}n \rceil$th largest value is a random variable D^* with distribution G. We know the extractive policy is implemented whenever its realization d^* is nonnegative in any voting equilibrium. Along with the continuity of F, this means the *ex ante* likelihood that the extractive policy is implemented is $Pr(D^* \geq 0) = 1 - G(0)$ i.e., the likelihood that D^* is nonnegative. This in turn depends on the composition of the elite.

Proposition 2 *In every monotone voting equilibrium, the following holds:*

(i) *Replace $\hat{n}$ type (g, u) individuals with $\hat{n}$ type (g, a) individuals. The* ex ante *likelihood the extractive policy is implemented decreases, for all $0 < \hat{n} \leq n_{gu}$ and $g = P, M$.*

(ii) *Replace $\hat{n}$ type (P, θ) individuals with $\hat{n}$ type (M, θ) individuals. The* ex ante *likelihood the extractive policy is implemented decreases, for all $0 < \hat{n} \leq n_{P\theta}$ and $\theta = u, a$.*

According to Proposition 2, the elite's ability to extract rents depends on the composition of the elite, because unaccountable types and landowners have a larger expected interest in extractive policy. Thus, as unaccountable elites are replaced by accountable elites, the likelihood of the extractive policy falls. The same occurs when production shifts away from agriculture to the mercantile sector where the extractive policy creates smaller rents.

Let us now examine the role of elite identity on the voting behavior of individual elite members. By Proposition 1 and monotonicity, individual i votes for the extractive policy if and only if $d^* \geq 0$ and $d_i \geq d^*$. Therefore, the *ex ante* likelihood of individual i voting for $x = 1$ is

$$
\begin{aligned}
Pr(v_i = 1) &= \big[1 - G(0)\big] . \int_0^\infty \frac{Pr(D_i \geq d^*)}{1 - G(0)} \, dG(d^*) \\
&= \int_0^\infty Pr(D_i \geq d^*) \, dG(d^*). \qquad (4)
\end{aligned}
$$

We can now derive the comparative statics results.

Proposition 3 *In every monotone voting equilibrium, the following holds:*

(i) *Suppose $g_i = g_j \in \{P, M\}$, while $\theta_i = u$ and $\theta_j = a$. Then $Pr(v_i = 1) > Pr(v_j = 1) > 0$.*

(ii) *Suppose $\theta_i = \theta_j \in \{a, u\}$, while $g_i = P$ and $g_j = M$. Then $Pr(v_i = 1) > Pr(v_j = 1) > 0$.*

The *ex ante* likelihood of an individual voting for the extractive policy depends on his accountability and economic interests. Lack of accountability and landowning increase an individual's likelihood of voting for the extractive policy. Unaccountable landowners are the most likely to vote for the extractive policy, whereas accountable merchants are the least likely.

We have examined how an individual's voting behavior depends on his own identity. Let us now examine how it depends on the composition of the elite.

Proposition 4 *In every monotone voting equilibrium, the following holds:*

(i) *Replace $\hat{n}$ type (g, u) individuals in $E - \{i\}$ with $\hat{n}$ type (g, a) individuals. Then $Pr(v_i = 1)$ increases for all $0 < \hat{n} \leq n_{gu}$.*

(ii) *Replace $\hat{n}$ type (P, θ) individuals in $E - \{i\}$ with $\hat{n}$ type (M, θ) individuals. Then $Pr(v_i = 1)$ increases for all $0 < \hat{n} \leq n_{P\theta}$.*

Proposition 4 reveals a more complex picture of the relationship between elite identity and political accountability than suggested by Propositions 2 and 3. As unaccountable types are replaced

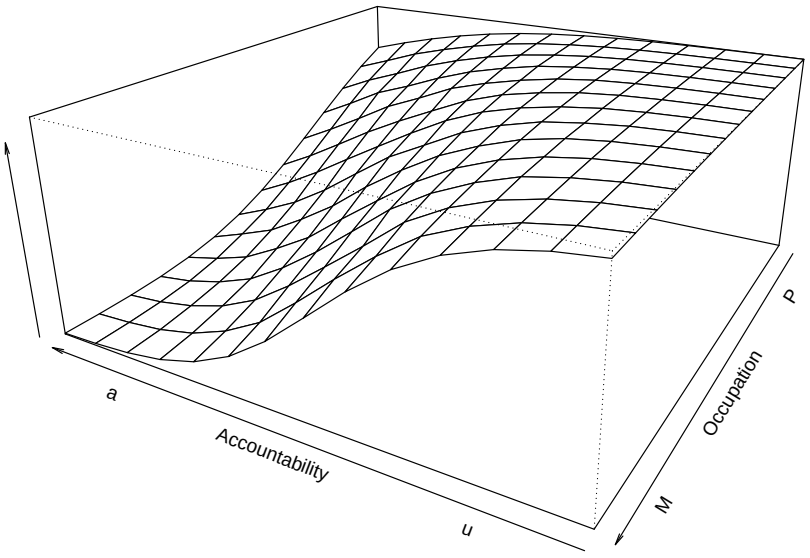
by accountable types in the elite, the likelihood that any existing member of the elite votes for the extractive policy rises. In particular, the likelihood that a given accountable type votes for the extractive policy rises. The reason lies in the underlying strategic structure which is equivalent to provision of a threshold club good. When accountable types are rare, they are likely to vote against the extractive policy, since there is a large number of unaccountable types who are likely to vote for it. As the share of accountable types in the elite increases, existing elite members step up and contribute to the policy being passed. Thus the effect of a shift in elite composition on political accountability at the equilibrium level cannot be linearly extrapolated from the voting behavior of a few accountable types. The same applies to economic identity. As the share of merchants in the elite grows, the likelihood that existing elite members vote for the extractive policy rises.

These effects are illustrated in Figure 1. The likelihood that extractive policy is implemented falls as the share of accountable types grows and the share of merchants grows (Proposition 2). For the particular numerical values chosen, the effect of a rising share of accountable types is larger than the effect of a rising share of merchants. The curvature of the graph can be understood as follows. Replace one unaccountable type with an accountable one. The direct effect is that the new elite member votes for extractive policy at a lower rate (Proposition 3). This is partially offset by existing elite members who increase their likelihood of voting for extractive policy (Proposition 4)—the indirect effect. The difference in the sizes of the direct and indirect effects depends on the identities of existing elite members. For the numerical values used in Figure 1, the difference is non-monotonic in the share of accountable types. Hence the likelihood that the extractive policy is implemented could fall at an increasing or decreasing rate depending on the composition of the elite.

2.2 The Threat of Revolt & Political Accountability

Let us now analyze how the threat of revolt affects individual voting and policy outcomes. In the seminal work of Acemoglu and Robinson (2006), the threat of revolt is a key form of discipline on rent extraction by a unified elite. In our model, the elite is disaggregated, heterogenous, and may not act in a unified manner. In particular, revolt is more costly to some elite members than others. Hence the threat of revolt plays a more complex role.

Figure 1: Probability of extractive policy being implemented



Notes: The numerical parameter values are $\pi_P(1) - \pi_P(0) = 1$, $\pi_M(1) - \pi_M(0) = 0.35$, $h(a) = 10$, $h(u) = 5$, $|E| = 13$, F is a Pareto cdf with $\alpha = 1$ and minimum value 0.05.

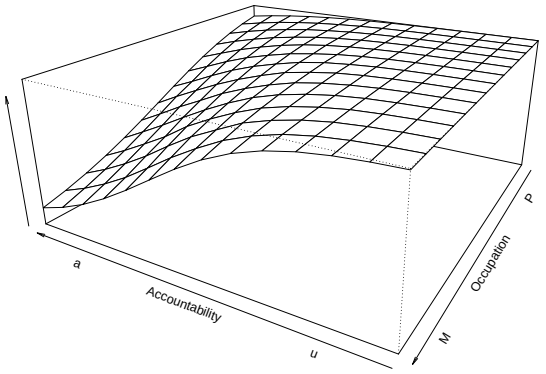
Proposition 5 *In every monotone voting equilibrium:*

(i) *The* ex ante *likelihood the extractive policy is implemented* $Pr(D^* \geq 0)$ *is strictly decreasing in* δ.

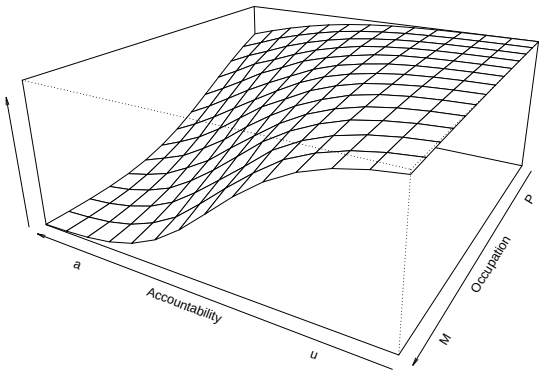
(ii) *Suppose* $\theta_i = a$ *and* $\theta_j = u$. *Conditional on the extractive policy being implemented,* $Pr(v_i = 1)$ *is decreasing in* δ *and* $Pr(v_j = 1)$ *is increasing in* δ, *for all* $(g_i, g_j) \in \{P, M\}^2$.

An increase in the likelihood of revolt δ reduces the likelihood of the extractive policy being implemented in equilibrium as one would expect. But it also affects who votes for the extractive policy. Conditional on the extractive policy being implemented (otherwise $v_i = 0$ for all $i \in E$), the expected proportion of accountable types voting for the extractive policy falls and the expected proportion of unaccountable types voting for the extractive policy rises. Unaccountable types step in to take up some of the slack left by accountable types in contributing to the extractive policy. As such, an increase in the threat of revolt splits the elite in a particular way, with voting behavior becoming more closely related to social identity than economic identity. This is illustrated in Figure 2. When δ is large, an increase in the share of accountable types produces a larger drop in

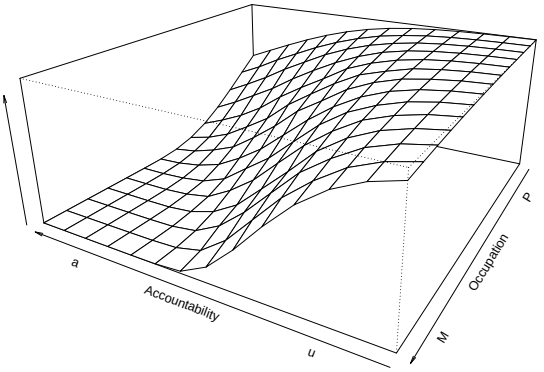
Figure 2: Probability of extractive policy being implemented



(a) Low $\delta = 0.4$



(b) Intermediate $\delta = 0.5$



(c) High $\delta = 0.6$

Notes: The extent to which the extractive policy survives a larger threat of revolt δ depends on the social and economic composition of the elite. Numerical parameter values are the same as in Figure 1.

the likelihood of extractive policy. In addition, as δ rises, the effect of an increase in the share of accountable types becomes much larger than the effect of an increase in the share of merchants.

2.3 Paying For Protection from Revolt

As we have seen, an increase in the share of accountable types in the elite and an increase in the threat of revolt reduce the likelihood that the extractive policy is passed. Since all elite members gain from the extractive policy, the elite may respond to these changes by attempting to reduce the likelihood of revolt. The question we address here is how much would the elite be willing to pay to reduce the likelihood of revolt from δ to zero?

Suppose that prior to date 1, there is a date 0 at which elite members can choose to pay an amount T to reduce the likelihood of revolt to zero. If they do not, the game proceeds as usual. If they pay T, there is no revolt at date 5. We are interested in the maximum amount the elite as a whole would be willing to pay for such protection, denoted by $\bar{T}$.

By inspection of (3), when the threat of revolt is zero, $d_i = \pi_{g_i}(1) - \pi_{g_i}(0)$ which is positive for all $i \in E$. Hence $d^* > 0$ and the extractive policy is implemented with probability one in every voting equilibrium. In this case, the expected payoff to i is $\pi_{g_i}(1)$. Each elite member $i \in E$ would thus be willing to individually contribute up to an amount T_i equal to the difference between $\pi_{g_i}(1)$ and his expected equilibrium payoff given $\delta > 0$. The maximum the elite would be willing to pay as a whole is $\bar{T} = \sum_{i \in E} T_i$.

Proposition 6 *In every monotone voting equilibrium, the following holds:*

(i) *Replace $\hat{n}$ type (g, u) individuals with $\hat{n}$ type (g, a) individuals. $\bar{T}$ increases, for all $0 < \hat{n} \leq n_{gu}$ and $g = P, M$.*

(ii) *$\bar{T}$ is strictly increasing in δ.*

The price the elite is willing to pay to reduce the likelihood of revolt is increasing in the share of accountable types in the elite and the likelihood of revolt. Therefore, measures aimed at boosting political accountability, by for example engineering the composition of the elite, may be counter-productive. They may induce the elite to pay for protection from revolt. In this way, the elite may be able to more effectively implement extractive policies. Thus, the relationship between accountability of elite members at the individual level and political accountability at the aggregate level may be non-monotonic.

3 The British Caribbean Sugar Islands After Emancipation

We now provide historical background on the Caribbean sugar colonies in the decades after Emancipation. There were 14 British Caribbean sugar islands founded in three waves. The oldest —

Antigua, Barbados, Jamaica, Montserrat, Nevis, St. Kitts, and the Virgin Islands — were founded in the 1600s by British settler-farmers. The second wave — Dominica, Tobago, St. Vincent, and Grenada — were annexed from France at the end of the Seven Years War in 1765, and were resettled by sugar planters from the other Caribbean islands. The last three colonies — Trinidad, St. Lucia, and Guyana — were ceded by Napoleon between 1797 and 1803.[20] Sugar was introduced into the Caribbean around 1700, and with it the *great planters* came to dominate (Taylor, 2002, ch. 11). By 1800, these *great planters* had become the "wealthiest men in all of English America" (Galloway, 2005). From the peak of their powers in 1800 the tide turned against the great planters. Slavery, which was critical to Caribbean wealth, came under increasing attack from the rising Abolitionist movement in London (Ragatz, 1928, ch.10). In 1807, British parliament abolished the slave trade. Finally, in 1833, British parliament passed *An Act for the Abolition of Slavery* which ended slavery throughout the Empire in 1838.

The Assemblies: Local Caribbean elites' political power had traditionally been and continued after Emancipation to be vested in their control of the local *assemblies*, which the Caribbean's original smallhold settlers had pushed for in the 17th and 18th century to better control taxes and spending (Taylor, 2002, p. 246). These assemblies were powerful institutions, which "in addition to their legislative functions, had extensive executive powers. Colonial Acts assigned all important administrative tasks to special boards, or commissions, upon which members of the assembly enjoyed either exclusive or majority control" (Green, 1991, p. 68). Morrell and Parker assert that the assemblies "seriously curtailed the powers of the governors in the colonies" (1969, p. 435). Rogers writes of the unchecked power of the Caribbean assemblies: "In the West Indies, the executive was almost completely isolated from public finances, over which the assemblies exerted an extraordinary influence. Indeed, all representative bodies exercised the functions of three separate [British] agencies. As a lawmaking chamber, it imposed truces. In an executive role, it collected revenue, voted appropriations, expended monies, and, along with the upper house, administered public services. Lastly, acting as an audit board, the island assemblies checked their own expenditures" (1970, p. 77–79).

It is important to emphasize that there were no career politicians on the islands. Assembly-

[20] The last three never had locally elected assemblies, and for the Virgin Islands we have no good data. Thus, we have a tale of 10 rather than 14 islands.

men were either planters or merchants, and their social identity was evident. As such, they were invariably representatives of the elite group they belonged to.

Post-Emancipation Changes in Elite Composition: On the eve of Emancipation the *Colonial Office* estimated that the islands' population consisted on average of 2–3% "whites, mostly landed," 8% "coloreds, who had been freed earlier and possessed, in many cases, substantial property," and almost 90% "blacks, recently emancipated" (Taylor, 1885, p. 207).[21]

What were the political relations between these groups? Baker (1994, p. 129) argues that at the time of emancipation "the coloured people and the negroes were two entirely separated classes of people," and Henry Taylor, a high-ranking official in the *Colonial Office* at the time, stated that "it was common knowledge that [the colored elite] tended to amalgamate with the whites in their uncharitable disposition toward the peasantry" (Taylor, 1885, p. 216). Craig-James (2000, p. 201) writes that "the most established [colored elites] attended the governor's balls, their wives and daughters were pillars of the Church of England."[22] Despite the colored elites' connections to the British white elite class, it is clear that the votes of the black citizenry, as it was slowly obtaining the franchise, went largely to them, if only for a lack of black politicians.[23] Holt (1991), Lowes (1994), and Craig-James (2000) offer rich biographical accounts of colored elites on Jamaica, Antigua, and Tobago which clearly confirm this.

In the early years after emancipation, the white planters' dominance of the assemblies continued. For example, Green (1991, pp.73) reports that "a few merchants, lawyers, and medical practitioners secured seats in the Jamaica Assembly before 1840, but planters dominated colonial government in the thirties and forties. Barbados' merchants petitioned that they were totally unrepresented in their Assembly. In 1837, twenty-two of twenty-five Antigua assemblymen were planters." Before emancipation it had been, throughout the Caribbean, "distinctly the exception for a member of the legislature to be returned by more than 10 votes" (Wrong, 1923, p. 69). This narrow franchise was driven by the small number of free people rather than by particularly strin-

[21] Coloreds had, by definition, some white ancestry; many coloreds had been freed and had even accumulated considerable wealth before Emancipation.

[22] Craig-James does emphasize on the same page that there "was little intermarriage between whites and coloreds," so that the latter "must be seen as a distinct segment of the dominant class."

[23] The property or income requirements to run for office were significantly larger than those to vote. Unlike the coloreds, blacks were practically all unfree before Emancipation and none of them could hope to attain any wealth through inheritance. In his investigation of Jamaican post-Emancipation politics, Holt (1991) finds that there were a total of two black assemblymen between 1836–1865, compared to over 30 colored ones.

gent franchise rules; the property holdings required to vote were in fact quite low, having typically stayed at their original 10-acre threshold from the Caribbean's smallhold days.[24] Because the price of 10 acres of land was easily within reach of a smallholder through accumulated savings, the white planters' dominance of the assemblies was soon to erode. Higman writes of a "spectacular growth in the extent of smallholding after 1838" (2001), and while smallholding did not generate the wealth required to run for office, it did generate the wealth required to purchase 10 acres and thus acquire the franchise. It is clear that colored elites were the ones who attained the black vote: Holt (1991, p. 244) recounts how in Jamaica, "in 1844, governor Elgin called for early elections to blunt the registration drive [of smallholders who had obtained 10 acres of land]. Yet, when the new assemblymen convened, there were five new colored faces among them." Lewis (2004, p.67) states that throughout the Caribbean "a brief generation after emancipation colored men had obtained positions of prominence, as merchants, property owners, and in the professions." Green (1991, p.296) writes that "In Dominica and Montserrat colored men quickly assumed a dominant role in the legislature. They were a powerful element in Jamaica." In fact, Rogers (1970, p. 164) and Honychurch (1984, p.70) write of colored majorities in Dominica's and Montserrat's assemblies. Green (1991, p.296) writes that "although whites continued to dominate society in most colonies [...] in numbers [the colored elites] constituted the largest segment of the European culture group at the end of the period."

While the old white elites were mostly associated with the plantation economy, the economic interests of colored elites were more mixed.[25] Meditz and Hanratty (1987, p.31) write that the new colored elites class "was far more heterogeneous than the class it was gradually displacing in economic and political affairs [...] consisting of merchants, successful estate owners, members of the professions, and an expanding managerial sector." Holt (1991, p. 221) writes that "more than a third of the brown representatives who served between 1831 and 1866 were lawyers, and before 1849 their predominance was even greater. Several others were merchants, editors, or public employees, not dependent on agriculture. Unlike the planters they did not identify the interests of the island exclusively with the success of its plantations."

[24]The franchise in the Caribbean, as elsewhere in the British colonies, was obtained primarily through land ownership. The *Blue Books* display very little variation in the 10-acre requirement across colonies or over time.

[25]We shall code any elite who is not a planter as a merchant, a group that de facto included many lawyers and professionals. The key point to us is that plantation owners had a much more pronounced interest in a wage-reducing policy than any other elite group.

While colored elites were always more heterogenous in their interests and on average less tied to the plantation economy, the share of colored planters did increase over time as white planters sold their estates and left the islands. This trend accelerated sharply after 1854, when British Parliament passed the *Caribbean Encumbered Estate Act* (EEA), a change in bankruptcy law that had major consequences for the planter elites in the Caribbean. Many of the plantations owned by the old English planter families were nominally bankrupt because of 'encumbrances' that they or their ancestors had attached to their estates during sugar's heyday in the 18th century (Beachey (1978, ch.1), Cust (1859, p.9–13)). These were regular money obligations to the wider family in England paid from the plantations' revenues. The EEA made three innovations: First, it allowed any of the plantations' many potential encumbrancers and creditors to initiate bankruptcy proceedings; second, it established a clear legal hierarchy of creditor claims, and third, it instituted a specialized court in London with offshoots in the colonies that ensured that these claims were processed in a timely manner (Cust (1859, p.5-7, 13-15), Sewell (1861, p.82, 89)). The EEA led to dramatic turnover in the ownership of sugar plantations throughout the Caribbean. According to Lowes, "The act played a key role in the snowballing process of turnover–so great a role, in fact, that one merchant reported that all but eight estates changed hands [in Antigua] between 1860 and 1897" (1994, p.21). We know from the historical accounts that in many cases the only potential buyers of the estates were colored (Lowes 1994, Craig-James 2000, p.199-201, Lewis 2004, p.67). Craig-James (2000, p.200, 296) writes that "increasingly men of color acquired plantation property," to the extent that by the 1870s in Tobago "coloreds owned or operated 32 of the 73 estates." Consistent with this, Brizan (1984, p.201–202) states that "especially after 1850, the vacuum created by the exodus of white planters was now being filled by the rich coloreds," Craig-James recounts the story of Brutus Murray who was born a slave in Tobago in 1797, appeared in the public records in 1842 as a sharecropper at Orange Valley Estate, then in 1852 as a manager of Belle Garden Estate, in 1862 as a part-owner of Pembroke Estate, and finally in 1870 as the exclusive owner of Pembroke and Cardiff Estates (Craig-James, 2000, p.165). Stories like Murray's abound in the detailed island histories of Craig-James (2000), Lowes (1994), Holt (1991) and others.

Interactions between the different elite groups and the eventual dissolution of the assemblies: Accounts like Heuman's and Holt's of Caribbean racial politics describe a complicated ebb and flow of conflict and coalition between white and colored elites. While it seems clear that

the emergence of the colored elites did not lead to any dramatic improvements in the citizenry's fortunes, it is less clear whether this was because colored elites were too few to make a dent in the status quo or because they tended to support it.[26] To the extent that the colored elites did support the extractive status quo, their increasing influence created a predicament because this support had to increasingly be open as opposed to tacit. Open support for the extractive system that ensured cheap plantation labor brought with it the accountability that we emphasize in this paper. Accountability meant in particular the threat of violent revolt. Colored elites were far more exposed to this threat. White planters were English citizens, could count on the support of the British Navy garrison, and were in fact frequently absent from the islands, preferring to have a nephew of younger son manage their estates in their stead. None of these mitigating factors were there for the colored elite (Trouillot, 1988, p. 101). In sections 4.2–4.4 we investigate the changing nature of voting interactions between white and colored elites empirically, and interpret our findings through the lens of our theory.

The post-EEA period, in which the planter elite became increasingly colored, culminated in a remarkable series of institutional changes. Starting with Montserrat in 1861 and ending with Grenada in 1876, all but one of the powerful assemblies voluntarily dissolved themselves, and invited the Crown to write a new constitution for them with a legislature appointed by the governor, a system referred to as *Crown Rule* (Britain, 1879, p. 188). In four of the colonies, violent uprisings appear to have been the direct cause of this drastic institutional change.[27] Scholars of Caribbean history have been somewhat divided on the political motivation for the assemblies' dissolution and on who supported it. Most have concluded that the dissolution of the assemblies was a case of white elites trying to shut down the emergent colored elites. In this camp, Lowes (1994, p.35) concludes that "in the end, the demand of an increasingly restive nonwhite middle class for a voice in island affairs proved the greater fear [than ceding power to the colonial office], and the white elites voted themselves out of office." Ashdown (1979, p.34) argues in a similar

[26] One of the few things that comes out the of the historical literature quite clearly is that the politics of patronage was important for colored elites, and that control over state resources may have been a sort of transfer by the old elites in exchange for supporting the extractive status quo. Both Rogers (1970, p. 171) and Honychurch (1984, p.69) write that colored assemblymen gained wealth and influence from patronage, particularly "jobbing," i.e. controlling who received government work. As a result, Green (1991, p.296) writes, "colored men held most clerkships, and by the end of our period they dominated the lower and mid-ranking government positions in many colonies."

[27] These concerns played a role everywhere, but it was in Jamaica (Lewis, 2004, p.96), St. Vincent (Rogers, 1970, p. 263), Tobago (Craig-James, 2000, p.251), and the Virgin Islands (Dookhan, 1977, p.202) that revolts directly preceded the dissolution of assemblies.

vein that "the colonies gave up their elected assemblies voluntarily, for in most cases the white, privileged classes preferred direct imperial government to the government of the colored classes who were slowly obtaining greater representation in the legislative councils." This is in stark contrast to the mechanism that our theory emphasizes by which the assemblies' dissolution may have been supported by white and colored elites alike to shield colored elites from their greater accountability. There are, however, a few studies whose conclusions resonate with our proposed mechanism. Rogers argues that "fear of political displacement by the colored middle class was a primary reason for its cooperation in destroying representative government" (1970, p. 316). Our theory is closest to Fergus's 1994, p.81 conclusion that the point of *Crown Rule* was to alleviate elites' accountability for an extractive system as it created "a more subtly exclusive system as far as free blacks were concerned. There was only room [in it] for whites and their wealthy colored equivalents." In section 4.5 we will show that the detailed data we collected on elite groups' sizes at the time of the dissolution of assemblies, and on who supported the proposals for dissolution, is consistent with the predictions of our theory, and inconsistent with the majority view among Caribbean historians.

4 Interactions Between Elite Groups

4.1 Data

Voting Data: All the islands sent at least partial records of the assemblies to London, where they are kept under the header *Assembly Minutes* in the *Colonial Office Records* in the British National Archives. We photographed and digitized these books and painstakingly assembled the scattered roll-call information. Only six of the islands reported at least partial roll-call voting data. These were Barbados, Dominica, Grenada, Jamaica, Montserrat and Tobago. Table 1 displays the number of proposals per year for which we were able to find roll-call votes in each colony. The table also shows legislative sessions, which loosely corresponded to electoral cycles, with the caveat that elections in some parishes occurred a few months before or after the start of a session so that island-wide electoral cycles were less regular than legislative sessions. In Barbados, there were no legislative sessions, and all parishes had annual or bi-annual "rolling" elections, i.e. at different months in each parish.

Table 1: Voting Data

Years	Jamaica		Barbados		Grenada		Tobago		Montserrat		Dominica	
1837 , 1838	18		15	12	99						30	33
1839 , 1840	15	9	14	25	15	8				1	25	51
1841 , 1842	22		28	36		5				1	44	40
1843 , 1844	29	42	29	23	28		1	5	5	11	29	53
1845 , 1846	49	38	29	20		6	3	6			19	15
1847 , 1848	35	55	6	35	7	45	2	4			47	43
1849 , 1850	128	91	28	34	3	26	1				58	23
1851 , 1852	69	73	15	9	16	14	3	5		2	30	115
1853 , 1854	84	57	17	18	16	11	1	6	3		54	29
1855 , 1856	52	25	6		3		3	1	1		15	8
1857 , 1858	43	83	5	29		15	2				10	6
1859 , 1860		71	37	20	25	17			2		16	8
1861 , 1862	33		22	29	37	21	2				13	10
1863 , 1864	75	75	31	37	47		2	2				
1865 , 1866			34	54	51			2				
1867 , 1868			47	93	9	9	4	1				
1869 , 1870			121	65	33	58	3	6				
1871 , 1872			89	81	55		2					
1873 , 1874			80	101	47	27	3	5				
1875 , 1876			35		71	1						

Notes: This table displays the number of proposals for which we have voting data from each island's *Assembly Minutes*. For example, there are 9 proposals in Jamaica in 1840. Each row displays two years to conserve space. Frames around years denote legislative sessions, except in Barbados, which had annual elections. See discussion in text.

Assemblymen Data: Antigua, St. Kitts, Nevis, and St. Vincent did not report roll-call data. For them we gleaned the names and electoral dates for all assemblymen from the *Councils & Assembly* section of the *Colonial Blue Books*. For the other six colonies we also did this as a data check on the *Minutes*.

Assigning Elite Group Labels: In the theory, individual elite members have an occupation $g = P, M$ and a social type that is accountable or unaccountable, $\theta = u, a$. We denote the set of planters with social identity θ by P^θ, and the set of merchants with social identity θ by M^θ. The empirical counterpart to this in the Caribbean context is that white elites were (relatively) unaccountable and colored elites (relatively) accountable. The terms 'white planter' and 'colored planter' are thus used interchangeably with the labels P^u and P^a.

To assign each assemblymen one of the four group labels, our starting point was plantation ownership records. Before emancipation, plantation records were consistently collected in the 1820s *Slave Registries* and the 1835 *Emancipation Compensation Tables*.[28] We laboriously digitized

[28]When England's Parliament abolished slavery, it set aside money to compensate slave owners for their lost assets. The disbursal of that money was recorded in the *Compensation Tables*.

the *Slave Registries* ourselves, while the *Compensation Tables* data had been digitized by a research project at University College London. After emancipation, the collection and publication of plantation ownership records was much more fragmented and mostly depended on the initiative of private businessmen publishing so-called *Almanacs*. Altogether, we collected 61 plantation surveys from 43 distinct publishing sources.[29] Appendix C contains details of the data sources and data collection. In a first step, we coded assemblymen as 'white planters' if they belonged to families that were pre-Emancipation sugar plantation owners. We code assemblymen as 'colored planters' if they only appear on the plantation ownership records after emancipation. The remainder of assemblymen were coded as merchants, which also included a sizable number of lawyers and professionals. Of these, we coded assemblymen who were represented in the assemblies before Emancipation as 'white merchants.' The later plantation ownership records also show that in two colonies—Grenada and Dominica—some new plantation owners converted their plantations to grow different crops, most commonly cocoa, firewood, livestock and provisions. Dippel, Greif, and Trefler (2015) carefully document the fact that these crops were not 'plantation crops' in the sense of being owned by large scale planters and run under a coercive plantation mode of production. We therefore label new owners on the plantation records as 'colored planters' only if they produced sugar, and as 'colored merchants' if they produced cocoa, firewood, livestock and provisions.[30]

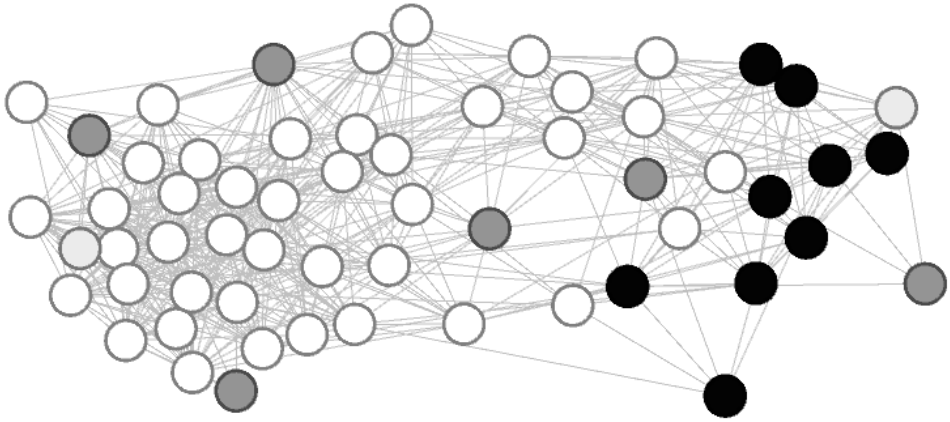
From this starting point, we perused an extensive list of social histories of the individual islands to verify and amend our coding in a second step. In total we perused twenty-nine secondary sources for the coding of assemblymen's social and economic identity in the ten islands. To avoid clogging the paper's references with citations of island-specific source materials, these sources are listed in Online Appendix B.

Outcome Variable of Interest: Consider Figure 3. It depicts the network of voting relations between all assemblymen in Jamaica's 1844–1848 legislative session. White nodes are 'white planters', the two light-grey nodes (one on the far-left and one on the far-right) are 'white merchants', the six dark-grey nodes are 'colored planters', black nodes are 'colored merchants'. In this

[29]Where estates belonged to absentee owners, the *Slave Registries* and most post-Emancipation records included information on owners as well as on the estates' attorneys.

[30]As long as the production of cocoa, firewood etc. is less labor-intensive than sugar cultivation, so that such producers benefit less from lower wages than sugar planters, these producers vote in the same way as merchants in our model. Hence the distinction between them and merchants is not an important one.

Figure 3: Voting Network in Jamaica's Parliament, 1844–1848 Session



Notes: White nodes are 'white planters', the two light-grey nodes on the far-left and far-right are 'white merchants', the six dark-grey nodes are 'colored planters', black nodes are 'colored merchants'. This network visualization has no scale and no axis. Two nodes are connected by an 'edge' if they agreed on more than two-thirds of the bills on which both voted, or not connected if they agreed on less. The placement of nodes in the graph is determined by these edges.

visualization, two nodes are connected by an edge if they agreed on more than two-thirds of the bills on which both voted, or not connected if they agreed on less. The placement of nodes in the graph is determined by these edges, i.e the white planters and the colored merchants appear to be separate blocs because they tended to agree among themselves and disagree with each other.[31] In short, figure 3 considers the bilateral voting relations between individual assemblymen and elite groups visually appear as blocs if voting agreement is higher within group than across groups. We do not have sufficient information about the proposals being voted on to reliably isolate proposals for extractive policies. Often the minutes report no information at all about a proposal. At other times, they may report on the broad topic of a proposal, e.g. "a proposal to change squatting laws", a potentially extractive policy, but without specifying important details such as whether a loosening or a strengthening of a legislation is proposed. For the regressions that follow we therefore collapse the network of pairwise voting relations measured over all proposals into a single measure of each assemblyman i's voting agreement with the white landowner coalition, which we take as the benchmark for supporting extractive policies.[32]

[31] Figure 3 was built in Gephi, using the Yifan Hu visualization algorithm.

[32] Any reasonable reading of Caribbean history has to conclude that white landowners were the group most interested in and supportive of extractive wage-depressing policies. See Dippel et al. (2015).

Specifically, we take the full network of voting relations in a given year, where one observation consists of a pair of assemblymen and their vote on a single proposal. Let K_{ijt} be the set of proposals that both individuals i and j voted on in year t, indexed by k. Define $N_{ijt} = |K_{ijt}|$. Let $I_{ijk} = 1$ if assemblymen i and j agree on proposal k. For assemblyman i, we have that his average agreement with each other assemblyman j in year t is defined as $\text{agree}_{ijt} \equiv N_{ijt}^{-1} \sum_{k \in K_{ijt}} I_{ijk}$. For any assemblyman i we measure his voting agreement with the white landowner coalition, i.e. the set P^u, as $\frac{1}{|P_t^u|} \sum_{j \in P_t^u} \text{agree}_{ijt}$, where $|P^\theta|$ denotes the number of planters with social identity θ, $\theta = a, u$. In a legislative session like the one depicted in Figure 3, colored merchants (black nodes) on average displayed lower voting agreement with the white planters (white nodes), i.e. a lower value of $\frac{1}{|P_t^u|} \sum_{j \in P_t^u} \text{agree}_{ijt}$, than did colored planters (dark-grey nodes) or white merchants (light-grey nodes).

4.2 Elite Identity & Voting Behavior

We begin by pooling all 3,650 assemblyman-year observations in our data and asking whether the four elite groups exhibit distinct voting patterns on average. As a benchmark, white planter assemblymen in the data agree with all white planters in the same year on average 65% of the time. In table 2, we regress an individual assemblyman's voting agreement on only six colony fixed effects, year fixed effects and on a dummy for their own group $D(i \in g^\theta)$, for $g = P, M$ and $\theta = a, u$, with white planters as the omitted category $D(i \in P^u)$.

For our preferred specification with year fixed effects, column 2 suggests that colored planters agreed 1.9% less with the white planter coalition than the white planters agreed among themselves, while white merchants and colored merchants appear to have respectively agreed 3.9% and 8% less. This is in line with the theory; colored merchants should be the least in favor of extractive policies due to both their economic and social identities.[33]

[33]Colored planters may disagree with the white planters because of their accountability under the threat of revolt, while white merchants disagree because they have an economic incentive not to support extractive policy. The relative rate of agreement between these two blocs thus depends on the threat of revolt and the economic gains to the different occupations from lower wages.

Table 2: Pooled Difference in Voting Behavior Across Four Elite Groups

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
D($i \in P^a$)	-1.078	-1.940[a]	-3.276[a]	-2.501[a]	0.322	-1.971[a]	-1.965[a]	-1.557[b]
	(1.64)	(2.99)	(3.40)	(3.91)	(0.43)	(2.97)	(3.01)	(2.33)
D($i \in M^u$)	-4.322[a]	-3.991[a]	-4.584[a]	-3.833[a]	-2.261[b]	-4.158[a]	-3.996[a]	-3.893[a]
	(5.05)	(4.73)	(4.59)	(3.67)	(2.18)	(4.80)	(4.72)	(4.67)
D($i \in M^a$)	-7.118[a]	-8.077[a]	-9.009[a]	-8.773[a]	-2.139[a]	-8.092[a]	-8.085[a]	-9.795[a]
	(13.41)	(15.11)	(13.58)	(15.51)	(2.79)	(14.81)	(15.03)	(18.57)
drop:			Barbados	Grenada	Jamaica	Tobago	Montserrat	Dominica
fixed effects	colony	colony	colony	colony	colony	colony	colony	colony
year fixed effects		Y	Y	Y	Y	Y	Y	Y
Observations	3,605	3,605	2,541	2,872	2,606	3,316	3,533	3,157
R-squared	0.083	0.140	0.126	0.179	0.075	0.144	0.139	0.190

Notes: There are 3,650 assemblyman-year observations, with assemblymen divided amongst the four elite types P^u ('white planters'), P^a ('colored planters'), M^u ('white merchants') and M^a ('colored merchants'). Regressing each assemblyman's support for the 'white planter coalition' only on their elite type as well as colony and year fixed effects, column 2 shows that colored planters, white merchants and colored merchants respectively agreed 1.9%, 3.9% and 8% less with the 'white planter coalition' than the omitted category of how much white planters agreed among themselves. Columns 3–8 drop one colony at a time from the data. In brackets are t-statistics for robust standard errors. Superscripts *a*, *b*, *c* denote 1%, 5% and 10% statistical significance.

4.3 The Threat of Revolt

Proposition 5 of the theory states that in response to an increased threat of revolt unaccountable types will become more heavily represented in supporting extractive policies. As an empirical counterpart to an increased threat of revolt, we use data on riots from Cundall's 1906 comprehensive list for the Caribbean in this period. Riots were a common occurrence in the Caribbean, and were always viewed by elites as a threat of more serious revolts to come. Hence we view the incidence of a riot as an exogenous shock which induces individuals to revise upward their estimate of the likelihood of revolt δ. Viewed through the lens of our model, the islands moved from panel (*a*) to panel (*c*) in Figure 2. In Jamaica (Lewis, 2004, p.96), St. Vincent (Rogers, 1970, p. 263), Tobago (Craig-James, 2000, p.251), and the Virgin Islands (Dookhan, 1977, p.202), the assemblies apparently dissolved themselves as a direct response to riots, which were in all four cases clearly the consequence of extractive policies aimed at reducing wages. We will further examine the dissolution of assemblies in section 4.5. For now, we note that it would be futile to try and statistically test whether riots caused the dissolution of assemblies in Jamaica, St. Vincent, Tobago

Table 3: Riots

	(1)	(2)	(3)	(4)	(5)	(6)
Year(Riot) · D($i \in P^u$)	2.36	1.049	2.139	1.127	1.749	1.736
	(1.56)	(0.59)	(1.44)	(0.65)	(1.21)	(1.04)
Year(Riot) · D($i \in P^a$)	-1.986	-2.166	-2.339	-2.222	-6.971[b]	-6.818[b]
	(0.62)	(0.65)	(0.74)	(0.68)	(2.25)	(2.14)
Year(Riot) · D($i \in M^a$)	-3.253[c]	-3.229	-2.504	-2.587	-2.914[c]	-3.632[c]
	(1.85)	(1.52)	(1.44)	(1.23)	(1.79)	(1.82)
Year(Riot) · D($i \in M^u$)	2.023	1.598	2.961	1.982	4.187	3.385
	(0.56)	(0.43)	(0.84)	(0.54)	(1.18)	(0.93)
fixed effects			colony	colony	indiv.	indiv.
year fixed effects		Y		Y		Y
Observations	3,605	3,605	3,605	3,605	3,605	3,605
R-squared	0.085	0.125	0.117	0.165	0.455	0.486
p-value[P^u=P^a]	0.222	0.360	0.200	0.330	0.011	0.011
p-value[P^u=M^a]	0.015	0.067	0.041	0.105	0.031	0.015
p-value[P^u=M^u]	0.931	0.887	0.829	0.821	0.522	0.664

Notes: The theory predicts that colored elites will disproportionately reduce their support for the white planter coalition in response to an increased threat of revolt. As a test, this table reports on the effect of an outbreak of riots on each elite group's voting behavior in the year of the riot. Columns 2, 4, and 6 include year fixed effects. Columns 3–4 include colony fixed effects. Columns 5–6 are our core specification which includes individual fixed effects to isolate changes in individual voting behavior. In columns 5–6, both colored planters and colored merchants become significantly less supportive of the white planter coalition relative to how agreement *within* the white planter coalition changed, with p-values of 0.011 and 0.015 respectively. In brackets are t-statistics for robust standard errors. Superscripts *a*, *b*, *c* denote 1%, 5% and 10% statistical significance.

and the Virgin Islands. Instead, we test if the outbreak of other riots for which we have records and which did not lead to the dissolution of an assembly induced accountable colored elites to reduce their support for the white planter coalition, and whether the effect on white elites was the opposite. For the six islands for which we have roll-call data, there were three noteworthy riots in Cundall's 1906 comprehensive list during the period under consideration. In June 1844, 'la Guerre Negre' broke out in Dominica. On February 12th and August 1st 1859, the 'Toll Bar Riots' and the 'Florence Hall Riot' broke out in Jamaica. In Dominica in 1844, all recorded riots occurred in the second half of the year, so we code 1844 as the year after the riots. In Jamaica because the 'Toll Bar' and the 'Florence Hall' riots occurred respectively at the beginning and end of 1859, we code 1859 and 1860 each as the year after a riot.

Table 3 reports the results. Columns 2, 4, and 6 include year fixed effects. Columns 3–4 include

colony fixed effects. Columns 1–4 confound changes in individual voting behavior with compositional effects. For example, the colored assemblymen least supportive of the white planter coalition may have voted less regularly after riots. In columns 5–6 our preferred specification therefore includes individual fixed effects to isolate changes in individual voting behavior, thus parsing out compositional effects. The theory predicts that accountable elites will reduce their support for extractive policies and that unaccountable elites will step up in response and increase their support for the same policies. This prediction is supported by the data. The hypothesis that colored elites respond in the same way as white planters to an increased threat of revolt is strongly rejected. Specifically, the p-value for the two-sided test that the response of colored planters is the same as white planters is rejected at the 1.5% level of statistical significance (p-value$[P^u = P^a]$ = 0.015 in column 6), and the response of colored merchants is the same as white planters is rejected even more soundly (p-value$[P^u = M^a]$ = 0.011). By contrast, both white merchants and white planters appeared to 'step up' their support for extractive policies in response.[34]

4.4 Group Size Interactions

Proposition 4 of the theory states that (*i*) each individual accountable elite member becomes more likely to support the extractive policy if the number of unaccountable elite members decreases, and that (*ii*) each individual merchant elite member becomes more likely to support the extractive policy if the number of planters decreases. The reason is again that individuals are forced to 'step up' if other elite members are on average less supportive of extractive policies. In the Caribbean context colored planters and merchants had to 'fill the void' when the white planter elite shrank.

The discussion in section 3 suggests that the EEA exogenously reduced the size of the white planter elites in the islands and precipitated the rise of a colored planter elite. To validate this, we converted the plantation ownership information in Appendix C into a panel of stacked first differences of plantation ownership, and tested the hypothesis that the introduction of the EEA had a large effect on ownership turnover. Table 1 and Figure 1 in the online appendix show that ownership indeed turned over far more frequently in the decade after the introduction of the EEA, while plantation survival itself was not affected. To further allow for the inclusion of year

[34]When compared to the counterfactual of *no* change in voting behavior – i.e. the standard hypothesis test of the reported t-values – the effect on colored elites is less significant but still clearly present.

Table 4: The Encumbered Estate Act and Bloc Size

Seat Shares:	$\|P^u\|$		$\|P^a\|$		$\|M^a\|$		$\|M^u\|$	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
D(EEA)	-16.471[a]	-12.443[a]	5.795[a]	2.804[a]	13.945[a]	7.858[a]	-3.269[a]	1.781
	(12.12)	(7.95)	(6.70)	(2.69)	(6.59)	(3.02)	(2.99)	(1.39)
fixed effects	colony	colony	colony	colony	colony	colony	colony	colony
year fixed effects		Y		Y		Y		Y
R-squared	0.939	0.963	0.844	0.904	0.732	0.835	0.714	0.875
Observations	153	153	153	153	153	153	153	153

Notes: This table collapse the main data down to the colony-year specific seat shares of each elite group. We denote by $|g^{\theta}|$ the seat share for each group, $g = P, M$ and $\theta = u, a$. The raw seat shares are reported in online appendix table 2. Each column reports on a separate regression, with each pair of columns reporting on one elite group's seat shares. In brackets are t-statistics for robust standard errors. Superscripts *a*, *b*, *c* denote 1%, 5% and 10% statistical significance.

fixed effects, we additionally exploit the fact that the timing of the EEA's impact on elite blocs in the assemblies depended on each island's electoral cycle. Although the EEA was introduced uniformly across the Caribbean in 1854, the first post-EEA legislative session started in different years in the islands, depending on the timing of electoral cycles. In Jamaica this was 1854, in Montserrat 1856, in Grenada 1858, in Dominica in 1859, and in Tobago in 1863. Additionally, Barbados was the only island that chose not to adopt the EEA. Table 2 in the online appendix illustrates this colony-specific timing and how it affected the sizes of the different elite blocs on each island. In Table 4 we collapse the main data down to the colony-year specific seat shares of each elite group. The raw seat shares are reported in online appendix Table 2. Each column reports a separate regression, with each pair of columns reporting one elite group's seat share. The more stringent specification with year fixed effects suggests that the EEA reduced the seat share of white planters by 12% while raising the seat shares of colored planters and colored merchants by 3% and 8% respectively.[35] Table 4 thus illustrates that the EEA had a substantial effect on elite churning.

We are interested in the effect of a shrinking white planter bloc on the voting behavior of the other elite groups. According to Proposition 4, when accountable landowners (i.e. white planters) are replaced, other elite members $i \in \{P^a, M^a, M^u\}$ step up and increase their likelihood of voting for extractive policy. We test this hypothesis using the EEA as an instrument for the size of the white planter bloc. Because we are interested in changes to individuals' voting behavior holding

[35]We coded colored plantation owners that grew smallhold crops (cocoa, firewood, livestock or provisions) as 'colored merchants' because their interests were economically more aligned with the citizenry. For a discussion of what were true 'plantation crops' in the Caribbean see Dippel et al. (2015).

Table 5: Testing Proposition 4

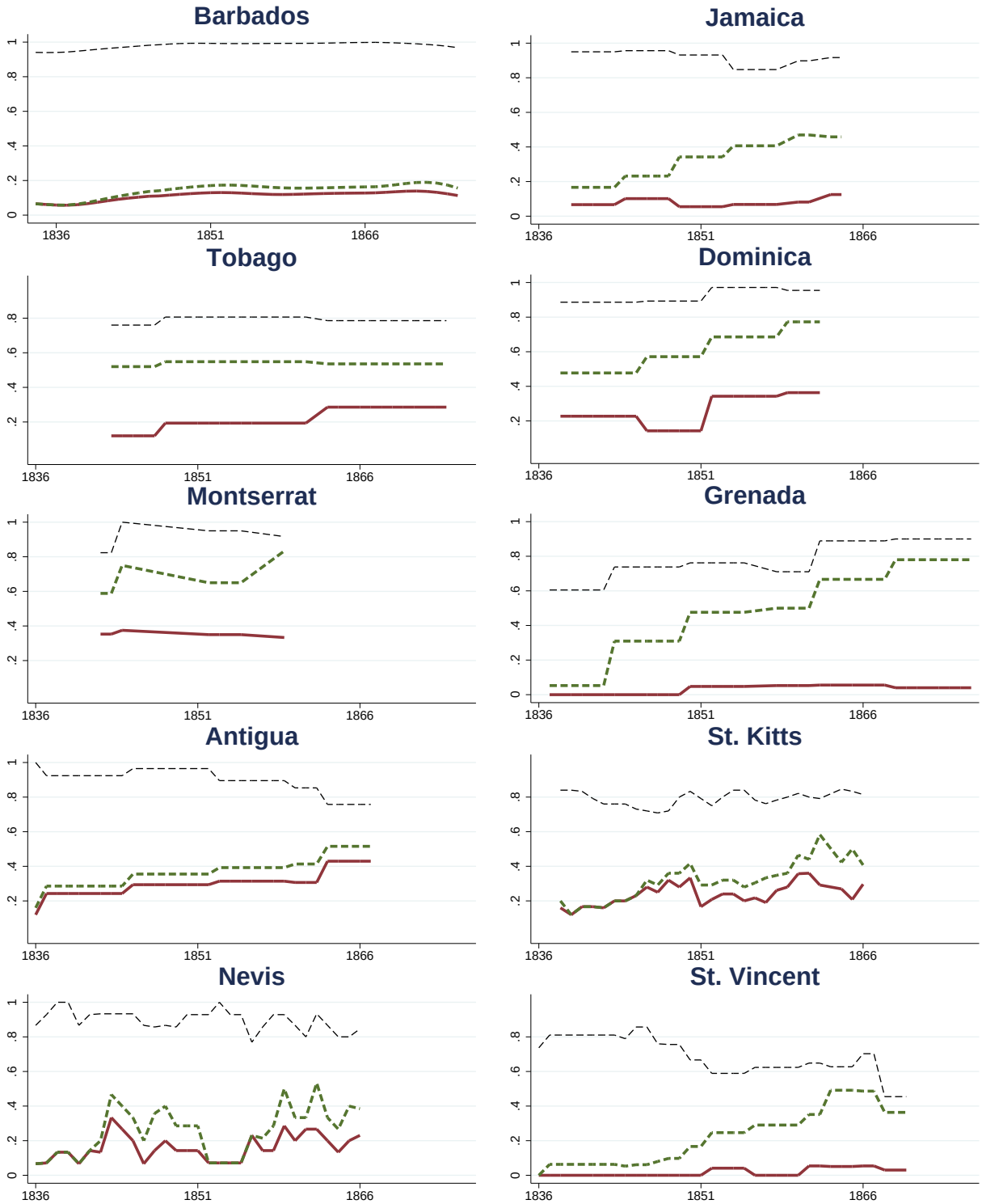
	OLS		IV	
	(3)	(4)	(1)	(2)
$\|\mathbf{P^u}\| \cdot \mathbf{D}(i \in \mathbf{P^a})$	0.042	0.261	-0.580[a]	-0.488[b]
	(0.26)	(1.57)	(2.77)	(2.13)
$\|\mathbf{P^u}\| \cdot \mathbf{D}(i \in \mathbf{M^a})$	0.035	0.153	-0.312[a]	-0.380[a]
	(0.43)	(1.63)	(2.81)	(2.81)
$\|\mathbf{P^u}\| \cdot \mathbf{D}(i \in \mathbf{M^u})$	0.187	0.340[a]	0.090	0.133
	(1.51)	(2.58)	(0.40)	(0.55)
fixed effects	indiv.	indiv.	indiv.	indiv.
year fixed effects		Y		Y
Observations	3,605	3,605	3,605	3,605

Notes: This table reports the effect of a shrinking white planter bloc (a falling seat share $|P^u|$) on the other elite groups' voting agreement with the white planters. Columns 1–2 report the OLS results. In columns 3–4 we isolate exogenous changes in $|P^u|$, instrumenting for $|P^u|_{ct} \times D(i \in g^\theta)$ with $D(\text{EEA})_{ct} \times D(i \in g^\theta)$, for $g = P, M$ and $\theta = u, a$, in each colony c at time t. Shrinking the size of the white planter group by 50 percent increased the average colored planter's voting agreement with them by 29 percent and the average colored merchant's voting agreement by 16 percent (-0.5×-0.580, and -0.5×-0.312). In brackets are t-statistics for robust standard errors. Superscripts *a*, *b*, *c* denote 1%, 5% and 10% statistical significance.

constant any time-invariant individual heterogeneity that shapes their voting behavior, we again include individual fixed effects.

Columns 1–2 report the OLS results. Without an exogenous source of variation in group sizes, there are no clear patterns discernible. However, when we instrument for $|P^u|_{ct} \times D(i \in g^\theta)$ with $D(\text{EEA})_{ct} \times D(i \in g^\theta)$, for $g = P, M$ and $\theta = u, a$ in colony c at time t, the theory's predictions are supported by the data. Column 3 in Table 5 reports the core results. Consistent with our theory, we find that *individual* colored planters and colored merchants shifted their voting behavior toward extractive policies in response to the exogenous decline in the share of white planters induced by the EEA. Shrinking the size of the white planter group by 50 percent increased the average colored planter's voting agreement with them by 29 percent and the average colored merchant's voting agreement by 16 percent (-0.5×-0.580, and -0.5×-0.312). There is no effect on white merchants which were a small group in the data and not an historically significant faction. This finding is robust to including year fixed effects in column 2.

Figure 4: Four Elite Groups' Share of Assembly Seats



Notes: The figure displays the evolution of the different elite groups' share of assembly seats over time. The vertical axis is the percentage accruing to bloc sizes. The thick solid red line is the colored landowners' share. The thick dashed green line *adds to this* the colored merchants' share to represent the total share of colored elites. The thin dashed black line *adds to this* the white landowners' share. The remainder between that line and 100 percent is the white merchants' share. The end-point is marked in each island by its Assembly's dissolution, with the exception of Barbados, where we set the end-point at the dissolution of the last two Assemblies, i.e. Grenada's and Tobago's, in 1876.

4.5 The Dissolution of the Assemblies

Proposition 6 of the theory states that when the elite becomes too accountable, it may pay to reduce the threat of revolt, for example by ceding power and inviting the military to take over. In the context of the 19th century Caribbean this meant ceding power to the British colonial adminstration which had the backing of the British Navy to put down revolts, as demonstrated by the violent suppression of the Indian Mutiny in 1857. The elite could become too accountable in two ways: either its share of accountable types becomes too large (moving left along the accountability-axis in Figure 2), or the threat of revolt becomes too large (moving from panel (*a*) to (*c*) in Figure 2).

We now ask to what extent Caribbean history supports the view that elites dissolved their assemblies because they had become too accountable to the citizenry to maintain the existing extractive policies under the status quo institutional arrangement. Figure 4 tracks the evolution of the four elite groups' seat shares in each of the ten assemblies from Emancipation to their dissolution, i.e. each assembly's time-series ends with its dissolution. In 1876 Grenada was the last island to dissolve its assembly, through what was in the Assembly Minutes labeled an *Act to Simplify the Legislature*. Barbados was the only island never to dissolve its assembly, so we display its time-series only to 1876. The top-left panel in Figure 4 shows that it was an outlier in another respect: In Barbados, the dominance of white landowner elites was never seriously affected by Emancipation. Online Appendix D provides a detailed discussion of Barbados' geography, which provides an explanation for why it was easier there than elsewhere to tax smallholders, and thereby increase planter profits and depress the emergence of a mercantile sector. As a result, the pre-Emancipation political equilibrium was never seriously challenged in Barbados.

Looking across the other nine islands, one clear pattern is an increase in colored elites' seat shares after 1854 and in the lead-up to each assembly's dissolution. In Grenada, Montserrat and St. Vincent plantation owners were in the minority when the assemblies were dissolved.[36] In Tobago and Dominica, they had only small majorities. In Grenada, Montserrat and Dominica the majority of the elite was colored at the time the assemblies were dissolved. This is consistent with

[36]In St. Vincent there was not in fact an expanding white mercantile sector as suggested by the picture. Instead, the 'white merchants' in St. Vincent were in large part British colonial administrators, which we group into the same category because they were not important in any of the other islands' assemblies. Smith (2009) argues that the rate of absentee plantation ownership was much more prevalent in St. Vincent than in the other islands, and it may be that the absentee owners politically endorsed British administrators as candidates in their voting parishes for lack of a better alternative. We suspect that the colonial administrators in St. Vincent were sympathetic towards ceding more power to the Crown, so this case may not fit our theory.

historical accounts of these islands by Green (1991, p.296), Rogers (1970, p.164), and Honychurch (1984, p.70). In all the other islands except Barbados colored elites occupied close to half of the seats by the end of the period. Tobago is the only island that does not display a pronounced increase in colored elites' representation in the lead-up to its assembly's dissolution. Tobago was, however, one of the four islands where an upsurge in the threat of revolt appears to have motivated the assembly's dissolution. The 'Bellmana Riots' broke out in Tobago in April 1876. These riots marked a steep increase in the threat of serious revolt, which our theory suggests has the same effect as changes in elite composition of undermining an elite's ability to sustain extractive policy. By year's end, the Tobagian assembly had dissolved itself (Craig-James 2000, p.237,251).

The combined evidence lends strong support to this paper's core mechanism, which is the corrosive effect that accountability has on elites' ability to sustain extractive policies. It is worth noting that while Caribbean historians' views vary on which elite groups supported the assemblies' dissolution (see the discussion towards the end of section 3), there is a clear consensus that this institutional change was a detriment to the citizenry. This is supported in some of the evidence we have uncovered in the *Assembly Minutes*. In the Nevis *Minutes* for example, the meeting of June 14th 1866, when the dissolution of the assembly was voted on, began with the reading of a petition by smallholders to prevent the constitutional changes. In Antigua Lowes (1995, p.46) suggests that "The vote took place in secrecy to forestall any public protest." Indeed, the records for the final proposal that dissolved the assembly are conspicuously missing from all but one of the colonies in Table 1 for which we generally have roll-call data.

However, in the limited roll-call information that is available, we can glean additional evidence from asking which individual elite members supported the dissolution of the assemblies.The only two colonies for which we have the roll-call information for the final proposal are St. Vincent, where we do not have roll call information for any other proposals, and Grenada. In St. Vincent, the bill passed twelve to five. Of the four assemblymen identified as white planters, three voted in favor of the bill. All of the four white merchants voted in favor. The colored merchants were split five to three in favor, and the only colored planter voted against it. In Grenada, the only colored planter voted in the bill's favor, the colored merchants were split eight to five in its favor, and

the two white merchants voted against it.[37,38] In short, the limited evidence suggests that colored elites were barely, if at all, less supportive of the assemblies' dissolution.

The evidence we present does not accord with those Caribbean historians who have viewed the assemblies' abolition as an attempt by white elites to prevent a colored majority taking control (Ashdown 1979, p.34, Lowes 1994, p.35). Instead , it suggests a more nuanced view of Caribbean race relations in which colored elites wanted to preserve "elite rents". In keeping with our theory, it appears that colored elites preferred to pull the 'ripcord' of inviting Crown rule because their accountability to the black citizenry prevented them from openly supporting extractive policies which they preferred.

5 Discussion & Conclusion

In this paper, we study the effect of elite identity on political accountability. The elite is partitioned into groups based on economic interest and social identity. The focus on social identity in particular is novel in the literature. Generally, social identity means traits such as race, religion and nationality that affect the relationship between the elite and non-elite citizenry. More specifically, we link social identity to accountability, i.e., some elite groups are subject to greater discipline by the citizenry for supporting certain policies. We study interactions between elite groups that have a strong economic interest in extractive policies and no accountability (the 'white planters'), an equal economic interest in extractive policies but are held accountable (the 'colored planters'), and a weaker economic interest in extractive policies and are in addition held accountable for supporting them (the 'colored merchants'). The relationship between elite accountability at the individual level and equilibrium political outcomes is complex and possibly non-monotonic. Our theoretical predictions are supported by data on locally elected assemblies in ten British Caribbean sugar colonies in the 19th century, where we can get an unusually complete picture of the identities and voting behavior of local elites, and where the economic incentives and social identities of each elite group are clearly identifiable, being anchored in the islands' historical context.

[37] The numbers given do not match perfectly the shares reported in Figure 4 because those shares are calculated over the full legislative session and there was always some churning happening throughout.

[38] It also appears that the other five put up a fight: The second-to-last bill of Grenada's Assembly in 1876 was "an amendment to rename the *Act to Simplify the Legislature* into *An Act to diminish the rights of the people in electing, from their own body, fit and proper representatives, and to lay oppressive taxation on every side*," which was voted down.

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Appendix A Mathematical Appendix

Proof of Proposition 1. Consider $v^* = \mathbf{0}$. The equilibrium payoff to each i is $\pi_g(0)$. As $n > 2$, a unilateral deviation to $v_i = 1$ yields $\pi_g(0) - \delta h(\theta_i) z_i$. This is no greater than his equilibrium payoff because $\delta > 0$ and $z_i \geq 0$ for all i. Hence there is no profitable deviation for any i.

Now consider $v^* \in \bar{V}$. For $v_i = 0$, the equilibrium payoff to i is $\pi_g(1)$. A unilateral deviation to $v_i = 1$ yields $\pi_g(1) - \delta h(\theta_i) z_i \leq \pi_g(1)$. For $v_i = 1$, the equilibrium payoff to i is $\pi_g(1) - \delta h(\theta_i) z_i$. A unilateral deviation to $v_i = 0$ yields $\pi_g(0)$, which is greater than i's equilibrium payoff if and only if $\pi_g(1) - \pi_g(0) - \delta h(\theta_i) z_i = d_i < 0$. Hence d_i must be nonnegative for all $\lceil \frac{1}{2} n \rceil$ elite members voting for the extractive policy. This requires d^* to be nonnegative.

For all pure equilibria such that $\sum_{i \in E} v_i$ does not equal 0 or $\lceil \frac{1}{2} n \rceil$, there is a profitable deviation for some i from $v_i = 1$ to $v_i = 0$. This completes the proof. □

Proof of Proposition 2. *Ex post*, the extractive policy is implemented if $d^* \geq 0$. The *ex ante* likelihood that the extractive policy is implemented $Pr(D^* \geq 0)$ is calculated as follows. Let $\gamma(E, k)$ denote the set of k-subsets of E. Define

$$\Gamma\big(E, K\big) \equiv \bigcup_{k=K}^{|E|} \gamma(E, k),$$

with typical member A. Then

$$Pr(D^* \geq 0) = \sum_{A \in \Gamma\left(E, \left\lceil \frac{1}{2}|E| \right\rceil\right)} \Pi_{j \in A} Pr(D_j \geq 0) \Pi_{j' \notin A} Pr(D_{j'} < 0). \tag{5}$$

Note that the following statements are equivalent:

$$\begin{aligned} D_j &\geq 0 \\ \pi_{g_j}(1) - \pi_{g_j}(0) - \delta h(\theta_j) Z_j &\geq 0 \\ \frac{\pi_{g_j}(1) - \pi_{g_j}(0)}{\delta h(\theta_j)} &\geq Z_j. \end{aligned} \tag{6}$$

Define $\Delta_j \equiv \frac{\pi_{\theta_j}(1) - \pi_{\theta_j}(0)}{\delta h(\theta_j)}$. Hence $Pr(D_j \geq 0) = F(\Delta_j)$. As such, (5) can be reexpressed as

$$
\begin{aligned}
Pr(D^* \geq 0) &= \sum_{A \in \Gamma\left(E, \left\lceil \frac{1}{2}|E| \right\rceil\right)} \Pi_{j \in A} F(\Delta_j) \Pi_{j' \notin A} \left[1 - F(\Delta_{j'})\right] && (7) \\
&= \sum_{A \in \Gamma\left(E - \{i\}, \left\lceil \frac{1}{2}|E| \right\rceil - 1\right)} F(\Delta_i) \Pi_{j \in A} F(\Delta_j) \Pi_{j' \notin A} \left[1 - F(\Delta_{j'})\right] \\
&\quad + \sum_{A' \in \Gamma\left(E - \{i\}, \left\lceil \frac{1}{2}|E| \right\rceil\right)} \left[1 - F(\Delta_i)\right] \Pi_{j \in A'} F(\Delta_j) \Pi_{j' \notin A'} \left[1 - F(\Delta_{j'})\right] && (8) \\
&= F(\Delta_i) \sum_{A \in \gamma\left(E - \{i\}, \left\lceil \frac{1}{2}|E| \right\rceil - 1\right)} \Pi_{j \in A} F(\Delta_j) \Pi_{j' \notin A} \left[1 - F(\Delta_{j'})\right] \\
&\quad + \sum_{A' \in \Gamma\left(E - \{i\}, \left\lceil \frac{1}{2}|E| \right\rceil\right)} \Pi_{j \in A'} F(\Delta_j) \Pi_{j' \notin A'} \left[1 - F(\Delta_{j'})\right]. && (9)
\end{aligned}
$$

Now switch θ_i from u to a holding occupation g fixed. The difference in probabilities is

$$
Pr(D^* \geq 0; \theta_i = a) - Pr(D^* \geq 0; \theta_i = u) \propto F\left(\frac{\pi_g(1) - \pi_g(0)}{\delta h(a)}\right) - F\left(\frac{\pi_g(1) - \pi_g(0)}{\delta h(u)}\right), \qquad (10)
$$

which is negative because $h(a) > h(u) > 0$ and F is strictly increasing by assumption. Part (i) follows immediately.

Similarly switching i's occupation from P to M holding accountability θ fixed yields

$$
Pr(D^* \geq 0; g_i = M) - Pr(D^* \geq 0; g_i = P) \propto F\left(\frac{\pi_M(1) - \pi_M(0)}{\delta h(\theta)}\right) - F\left(\frac{\pi_P(1) - \pi_P(0)}{\delta h(\theta)}\right), \quad (11)
$$

which is negative because $\pi_P(1) - \pi_P(0) > \pi_M(1) - \pi_M(0)$ and F is strictly increasing by assumption. Part (ii) follows immediately. □

Proof of Proposition 3.

(i) Suppose $g_i = g_j = g \in \{P, M\}$, while $\theta_i = u$ and $\theta_j = a$.

Fix a value d^*. We claim that $Pr(D_i \geq d^*) > Pr(D_j \geq d^*)$. To establish the claim, note that the following statements are equivalent:

$$
\begin{aligned}
D_i &> d^* && (12) \\
\pi_g(1) - \pi_g(0) - \delta h(u) Z_i &> d^* && (13) \\
\frac{\pi_g(1) - \pi_g(0) - d^*}{\delta h(u)} &> Z_i. && (14)
\end{aligned}
$$

Hence

$$
Pr(D_i \geq d^*) = F\left(\frac{\pi_g(1) - \pi_g(0) - d^*}{\delta h(u)}\right). \qquad (15)
$$

Likewise

$$Pr(D_j \geq d^*) = F\bigg(\frac{\pi_g(1) - \pi_g(0) - d^*}{\delta h(a)}\bigg). \tag{16}$$

As $h(a) > h(u) > 0$ and F is strictly increasing by assumption, $Pr(D_i \geq d^*) > Pr(D_j \geq d^*) > 0$.

Since this applies for all values d^*, $Pr(v_i = 1) > Pr(v_j = 1)$ by (4).

(ii) Suppose $\theta_i = \theta_j = \theta \in \{a, u\}$, while $g_i = P$ and $g_j = M$.

Fix a value d^*. Compute

$$Pr(D_i \geq d^*) = F\bigg(\frac{\pi_P(1) - \pi_P(0) - d^*}{\delta h(\theta)}\bigg), \tag{17}$$

$$Pr(D_j \geq d^*) = F\bigg(\frac{\pi_M(1) - \pi_M(0) - d^*}{\delta h(\theta)}\bigg). \tag{18}$$

$\pi_P(1) - \pi_P(0) > \pi_M(1) - \pi_M(0)$ and F is strictly increasing by assumption. Hence $Pr(D_i \geq d^*) > Pr(D_j \geq d^*) > 0$.

Since this applies for all values d^*, $Pr(v_i = 1) > Pr(v_j = 1)$ by (4). □

Proof of Proposition 4. Recall that $Pr(v_i = 1) = \int_0^\infty Pr(D_i \geq d^*)\, dG(d^*)$.

Define $\Delta_i(d^*) \equiv \frac{\pi_{\theta_i}(1) - \pi_{\theta_i}(0) - d^*}{\delta h(\theta_i)}$. We have established that $Pr(D_i \geq d^*) = F\big(\Delta_i(d^*)\big)$, which is strictly decreasing in d^*.

Compute

$$G(d^*) = \sum_{A \in \Gamma\left(E, \left\lceil \frac{1}{2}|E| \right\rceil\right)} \Pi_{j \in A} F\big(\Delta_j(d^*)\big) \Pi_{j' \notin A} \big[1 - F\big(\Delta_{j'}(d^*)\big)\big]. \tag{19}$$

Start with the distribution G^1. Now switch $\theta_{i'}$ from u to a holding occupation $g_{i'}$ fixed. The new distribution is denoted by G^2. By the argument used above [see (7)-(10)], $G^1(d^*) < G^2(d^*)$ for all $d^* > 0$. Recall that $F\big(\Delta_i(d^*)\big)$ is strictly decreasing in d^*. Taken together, this implies

$$\int_0^\infty F\big(\Delta_i(d^*)\big)\, dG^1(d^*) > \int_0^\infty F\big(\Delta_i(d^*)\big)\, dG^2(d^*). \tag{20}$$

Therefore, $Pr(v_i = 1; G^1) > Pr(v_i = 1; G^2)$.

The same applies to a switch in $g_{i'}$ from P to M holding accountability $\theta_{i'}$ fixed. This establishes the proposition. □

Proof of Proposition 5. (i) Compute

$$\frac{\partial Pr(D^* \geq 0)}{\partial \delta} = \frac{\partial}{\partial \delta} \sum_{A \in \Gamma\left(E, \left\lceil \frac{1}{2}|E| \right\rceil\right)} \Pi_{j \in A} F(\Delta_j) \Pi_{j' \notin A} \left[1 - F(\Delta_{j'})\right] \tag{21}$$

$$= \sum_{i \in E} \frac{\partial}{\partial \Delta_i} \frac{\partial \Delta_i}{\partial \delta} \sum_{A \in \Gamma\left(E, \left\lceil \frac{1}{2}|E| \right\rceil\right)} \Pi_{j \in A} F(\Delta_j) \Pi_{j' \notin A} \left[1 - F(\Delta_{j'})\right] \tag{22}$$

$$= \sum_{i \in E} F'(\Delta_i) \frac{\partial \Delta_i}{\partial \delta} \sum_{A \in \gamma\left(E - \{i\}, \left\lceil \frac{1}{2}|E| \right\rceil - 1\right)} \Pi_{j \in A} F(\Delta_j) \Pi_{j' \notin A} \left[1 - F(\Delta_{j'})\right]. \tag{23}$$

The last line follows from (9). The expression is negative because $F'(.) > 0$, $0 < F(.) < 1$ and $\frac{\partial \Delta_i}{\partial \delta} < 0$ for all $i \in E$.

(ii) Consider two individuals i and j, with $\theta_i = a$ and $\theta_j = u$. Write $d_i(\delta)$ and $d_j(\delta)$ as functions of δ. The difference

$$d_j(\delta) - d_i(\delta) = \pi_{g_j}(1) - \pi_{g_j}(0) - \delta h(u) z_j - \left[\pi_{g_i}(1) - \pi_{g_i}(0) - \delta^2 h(a) z_i\right] \tag{24}$$

Suppose $\delta^2 > \delta^1 > 0$. The difference-in-difference is positive if and only if

$$d_j(\delta^2) - d_i(\delta^2) > d_j(\delta^1) - d_i(\delta^1) \tag{25}$$

$$(\delta^2 - \delta^1)[h(a) z_i - h(u) z_j] > 0. \tag{26}$$

Define $\mu = \int_0^\infty z \, dF(z) > 0$. In expectation, the LHS of (26) is $(\delta^2 - \delta^1)\mu[h(a) - h(u)]$ which is positive. Part (ii) follows. □

Proof of Proposition 6. (i) Define $\theta \equiv (\theta_i)_{i \in E}$. Denote the original profile of social identities by θ^1 and the profile after the hypothesized identity switches by θ^2. The corresponding random variables are D_1^* and D_2^* respectively.

Denote the equilibrium payoff to i as a function of z and social identity profile θ by $u_i^*(z, \theta)$. Denote its expectation over z by $U_i^*(\theta)$. Then:

$$\bar{T}^1 = \sum_{i \in E} T_i(\theta^1)$$

$$= \sum_{i \in E} \left[\pi_{g_i}(1) - U_i^*(\theta^1)\right]. \tag{27}$$

$\bar{T}^2$ can be computed similarly. We need to show $\bar{T}^2 > \bar{T}^1$, which is equivalent to:

$$\sum_{i \in E} \left[\pi_{g_i}(1) - U_i^*(\theta^2)\right] > \sum_{i \in E} \left[\pi_{g_i}(1) - U_i^*(\theta^1)\right]$$

$$\sum_{i \in E} \left[U_i^*(\theta^1) - U_i^*(\theta^2)\right] > 0. \tag{28}$$

To show (28) is satisfied, partition the set of realizations of $z = (z_i)_{i \in E}$ into subsets of which the following three have full measure:

- $S_1 = \{z \in (\mathcal{R}^+)^n : d_1^* > 0, d_2^* > 0\}$,
- $S_2 = \{z \in (\mathcal{R}^+)^n : d_1^* > 0, d_2^* < 0\}$,
- $S_3 = \{z \in (\mathcal{R}^+)^n : d_1^* < 0, d_2^* < 0\}$.

First, we claim that for each $z \in S_1$, $\sum_{i \in E} \left[u_i(z, \theta^1) - u_i(z, \theta^2)\right] \geq 0$. To establish the claim, denote the set of agents voting $v_i = 1$ under (z, θ^1) by $\hat{E}^1$. Similarly define $\hat{E}^2$. Then:

$$\begin{aligned} \sum_{i \in E} u_i(z, \theta^1) &\geq \sum_{i \in E} u_i(z, \theta^2) \\ n_P \pi_P(1) + n_M \pi_M(1) - \delta \sum_{i \in \hat{E}^1} h(\theta_i^1) z_i &\geq n_P \pi_P(1) + n_M \pi_M(1) - \delta \sum_{i \in \hat{E}^2} h(\theta_i^2) z_i \qquad (29) \\ \delta \sum_{i \in \hat{E}^2} h(\theta_i^2) z_i &\geq \delta \sum_{i \in \hat{E}^1} h(\theta_i^1) z_i. \qquad (30) \end{aligned}$$

By monotonicity, this is implied by:

$$\begin{aligned} \delta \sum_{i \in \hat{E}^2} h(\theta_i^2) z_i &\geq \delta \sum_{i \in \hat{E}^2} h(\theta_i^1) z_i \\ \delta \sum_{i \in \hat{E}^2} \left[h(\theta_i^2) - h(\theta_i^1)\right] z_i &\geq 0, \qquad (31) \end{aligned}$$

which holds because the hypothesized switches are from $\theta_i^1 = u$ to $\theta_i^2 = a$ and $h(a) > h(u)$. This establishes the claim.

Second, it is straightforward to show that S_2 has positive measure because $h(a) > h(u)$. In addition, we claim that for each $z \in S_2$, $\sum_{i \in E} \left[u_i(z, \theta^1) - u_i(z, \theta^2)\right] > 0$. As $d_2^* < 0$, $u_i(z, \theta^2) = \pi_{g_i}(0)$. As $d_1^* > 0$, $u_i(z, \theta^1) = \pi_{g_i}(1) - v_i \delta h(\theta_i^1) z_i > \pi_{g_i}(0)$ for all $i \in E$. This establishes the claim.

Third, for each $z \in S_3$, $\sum_{i \in E} \left[u_i(z, \theta^1) - u_i(z, \theta^2)\right] = 0$, because $u_i(z, \theta^1) = u_i(z, \theta^2) = \pi_{g_i}(0)$ for all $i \in E$.

Taken together, these facts imply that (28) is satisfied.

(ii) Now denote the equilibrium payoff to i as a function of z and δ by $u_i^*(z, \delta)$. Denote its expectation over z by $U_i^*(\delta)$. Then $\bar{T}^2 > \bar{T}^1$ is equivalent to:

$$\begin{aligned} \sum_{i \in E} \left[\pi_{g_i}(1) - U_i^*(\delta^2)\right] &> \sum_{i \in E} \left[\pi_{g_i}(1) - U_i^*(\delta^1)\right] \\ \sum_{i \in E} \left[U_i^*(\delta^1) - U_i^*(\delta^2)\right] &> 0, \qquad (32) \end{aligned}$$

where $\delta^2 > \delta^1$ by hypothesis. To prove that (32) holds, we follow a similar procedure to part (i).

First, we claim that for each $z \in S_1$, $\sum_{i \in E} \left[u_i(z, \delta^1) - u_i(z, \delta^2) \right] > 0$. To establish the claim, denote the set of agents voting $v_i = 1$ under (z, δ^1) by $\hat{E}^1$. Similarly define $\hat{E}^2$. Then:

$$\begin{aligned} \sum_{i \in E} u_i(z, \delta^1) &> \sum_{i \in E} u_i(z, \delta^2) \\ n_P \pi_P(1) + n_M \pi_M(1) - \delta^1 \sum_{i \in \hat{E}^1} h(\theta_i) z_i &> n_P \pi_P(1) + n_M \pi_M(1) - \delta^2 \sum_{i \in \hat{E}^2} h(\theta_i) z_i \qquad (33) \\ \delta^2 \sum_{i \in \hat{E}^2} h(\theta_i) z_i &> \delta^2 \sum_{i \in \hat{E}^1} h(\theta_i) z_i. \qquad (34) \end{aligned}$$

By monotonicity, this is implied by:

$$\begin{aligned} \delta^2 \sum_{i \in \hat{E}^2} h(\theta_i) z_i &> \delta^1 \sum_{i \in \hat{E}^2} h(\theta_i) z_i \\ \left(\delta^2 - \delta^1 \right) \sum_{i \in \hat{E}^2} h(\theta_i) z_i &> 0, \qquad (35) \end{aligned}$$

which holds because $\delta^2 > \delta^1$ by hypothesis. This establishes the claim.

Second, it is straightforward to show that S_2 has positive measure because $\delta^2 > \delta^1$. In addition, for each $z \in S_2$, $\sum_{i \in E} \left[u_i(z, \delta^1) - u_i(z, \delta^2) \right] > 0$ for the same reason as in part (i).

Third, for each $z \in S_3$, $\sum_{i \in E} \left[u_i(z, \delta^1) - u_i(z, \delta^2) = 0$, because $u_i(z, \delta^1) = u_i(z, \delta^2) = \pi_{g_i}(0)$ for all $i \in E$.

Taken together, these facts imply that (32) is satisfied. □

Appendix B Production, Wages and Profits

Consider an economy with a finite number of planters n_P and merchants n_M, as well as a citizenry/workforce which is a continuum with unit mass. All agents are risk neutral.

Plantation production uses labor inputs and exhibits constant returns to scale. Each worker hired produces output of $\lambda > 0$ units of sugar. Sugar is entirely exported at the price prevailing on international markets, which we normalize to one. Planters collude in setting the wage w to maximize planter profits. In doing so, they are constrained by a worker's outside option of becoming a smallholder. This option is worth $\tau(x)y$ to a worker, where y is determined by an independent draw from the distribution $U(0, 1)$ and $\tau(1) < \tau(0)$ so that the extractive policy makes each worker's outside option less attractive (and thereby depresses wages). In the Caribbean, reducing workers' outside options was the primary way in which wages could be reduced. One reason was because London abolitionists kept a watchful eye on labor practices on the plantations themselves. Another reason was that smallholding truly was the relevant alternative to plantation labor so that wages were set at that margin as opposed to the standard assumption of wages being set at the margin of labor productivities in two-wage paying sectors. See Dippel et al. (2015).

The profits of planters and plantation workers are spent entirely on a good which is imported by merchants. Workers who exercise their outside option and become smallholders, engage in subsistence production. They exit the formal economy and do not purchase goods from merchants. Merchants import the consumption good at cost c and sell the good at price $p > c$, which is the cost to non-merchants of importing the good. To preserve symmetry, we assume that sales to planters and workers are evenly distributed among merchants.

Let us now solve for the equilibrium profits of planters and merchants. A worker will accept a wage w if $w > \tau(x)y$ or $y < \frac{w}{\tau(x)}$. Hence by paying a wage of w, a planter will hire mass $w/\tau(x)$ of workers. We assume that $\frac{n_P w}{\tau(x)} \leq 1$, so there is no shortage of labor in the economy.[39] Thus a wage of w yields profit of

$$\pi_P(w;x) = \frac{w}{\tau(x)}\big(\lambda - w\big).$$

When planters collude in setting w to maximize planter profits, the equilibrium wage is $w^* = \lambda/2$ yielding equilibrium profit of

$$\pi_P(x) = \frac{\lambda}{4\tau(x)}.$$

The equilibrium revenue of merchants is the sum of sales to planters and plantation workers, which is simply equal to total planter revenue (i.e., wages are transfers between planters and plantation workers), which equals $\frac{w}{2\tau(x)}\big(\lambda - w\big)$. Hence the profit to each merchant is

$$\pi_M(x) = \frac{n_P}{n_M}\frac{p-c}{p}\frac{\lambda}{2\tau(x)}.$$

As $\tau(1) < \tau(0)$, $\pi_P(1) > \pi_P(0))$ and $\pi_M(1) > \pi_M(0))$.

In addition, planters gain more from extractive policy than merchants, i.e., $\pi_P(1) - \pi_P(0)) > \pi_M(1) - \pi_M(0))$, if

$$\begin{aligned}
\frac{\lambda}{4\tau(x)}\left[\frac{1}{\tau(1)} - \frac{1}{\tau(0)}\right] &> \frac{n_P}{n_M}\frac{p-c}{p}\frac{\lambda}{2\tau(x)}\left[\frac{1}{\tau(1)} - \frac{1}{\tau(0)}\right] \\
\frac{1}{2} &> \frac{n_P}{n_M}\frac{p-c}{p} \\
\frac{1}{2}\frac{n_M}{n_P} &> \frac{p-c}{p},
\end{aligned} \tag{36}$$

that is the merchants' markup must be sufficiently low relative to the share of merchants.

In sum, if (36) holds, then $\pi_P(1) - \pi_P(0) > \pi_M(1) - \pi_M(0)$, which is the condition we impose in the paper.

[39] This is natural since prior to emancipation of slaves there was full employment in the plantation sector at a lower (survival) wage.

Appendix C Data Appendix

Appendix C.1 Assemblymen Data

The names of assemblymen, as well as data on election cycles comes from the British *Colonial Blue Books*, annual statistical accounts that were sent to London from each individual colony to report on local conditions.[40] From 1836, the books' Councils and Assemblies section reported the names of all local politicians, with election dates and the parish they represented. For each colony, The British National Archives maintain 6 data-series (*Original correspondence*, *Entry Books*, *Acts*, *Sessional Papers*, *Gazettes*, and *Miscellenea*), and the Blue Books form the bulk of the *Miscellenea* series.

Appendix C.2 Plantations & Plantation Ownership

Before emancipation, plantation data comes from two sources. From 1813 on, the Crown required colonies to register all slaves. Most colonies have three or four iterations of the *slave registries*, but each new iteration simply updated the initial information with births and deaths. The slave registries are fully uploaded on Ancestry, where we browsed them and manually compiled plantation listings. In the slave registries, one observation is a slave, but the owner is also listed. We systematically searched Ancestry's records for long series of slaves with identical owners, and then browsed the underlying images for the plantation and parish information that was not digitized by Ancestry.

For most colonies, the next plantation survey came from the slave *compensation table* of moneys disbursed by London to slave owners to compensate them for the emancipation of their slaves. The full records have been compiled by a research team at University College London, and made publicly available. There are 30,308 claimants recorded, and their information can be viewed on consecutive url's running from `http://www.ucl.ac.uk/lbs/claim/view/1` to `http://www.ucl.ac.uk/lbs/claim/view/30308`. These records indicate whenever the compensated individual was associated with a plantation and list the name of said plantation.

After emancipation, most plantation surveys came from individual colony-specific almanacs. We had a number of research assistants search for these almanacs, primarily through interlibrary loans. For Barbados, we obtained photocopies of plantation surveys from the Barbados Museum and Historical Society. In total, we collected the 61 plantation surveys in Table 1 from 43 distinct sources. Table 6 lists all island-years for which we have records, as well as their sources.

[40] For years before the 1890s, at most two copies exist of each *Blue Book*, one in the issuing colony's archives and one in the British National Archives, in London, where this data was hand-collected.

Table 6: Data Sources for Plantation Surveys

Antigua	1817	Slave Registries - Antigua	Montserrat	1835	Compensation Tables
Antigua	1829	Johnson (1830), A Descriptive Account of Antigua	Montserrat	1848	House of Commons Papers 1847-48 (399), p.116-118 [e]
Antigua	1835	Compensation Tables	Montserrat	1858	House of Commons Papers 1857-58 [2403], p.99-101 [c]
Antigua	1843	Hart, the 1843 Antigua Almanac & Registry	Nevis	1817	Slave Registries
Antigua	1851	The 1852 Antigua Almanac	Nevis	1835	Compensation Tables
Antigua	1858	House of Commons Papers 1857-58 [2403], p.74-77 [c]	Nevis	1878	The 1879 Leeward Islands Almanac
Antigua	1878	The 1879 Leeward Islands Almanac	Nevis	1897	House of Commons Papers 1898 [C.8669], p.229-232 [b]
Antigua	1891	Hall (1971), Five of the Leewards, Appendix A	St. Lucia	1852	The 1852 St. Lucia Almanac
Barbados	1817	Slave Registries - Barbados	St. Lucia	1897	House of Commons Papers 1898 [C.8669], p.56-57 [b]
Barbados	1835	Compensation Tables	St. Kitts	1835	Compensation Tables
Barbados	1848	Barbados Almanac for 1848	St. Kitts	1847	House of Commons Papers 1847-48 (245), p.121-124 [d]
Barbados	1854	Barbados Almanac for 1854	St. Kitts	1850	The 1850 St. Christophers Almanac
Barbados	1861	Barbados Almanac for 1861	St. Kitts	1878	The 1879 Leeward Islands Almanac
Barbados	1865	Barbados Almanac for 1865	St. Kitts	1897	House of Commons Papers 1898 [C.8669], p.229-232 [b]
Barbados	1870	Barbados Almanac for 1870	St. Vincent	1817	Slave Registries - St. Vincent
Barbados	1898	Barbados Almanac for 1898	St. Vincent	1827	Shephard (1831), Historical Account of St.Vincent, T.6
Dominica	1817	Slave Registries - Dominica	St. Vincent	1831	Slave Registries - St. Vincent
Dominica	1835	Compensation Tables	St. Vincent	1835	Compensation Tables
Dominica	1878	The 1879 Leeward Islands Almanac	Tobago	1819	Slave Registries - Tobago
Grenada	1817	Slave Registries - Grenada	Tobago	1832	Woodcock (1867), A History of Tobago, Appendix
Grenada	1835	Compensation Tables	Tobago	1835	Compensation Tables
Grenada	1849	House of Commons Papers 1849 [1126], p.180-181 [g]	Tobago	1847	House of Commons Papers 1847 [869], p.32-33 [a]
Grenada	1867	The 1867 Grenada Almanack	Tobago	1862	Woodcock (1867), A History of Tobago, Appendix
Guyana	1833	House of Commons Papers 1833 (700), p.4-11 [f]	Tobago	1881	Craig-James (2008), Tables 5.9-5.11
Guyana	1838	House of Commons Papers 1847 [869], p.94-98 [a]	Tobago	1894	The Trinidad Almanack 1894
Guyana	1846	House of Commons Papers 1847 [869], p.94-98 [a]	Trinidad	1813	Slave Registries - Trinidad
Guyana	1860	The Guyana Almanack 1860	Trinidad	1835	Compensation Tables
Guyana	1879	The Guyana Almanack 1879	Trinidad	1882	The Trinidad Almanack 1882
Jamaica	1829	The 1829 Jamaica Almanac	Trinidad	1888	The Trinidad Almanack 1888
Jamaica	1835	Compensation Tables	Trinidad	1894	The Trinidad Almanack 1894
Jamaica	1840	The 1840 Jamaica Almanac			

Notes: House of Commons Parliamentary Papers: (*a*) "1847 [869] The reports made for the year 1846 to the Secretary of State having the Department of the Colonies. Transmitted with the blue books for the year 1846." (*b*) "1898 [C.8669] West India Royal commission. Report of the West India Royal commission. Appendix C., vol. III., containing parts VI. to XIII. Proceedings, evidence, and documents relating to the Windward Islands, the Leeward Islands, and Jamaica." (*c*) "1857-58 [2403] The reports made for the year 1856 to the Secretary of State having the Department of the Colonies. Transmitted with the blue books for the year 1856." (*d*) "1847-48 (245) Seventh report from the Select Committee on Sugar and Coffee Planting; together with the minutes of evidence, and appendix." (*e*) "1847-48 (399) West India colonies and Mauritius. Returns to two addresses of the Honourable the House of Commons, dated respectively 8 & 31 May 1848." (*f*) "1833 (700) Slave population. (Slave registries.) Return to an address to His Majesty, dated 29 July 1833." (*g*) "1849 [1126] The reports made for the year 1848 to the Secretary of State having the Department of the Colonies. Transmitted with the blue books for the year 1848."

Online Appendix

to

"Elite Identity and Political Accountability: A Tale of Ten Islands"

Online Appendix A Sources for Group Coding

In this paper we theoretically explore the idea that an elite faction inside the government may pay an outside force for protection against popular pressure. While this is not the focus of our paper, we do see evidence that this mechanism is of general importance in autocratic regime changes. In the 1967 coup d'état in Greece, for example, politicians of the incumbent Conservative Party openly invited a military coup, fearing that the left-leaning Center Union Party would gain a parliamentary majority in the upcoming election (Kassimeris (2006)). Similarly, the 1971 military coup in Turkey was apparently supported by conservative parliamentary elements fearing increasing influence of both left- and right-wing parties and trade unions (Feroz (2002)). In Sierra Leone, when the incumbent prime minister, Albert Margai, narrowly lost the 1967 election to Siaka Stevens, he had planned ahead for this contingency and had the latter deposed by a military coup within hours after taking office (Cartwright (1970)). Thailand's military coup in May 2014 has been described as "the culmination of months of maneuvering by the Bangkok establishment seeking to suspend democracy, at least in the short term, as it struggled to unseat a party it has been unable to defeat at the polls" (Fuller (2014)).

Online Appendix B Sources for Group Coding

The secondary sources that we consulted extensively were:

1. for Jamaica: Heuman (1981) and Holt (1991)
2. for Antigua: Oliver (1896), Lowes (1994), Lowes (1995), Dyde (2000) and Lightfoot (2007)
3. for Barbados: Schomburgk (1848), Hoyos (1978) and Beckles (2006)
4. for Dominica: Trouillot (1988), Honychurch (1984) and Baker (1994)
5. for Grenada: Brizan (1984) and Cox (2007)
6. for Montserrat: Davy (1854), Fergus (1994), and Berleant-Schiller (1995)
7. for St. Kitts: Britain (1840, p.94-96), Hall (1971) and Dyde (2005)
8. for Nevis: Iles (1871), Hall (1971) and Olwig (2005)
9. for St. Vincent: Sheppard (1831), West Indies Royal Comission (1884, p.101-126), Smith (2009) and Smith and Forster (2013)
10. for Tobago: Craig-James (2000)

Online Appendix C The Encumbered Estate Act

The data in Table 1 is organized in first differences for the purpose of studying plantation survival and ownership turnover in section 4.

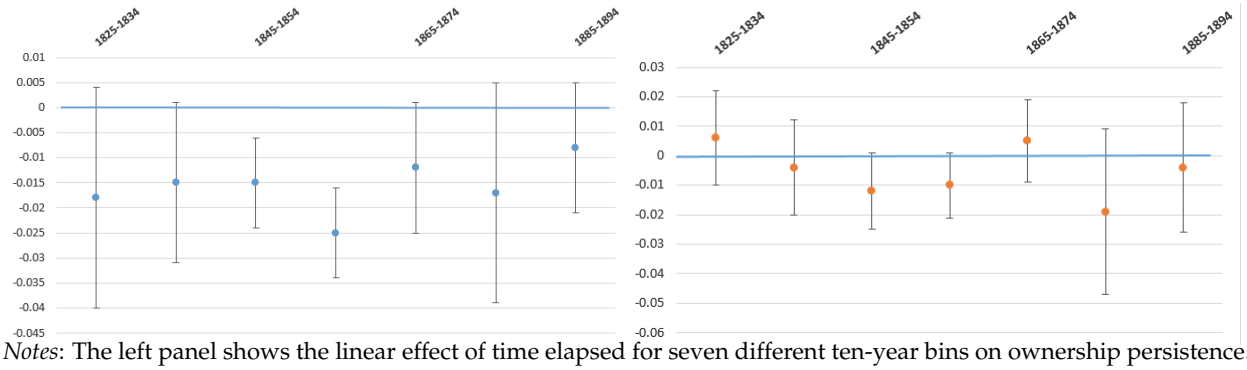
If the EEA had sizeable effects on elite churning, we should see this in the plantation ownership data in Table 1. Because the years in which we observe plantations vary case by case, the data is set up in first differences whose start and end years are specific to each plantation survey. To deal with this, we regress a dummy for whether ownership remains unchanged over a given period,

Online Appendix Table 1: Overview of Plantation Data Used

colony	year t	t+T	plantation survival(%)	ownership known	t+T'	ownership unchanged(%)
Antigua	1817	1829	0.86	Y	1829	0.62
Antigua	1829	1835	1.00	Y	1843	0.69
Antigua	1835	1843	0.90			
Antigua	1843	1851	0.99	Y	1851	0.78
Antigua	1851	1858	0.92	Y	1878	0.20
Antigua	1858	1878	0.86			
Antigua	1878	1891	0.73	Y	1891	0.47
Barbados	1817	1835	0.81	Y	1835	0.51
Barbados	1835	1848	0.75	Y	1848	0.61
Barbados	1848	1854	0.92	Y	1854	0.79
Barbados	1854	1861	0.95	Y	1861	0.72
Barbados	1861	1865	0.98	Y	1865	0.87
Barbados	1865	1870	0.97	Y	1870	0.87
Barbados	1870	1898	0.85	Y	1898	0.49
Dominica	1817	1835	0.57	Y	1835	0.29
Dominica	1835	1878	0.71	Y	1878	0.12
Grenada	1817	1835	0.57	Y	1835	0.35
Grenada	1835	1849	0.77	Y	1867	0.24
Grenada	1849	1867	0.47			
Guyana	1833	1838	0.67			
Guyana	1838	1846	0.99			
Guyana	1846	1860	0.51			
Guyana	1860	1879	0.62	Y	1879	0.26
Jamaica	1829	1835	0.76	Y	1840	0.62
Jamaica	1835	1840	0.69			
Montserrat	1835	1848	0.82	Y	1848	0.58
Montserrat	1848	1858	0.38			
Nevis	1817	1835	0.81	Y	1835	0.24
Nevis	1835	1878	0.62	Y	1878	0.10
Nevis	1878	1897	0.78	Y	1897	0.53
St. Lucia	1852	1897	0.82			
St. Kitts	1835	1847	0.81	Y	1850	0.40
St. Kitts	1847	1850	0.82	Y	1878	0.31
St. Kitts	1850	1878	0.85			
St. Kitts	1878	1897	0.47	Y	1897	0.58
St. Vincent	1817	1827	0.62	Y	1827	0.42
St. Vincent	1827	1831	0.90	Y	1831	0.57
St. Vincent	1831	1835	0.43	Y	1835	0.00
Tobago	1819	1832	0.96	Y	1832	0.25
Tobago	1832	1835	1.00	Y	1835	0.49
Tobago	1835	1847	0.92	Y	1862	0.13
Tobago	1847	1862	0.91			
Tobago	1862	1881	0.75	Y	1881	0.26
Tobago	1881	1894	0.93	Y	1894	0.44
Trinidad	1813	1835	0.30	Y	1835	0.21
Trinidad	1835	1882	0.50	Y	1882	0.18
Trinidad	1882	1888	0.87	Y	1888	0.77
Trinidad	1888	1894	0.83	Y	1894	0.78

Notes: One row in this table is one first difference. Column 2 is the base year and column 3 the next year. Not all plantation surveys included ownership information. As a result, first differences were re-defined for ownership information. For example, the plantation survey in Antigua in 1858 did not include ownership information. We can therefore ask if a plantation that existed in 1851 still existed in 1858, but we can only ask if a plantation owned by planter *i* in 1851, was still owned by planter *i* in 1878.

Online Appendix Figure 1: Effect of EEA on Planter Turnover



Notes: The left panel shows the linear effect of time elapsed for seven different ten-year bins on ownership persistence. One additional year in the 1855–164 window increases the probability of changed ownership by 2.5%. the right panel shows the same for plantation survival as the outcome.

on the number of years that have passed, testing specifically for an increase in ownership turnover in the years after the EEA. The simplest specification is

$$D(OwnerUnchanged)_{i,t\to t+T} = \alpha T + \beta T^2 + \gamma T_{1855-1864} + \epsilon_{it}, \tag{37}$$

Where α and β estimates the linear and quadratic effects of elapsed time between surveys on persistence. We reasonably expect $\alpha < 0$ and $\beta > 0$, i.e. more time elapsed raises the probability of changed ownership, but this effect does not extrapolate linearly. Any increased turnover after the adoption of the EEA should get picked up by γ, where the variable $T_{1855-1864}$ takes on values from 0 to 10. As an alternative outcome, we ask whether the plantation itself survives from year t to $t+T$. Table 1 reports the raw data probabilities of firm survival and unchanged ownership in all plantation survey first differences. When we run this regression we estimate $\widehat{\alpha} = -0.035$ with a t-statistic of 7.23, and $\widehat{\gamma} = -0.01$ with a t-statistic of 2.8. Each year that passes increases the probability of changed ownership by 3.5%, and in the ten-year window after the introduction of the EEA, we see this effect increase to 4.5%. When we consider plantation survival as the outcome, we estimate $\widehat{\alpha} = -0.024$, with a t-statistic of 3.3, and $\widehat{\gamma} = -0.003$ with a t-statistic of 0.4. In other words, elapsed time mattered but there was no additional effect of the EEA on plantations' survival overall, only on ownership.

We also replaced αT with a more flexible specification by slicing the entire time range covered by the plantation surveys into ten-year windows and estimating separate linear time trends for each. For example, for Barbados the next plantation survey after 1835 is 1848, so that in that first difference we regress $D(OwnerUnchanged)_{i,1835\to1848}$ on $T_{1825-1834} = 0$, $T_{1835-1844} = 10$, $T_{1845-1854} = 4$, $T_{1855-1864} = 0$ etc. Figure 1 plots the point estimates and 95% confidence bands for the effect of time in each of the ten-year windows. The left panel shows that only the effect of $T_{1845-1854}$ and $T_{1855-1864}$ are significant, but the latter has a much bigger point estimate of $\widehat{\gamma} = -0.025$ as opposed to $\widehat{\gamma'} = -0.014$ for $T_{1845-1854}$. The right panel shows that for plantation survival overall, no time window is ever quite significant with a 95% confidence interval. While this evidence is coarse, it does support quite strongly the qualitative evidence that the EEA caused a dramatic increase in plantation ownership turnover.

Online Appendix Table 2: The Evolution of Four Elite Groups' Seat Shares

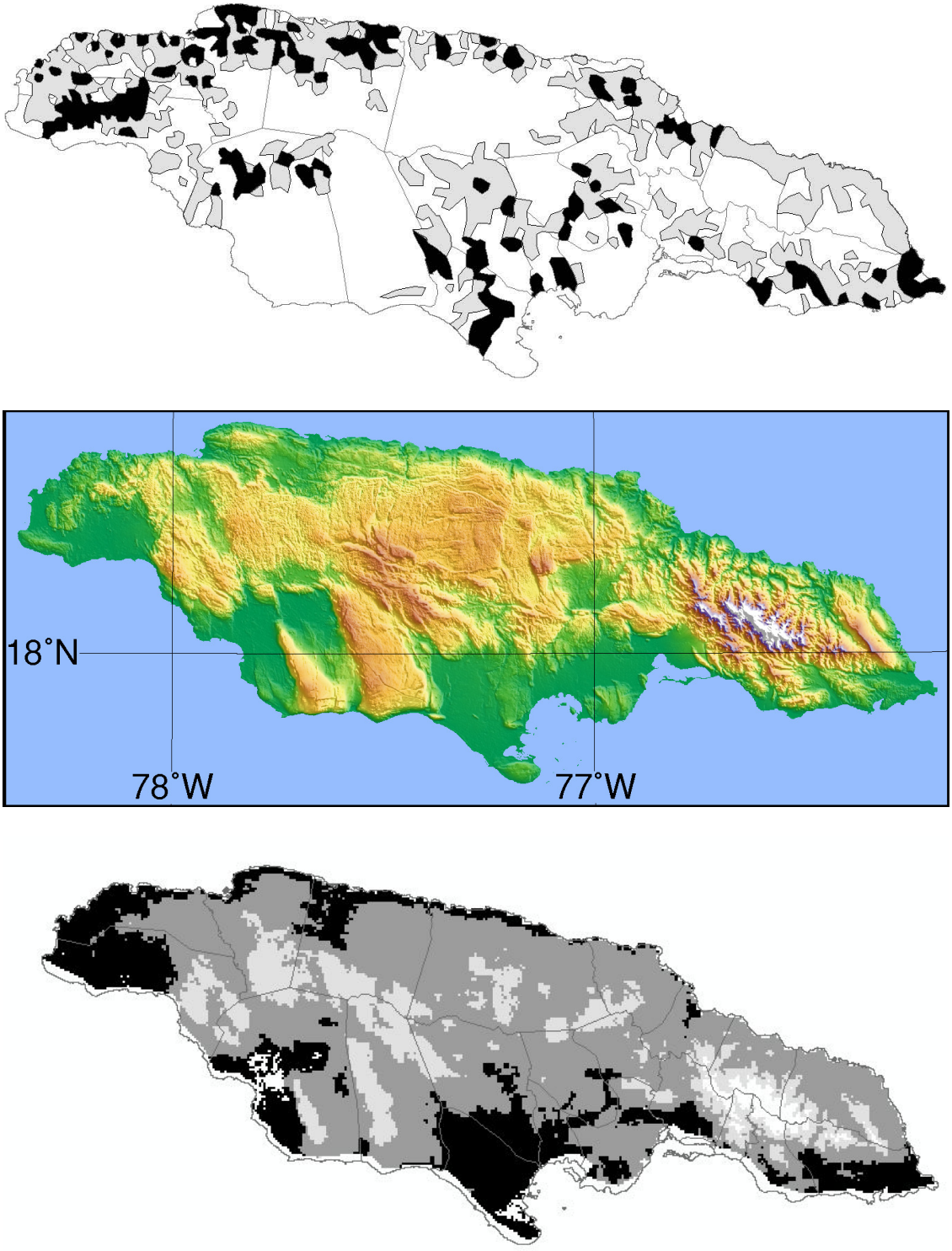
group:	Seat-Share White Planters						Seat-Share Colored Planters						Seat-Share Colored Merchants						Seat-Share White Merchants					
colony:	**BRB**	**GRD**	**JAM**	**TOB**	**MON**	**DOM**	**BRB**	**GRD**	**JAM**	**TOB**	**MON**	**DOM**	**BRB**	**GRD**	**JAM**	**TOB**	**MON**	**DOM**	**BRB**	**GRD**	**JAM**	**TOB**	**MON**	**DOM**
1834	87.5						6.6						0.0						6.0					
1835	87.8						6.2						0.0						6.1					
1836	88.2						5.8						0.0						6.1					
1837	88.5	55.3				28.6	5.7	0.0				28.6	0.0	5.3				33.3	5.7	39.5				9.5
1838	88.4					40.9	6.0					22.7	0.3					25.0	5.3					11.4
1839	88.0	55.3	78.3			40.9	6.6	0.0	6.7			22.7	0.7	5.3	10.0			25.0	4.7	39.5	5.0			11.4
1840	87.4	55.3	78.3			40.9	7.4	0.0	6.7			22.7	1.0	5.3	10.0			25.0	4.2	39.5	5.0			11.4
1841	86.6		78.3			40.9	8.3		6.7			22.7	1.4		10.0			25.0	3.7		5.0			11.4
1842	85.9	55.3			23.5	40.9	9.1	0.0			35.3	22.7	1.8	5.3			23.5	25.0	3.2	39.5			17.6	11.4
1843	85.3	42.9	78.3	24.0	23.5	40.9	9.8	0.0	6.7	12.0	35.3	22.7	2.1	31.0	10.0	40.0	23.5	25.0	2.7	26.2	5.0	24.0	17.6	11.4
1844	84.9		72.5	24.0	25.0	40.9	10.4		10.1	12.0	37.5	22.7	2.4		13.0	40.0	37.5	25.0	2.3		4.3	24.0	0.0	11.4
1845	84.5		72.5	24.0		40.9	10.9		10.1	12.0		22.7	2.8		13.0	40.0		25.0	1.8		4.3	24.0		11.4
1846	84.4	42.9	72.5	24.0		32.1	11.1	0.0	10.1	12.0		14.3	3.0	31.0	13.0	40.0		42.9	1.5	26.2	4.3	24.0		10.7
1847	84.0	42.9	72.5	24.0		32.1	11.6	0.0	10.1	12.0		14.3	3.3	31.0	13.0	40.0		42.9	1.1	26.2	4.3	24.0		10.7
1848	83.6	42.9	72.5	25.8		32.1	12.0	0.0	10.1	19.4		14.3	3.6	31.0	13.0	35.5		42.9	0.8	26.2	4.3	19.4		10.7
1849	83.1	42.9	58.9	25.8		32.1	12.4	0.0	5.5	19.4		14.3	3.8	31.0	28.8	35.5		42.9	0.7	26.2	6.8	19.4		10.7
1850	82.6	28.6	58.9			32.1	12.7	4.8	5.5			14.3	3.9	42.9	28.8			42.9	0.7	23.8	6.8			10.7
1851	82.2	28.6	58.9	25.8		32.1	13.0	4.8	5.5	19.4		14.3	4.1	42.9	28.8	35.5		42.9	0.7	23.8	6.8	19.4		10.7
1852	81.9	28.6	58.9	25.8	30.0	28.6	13.1	4.8	5.5	19.4	35.0	34.3	4.3	42.9	28.8	35.5	30.0	34.3	0.8	23.8	6.8	19.4	5.0	2.9
1853	81.8	28.6	58.9	25.8	30.0	28.6	13.0	4.8	5.5	19.4	35.0	34.3	4.4	42.9	28.8	35.5	30.0	34.3	0.8	23.8	6.8	19.4	5.0	2.9
1854	82.0	28.6	44.1	25.8		28.6	12.7	4.8	6.8	19.4		34.3	4.4	42.9	33.9	35.5		34.3	0.9	23.8	15.3	19.4		2.9
1855	82.4	28.6	44.1	25.8	30.0	28.6	12.4	4.8	6.8	19.4	35.0	34.3	4.4	42.9	33.9	35.5	30.0	34.3	0.8	23.8	15.3	19.4	5.0	2.9
1856			44.1	25.8		28.6			6.8	19.4		34.3			33.9	35.5		34.3			15.3	19.4		2.9
1857	83.2		44.1	25.8		28.6	12.0		6.8	19.4		34.3	4.1		33.9	35.5		34.3	0.7		15.3	19.4		2.9
1858	83.5	21.1	44.1			28.6	11.9	5.3	6.8			34.3	3.8	44.7	33.9			34.3	0.7	28.9	15.3			2.9
1859	83.7	21.1			8.3	18.2	12.0	5.3			33.3	36.4	3.6	44.7			50.0	40.9	0.7	28.9			8.3	4.5
1860	83.7	21.1	42.9			18.2	12.2	5.3	8.2			36.4	3.4	44.7	38.8			40.9	0.7	28.9	10.2			4.5
1861	83.7	21.1	42.9	25.8		18.2	12.3	5.3	8.2	19.4		36.4	3.3	44.7	38.8	35.5		40.9	0.7	28.9	10.2	19.4		4.5
1862	83.6	22.2				18.2	12.5	5.6				36.4	3.3	61.1				40.9	0.6	11.1				4.5
1863	83.6	22.2	45.8	25.0			12.6	5.6	12.5	28.6			3.3	61.1	33.3	25.0			0.5	11.1	8.3	21.4		
1864	83.6		45.8	25.0			12.7		12.5	28.6			3.4		33.3	25.0			0.4		8.3	21.4		
1865	83.5	22.2					12.7	5.6					3.5	61.1					0.2	11.1				
1866	83.5			25.0			12.8			28.6			3.5			25.0			0.2			21.4		
1867	83.5	22.2		25.0			12.9	5.6		28.6			3.5	61.1		25.0			0.1	11.1		21.4		
1868	82.8	22.2		25.0			13.2	5.6		28.6			3.7	61.1		25.0			0.3	11.1		21.4		
1869	82.0	12.0		25.0			13.5	4.0		28.6			4.0	74.0		25.0			0.5	10.0		21.4		
1870	81.0	12.0		25.0			13.8	4.0		28.6			4.5	74.0		25.0			0.7	10.0		21.4		
1871	80.2	12.0		25.0			13.9	4.0		28.6			4.9	74.0		25.0			1.0	10.0		21.4		
1872	79.7						13.7						5.3						1.3					
1873	79.7	12.0		25.0			13.2	4.0		28.6			5.3	74.0		25.0			1.8	10.0		21.4		
1874	80.2	12.0		25.0			12.3	4.0		28.6			5.1	74.0		25.0			2.4	10.0		21.4		
1875	81.2	12.0					11.3	4.0					4.3	74.0					3.2	10.0				

Notes: In grey is the year that Encumbered Estate Act affected the Composition of the Assembly, i.e. the first election after the E.E.A. was passed.

Online Appendix D Barbados's Geography

Barbados was an outlier among the Caribbean slave societies in its geography. While all Caribbean islands shared their climatic conditions, there was large variation in geographic characteristics like elevation and soil. The typical Caribbean sugar colony was characterized by sugar-suitable coastal plains and a rugged interior that lay fallow during slavery. The top panel of Online Appendix C Figure 2 displays a map of Jamaica (the only island where we have good plantation maps) which illustrates that plantation lands exactly coincided with these coastal plains. Barbados was the only Caribbean sugar island that combined the advantages of limestone rather than volcanic soil with a high enough elevation to protect sugar from saltwater and storm surges.The Caribbean is divided into three island chains: The Greater Antilles are large islands with mountainous interiors and coastal plains. Of these, only Jamaica was a British colony, the others are Cuba, Haiti and the Dominican Republic. Most British Caribbean colonies–Dominica, the British Virgin Islands, Grenada, Montserrat, Nevis, St. Kitts, St. Lucia, and St. Vincent–belonged to the inner chain of the Lesser Antilles, which is volcanic and mountainous. The outer chain of Lesser Antilles–Anguilla, Bahamas, Barbados, Turks and Caicos–consists of flat limestone. This limestone was more suitable for sugar cultivation because it retained water better than the volcanic land on the inner chain (Richardson, 1997, p. 147) and because sugar does not like high elevations. The importance of elevation for sugar suitability is illustrated in the middle and bottom panels of Online Appendix C Figure 2. In Barbados, the *entire* land area was highly sugar-suitable land, and over 95% of its land was under cultivation on the eve of emancipation, compared to under 50% elsewhere in the Caribbean (Martin, 1839, p.32–102). While Barbados was not particularly unique during slavery, it was unique *after* emancipation its ability to offer extremely low wages for lack of any other options to the citizenry. Consequently, a merchant class catering to local markets did not develop, and emancipated blacks did not obtain the franchise for a lack of available land for purchase.

Online Appendix Figure 2: Sugar Suitability, and the Plantation System in Jamaica



Notes: The top panel shows the extent of sugar plantations in 1790 (black plus grey areas) and 1890 (black areas). Grey areas are thus plantations that ceased to exist and were therefore potentially available for freeholders and squatters. The map is digitized from Higman's (2001) figure 2.9. It is the only map of its kind for any of the West Indies colonies. Parish boundaries are also shown. The middle panel shows Jamaica's topography. The bottom panel shows the distribution the suitability of land for sugar cultivation in Jamaica, from black (most suitable) to white (unsuitable), taken from Dippel et al. (2015).

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