

The Slave Trade and Conflict in Africa, 1400-2000*

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Abstract

Can the slave trade explain Africa's propensity for conflict? Using variation in slave exports driven by the interaction between foreign demand shocks and heterogeneity in trade costs, we show that the slave trade increased conflict propensities in pre-colonial Africa and that this effect has persisted to the present. Moreover, we find empirical evidence suggesting two related mechanisms for this persistence—natural resources and national institutions. These results “decompress” history by connecting the short-run and long-run effects of the African slave trade.

JEL Classification: N47, N57, O13, O43, P48, Q34

Keywords: slave trade, conflict, resource curse, institutions, Africa

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1 Introduction

Nearly 40 percent of African countries have experienced civil war between 1960 and 2000 (Elbadawi and Sambanis, 2000). Of course, conflict in Africa is not new. Inter- and intra-ethnic group conflict were frequently used to acquire slaves during the trans-Atlantic slave trade (Lovejoy, 2012, p. 85). Raiding was used to capture individuals for enslavement, and, in return, violence was used to protect against raiding.

Furthermore, the slave trade has been shown to have large impacts on contemporary outcomes including GDP, trust, polygyny, witchcraft beliefs, gender norms, and HIV infections (Nunn, 2008; Nunn and Wantchekon, 2011; Dalton and Leung, 2014; Gershman, 2018; Teso, 2018; Bertocchi and Dimico, Forthcoming). However, little is known empirically about the short-run impact of the slave trade on African societies.¹ This “compression of history” has been criticized as missing important dynamics relevant to growth and development (Austin, 2008). Did the slave trade increase conflict propensity in pre-colonial Africa? And, if so, can this explain Africa’s high conflict propensity today?

To answer these questions, we first construct a geocoded version of Brecke (1999)’s dataset on conflicts from 1400 to 2000 and assign the conflicts to ethnic groups from Murdock (1959). The extended timeframe of this data allows us to examine conflict propensities for each ethnic group in Africa before, during, and after the rise of the trans-Ocean slave trades (Atlantic and Indian). A key issue in estimating the causal effect of the slave trade on conflict is reverse causality. For example, climate shocks increased slave exports in 19th century Africa likely due, in part, to increased conflict (Fenske and Kala, 2015; Boxell, Forthcoming), and the introduction of maize in pre-colonial Africa increased both slave exports and conflict (Cherniwchan and Moreno-Cruz, 2019).

Our empirical strategy controls for endogeneity in two ways. First, we include ethnic group fixed effects to account for any time-invariant confounds.² Second, we build on Nunn and Wantchekon (2011) by constructing a measure of coastal proximity for each ethnic group. Coastal proximity accounts for the role of transport costs in mediating the extent to which a group was exposed to foreign demand shocks for slaves. The measure of coastal proximity is interacted with the regional growth of the trans-Ocean slave trades and used as an instrument for our time-varying measure of slave exports. Intuitively, the instrument pivots off of the variation

¹A few studies have examined colonial era outcomes such as ethnic fractionalization and literacy (Whatley and Gillezeau, 2011; Obikili, 2015).

²In contrast, most of the slave trade literature relies on cross-sectional variation.

in demand for slaves induced by the exogenous rise in the slave trade at the region level along with the heterogeneity in trade costs across ethnic groups. Our empirical strategy is similar to other work where industry-level variation is used to examine local impacts of trade exposure (e.g., Autor et al. 2013).

In our main results, we find a strong positive effect of slave exports on conflict in pre-colonial Africa. A 10 percent increase in our measure of slave export intensity increases the likelihood of observing conflict by 1.5 percentage points in a given century. This is economically significant as only 2.5 percent of ethnic groups have a recorded conflict in the 18th century. In contrast, the OLS estimates suggest a much smaller positive relationship between slave exports and conflict. This selection is consistent with Nunn (2008) who argues that it was areas with higher levels of initial development and lower levels of conflict propensity that were more likely to engage in the slave trade with Europeans thus driving its own “reversal of fortune” (Acemoglu et al., 2002). Huillery (2010) finds a similar selection effect between European settlement patterns in West Africa and pre-colonial levels of conflict propensity. Our discussion of the Kongo Kingdom below further highlights this selection effect.

To lend additional credibility to our empirical strategy, we first show that distance to coast is unrelated to conflict propensity prior to the onset of the slave trade but that this relationship quickly becomes negative with the rise of the slave trade. Furthermore, we perform a falsification test where we repeat this analysis on North Africa, which was not exposed to the same slave trade shock. In contrast to sub-Saharan Africa, the relationship between distance to coast and conflict remains insignificant throughout the entire 1400–2000 time period in North Africa. These two findings suggest that the correlation between distance to coast and conflict is fundamentally linked to the slave trade.

We also examine the temporal heterogeneity in our results. While the impact of slave exports on conflict exists throughout the slave trade (1500–1860), it appears to strengthen during the waning moments of the trans-Atlantic slave trades (1800–1860) relative to the prior century, which aligns with previous work arguing that the 1807 Slave Trade Act exacerbated conflict in West and South-West Africa (Fenske and Kala, 2017).

Given the established link between the slave trade and conflict in pre-colonial Africa, we examine whether the impact persisted after the collapse of the slave trade. Using the same empirical strategy, we show that the impact of the slave trade has a strong effect on contemporary African conflict (1960–2000). These results suggest that the historical impact of the slave trade fundamentally shaped conflict propensities in African societies that persist today, which is

consistent with Zhang and Kibriya (2016). On the other hand, the slave-conflict relationship is less pronounced during the colonial period (1860–1960) as attention shifted away from ethnic divisions to tensions with European colonizers.

We highlight two related mechanisms for the persistent impact of the slave trade on contemporary conflict—the natural resource curse and national institutions. There is a well-documented correlation between natural resources and conflict in Africa (Collier and Hoeffler, 2002).³ To examine this in the context of the slave trade, we first construct an indicator for the presence of petroleum or diamonds in an ethnic group. Neither petroleum nor diamonds were heavily traded commodities prior to the late 19th century.⁴ Therefore, their presence should have no differential effect on conflict in the pre-colonial period. Furthermore, during the colonial period, European powers controlled the human and natural resources and suppressed inter-ethnic group conflict over them. However, theoretical predictions and previous empirical evidence suggest that, given the capital intensive nature of petroleum and diamond extraction, the commodification of these resources along with the end of the colonial era should lead to increased returns to appropriation (Dal Bo and Dal Bo, 2011; Dube and Vargas, 2013). Other work suggests the extent to which increased returns to appropriation leads to conflict depends heavily on the presence of “grabber friendly” institutions (Acemoglu et al., 2003; Mehlum et al., 2006; Adhvaryu et al., 2018). The rise of foreign demand for slave exports can be viewed as a historical shock to the creation of institutions with a comparative advantage in appropriation.⁵

Consistent with these predictions, we show that the interaction between slave exports and an indicator for natural resources has no explanatory power for conflict at the end of the slave trade or during the colonial period. However, after the colonial period, we show that a large proportion of the effect of the slave trade on contemporary conflict outcomes is driven by ethnic groups with natural resources. These results suggest that the slave trade created institutions focused on conflict over resources. In the pre-colonial period, these conflicts were fought over human resources—slaves. During the colonial period, European powers controlled the human and natural resources and suppressed inter-ethnic group conflict over them. However, at the end of the colonial period and the end of European control of resources, we see a sharp increase in

³Some recent work has begun to question the causality of these claims on *national* measures of conflict (Cotet and Tsui, 2013; Bazzi and Blattman, 2014).

⁴The first oil well was not tapped until 1859 (Black, 2012), and diamonds were not discovered in South Africa until 1866 (Ndumbe and Cole, 2005).

⁵Dincecco et al. (2019) show that historical warfare in sub-Saharan Africa is associated with the creation of special-interest states whereas conflict in Asia and Europe is associated with the creation of common-interest states—the slave trade being an important distinguishing factor between these regions.

conflict in areas with natural resources. Our results also suggest that the relationship between natural resources and conflict in Africa may have its historical roots in the slave trade. In fact, absent the slave trade, our estimates suggest that ethnic groups with natural resources experience relatively *less* conflict in the contemporary period.

More generally, institutions may have important effects on development outcomes and conflict regardless of the presence of natural resources (e.g., Acemoglu et al. 2001 and Michalopoulos and Papaioannou 2013). To examine this, we focus on national institutions. Prior to the Scramble for Africa and the development of contemporary borders (Michalopoulos and Papaioannou, 2016), national institutions should not mediate the impact of the slave trade on conflict. However, if national institutions are an important mechanism, we would expect to see a large attenuation in our coefficient estimates for the contemporary period when including these controls. This is precisely what we find. Our coefficients on slave exports shrink by more than half with the inclusion of country fixed effects in the contemporary period, whereas we observe a much smaller change in the pre-colonial period. These results, along with the natural resource regressions, demonstrate the deeply linked relationships between the slave trade, extractive or “grabber friendly” institutions, and conflict in Africa.

Our paper also relates to a growing literature seeking to understand the determinants of the slave trade. Previous work has examined, among other factors, climate (Fenske and Kala, 2015; Boxell, Forthcoming), agricultural productivity shocks (Cherniwchan and Moreno-Cruz, 2019), market distortions and managerial ability (Dalton and Leung, 2015, 2016), and the gun-slave cycle (Whatley, 2018). More generally, our study relates to the literature on the historical roots of African development (see Michalopoulos and Papaioannou Forthcoming for a review), and the literature on contemporary conflict (see Blattman and Miguel 2010 for a review).

The remaining of our paper is outlined as follows. Section 2 gives the historical background. Section 3 presents the data. Section 4 includes the main results, heterogeneity, and robustness tests. Section 5 examines the persistence of the slave trade-conflict relationship overtime along with potential mechanisms for this persistence. And, Section 6 concludes.

2 Historical Background

Slaves dominated European trade with Africa in the pre-colonial era. Roughly 12 million slaves were exported from Africa during the trans-Atlantic slave trade, and a further 6 million are estimated to have left via the other trades (Nunn, 2008). Table 1 shows that, by the 18th century,

over 90 percent of African exports to the British were slaves. In return, Africans received a large number of guns and gunpowder to be used to acquire additional slaves, thus, fueling the gun-slave cycle (Whatley, 2018).

Table 1: British Gun Imports and Slave Exports in 18th Century Africa

Time Period	Gun Imports Shares	Slave Exports Shares
1701–1725	0.056	0.941
1726–1750	0.094	0.932
1751–1775	0.082	0.957
1776–1800	0.073	0.944

Notes: The table shows imports of gun-related products and exports of slaves as shares of total imports and total exports in 18th century Africa, respectively. The statistics of gun-related product imports and total imports in Africa are from Anglo-African Trade Database, 1699-1808. The gun-related products include gun carriages, gun blocks, gunflints, lead and shot, ball, birdshot, iron shot, gunpowder, powder horn, and military stores. The statistics of slave exports are from the Transatlantic Slave Trade database. The total exports from Africa are the sum of the non-slave exports from the Anglo-African Trade Database and the slave exports from the Transatlantic Slave Trade database. To obtain the value of the slave trade, we use the average price of slaves standardized on sterling cash price of prime slaves sold in Jamaica times the imputed total slaves disembarked.

In order to document the qualitative history of the rise of the slave trade and conflict in Africa, we consider three case studies: the Akan, Kongo, and Makua peoples. These ethnic groups were major participants in the slave trade and provide broad regional coverage across Africa. The Akan were located in West Africa, the Kongo in Central Africa, and the Makua in East Africa. In addition to the geographic heterogeneity, each ethnic group’s path to conflict is different—the Akan viewed the slave trade as a tactic to support their primary motivation of territorial expansion; the Kongo’s participation in conflict was motivated directly by the slave trade; and the story of the Makua is one by which a relatively peaceful ethnic group shifted into conflict in response to external pressures from the slave trade. Taken together, these narratives lend qualitative support for the slave trade’s exacerbation of conflict in Africa.

2.0.1 Akan

The presence of slavery and conflict was a part of Akan history before, during, and after the trans-Atlantic slave trade. However, a strong case can be made that the slave trade with Europeans exacerbated the level of conflict. To show this, we focus our discussion on the Ashanti empire, a consolidated empire of the Akan peoples that lasted from the 1670s to 1957 in what is modern-day Ghana. One of the key characteristics of the Ashanti empire was its militaristic nature and desire to wage war for territorial expansion. Conquest, not necessarily the acquisition of slaves, was the goal according to one Asantehene, as the king of the Ashanti empire

was called. The Asantehene tried to explain this to the British diplomat Joseph Dupuis when discussing the abolition of the British slave trade. Sparks (2014, p. 229) writes “He [the Asantehene] explained to Dupuis that he did not catch slaves in the bush, nor did he make war to capture slaves, but that his was a warrior nation, and when he defeated his enemies, he took them as slaves.”

Capturing slaves was a military tactic that served the main goal of territorial expansion in two ways. First, depleting conquered lands of people decreased the area’s ability to resist and revolt against Ashanti rule, a tactic known as “eating the country” (Thornton, 1999, p. 70). Second, slaves could then be sold to Europeans in exchange for weapons. Of course, not any weapons, but guns, an article of war primarily obtainable from European traders. Guns created a power differential between the Ashanti empire, with its access to the coast, and its neighbors in the interior of Africa who did not have good access to trade with Europeans. Indeed, the vast majority of slaves sold by the Ashanti empire to Europeans were thought by contemporaries to have originated from deep within the interior of Africa as prisoners of war (Sparks, 2014). The slave trade may not have been the primary motivation of conflict as the Asantehene claimed, but the slave trade clearly enabled the Ashanti empire to continue waging wars, thus fueling further conquests and territorial acquisitions via the gun-slave cycle (Whatley, 2018). This trend towards conflict is observed in our conflict dataset. While the Ashanti have one recorded conflict in the 17th century, they have nine recorded conflicts in the 19th century.⁶

2.0.2 Kongo

Further down the west African coast, the experience of the Kongo people in the trans-Atlantic slave trade was dominated by their interactions with the Portuguese. The Portuguese had been attempting trade relations with coastal societies north of the Zaire River for more than a decade but were unsuccessful. In 1483, however, the Portuguese discovered the Zaire estuary and made contact with the Kingdom of Kongo, a society developed enough in terms of its markets, national currency, and transportation infrastructure to support sustained foreign trade with the Portuguese. The first exports from the Kongo to the Portuguese consisted of luxury items like ivory, but Portuguese demand for such items quickly dried up. By the early 1500s, the Portuguese would only accept slaves for trade. In order to secure Portuguese goods, the Kongo traders began to sell off their existing stock of slaves, fanning out to interior markets to procure

⁶See the Online Appendix for a table with the counts of conflict per century for the three case studies.

as many as slaves they could find for sale to the Portuguese along the coast (Vansina, 1990).

As Portuguese demand for slaves increased, the Kongo quickly found themselves engaged in conflict and using conflict as a means to obtain more slaves. In the second decade of the sixteenth century, for example, the Kongo invaded the neighboring Mbundu to capture slaves in response to a trade mission from the Portuguese crown (Hilton, 1985). Another example occurred in 1567 when the Kongo went to war with the Tio, likely over the control of the Malebo Pool, which had become a major interior market for slaves. The Jaga invasions of 1568 then broke out in which small bands of warriors crossed over into Kongo territory and nearly led to the collapse of the kingdom (Vansina, 1990). This 16th century spike in conflicts also appears in our conflict dataset. Whereas there was only one observed conflict in the 15th century for the Kongo, there were five observed conflicts in the 16th century.

Portuguese military assistance eventually solidified the Kingdom of Kongo's power in the region. The Kongo continued to use wars as a way of capturing slaves, as the slave trade and conflict became entrenched ways of life for the Kongo people. Hilton (1985, p. 122) cites the observation of one mid seventeenth century observer: "... [the Kongo] customarily acquire most of the slaves in wars that one potentate makes against another, and those that are taken alive become slaves, and not being needed for the house, they sell them to be embarked. As a result they are more often moved to war to acquire a quantity of slaves . . . than for political needs and matters of state." As the slave trade became normalized, Kongo people within the kingdom began to prey on one another. Kidnapping was common. Slavery became an acceptable means for settling disputes. If one party could not compensate another monetarily, they could sell a child as a slave.⁷

2.0.3 Makua

Whereas the histories of the Akan and Kongo serve as examples of societies primarily engaging in external conflict to capture slaves, the history of the Makua people illustrates how a society on the receiving end of such raids could turn towards internal conflict in a desperate attempt at survival. Primarily located in what would become modern-day Mozambique, the Makua were historically not heavily involved in the slave trade. Their misfortune, however, was in being surrounded by neighbors who were—both with Arabic traders and, later, Europeans such as the French and Portuguese. As the demand for slaves increased, especially from the Portuguese,

⁷See Boxell (Forthcoming) for additional discussion on the violent and coercive mechanisms through which slaves were acquired.

the Makua began to lose power relative to their rivals, such as the Yao, who benefited from trade and access to guns from the Portuguese. As the hallowing out of Makua lands progressed, the Makua chiefs turned to the slave trade themselves. Initially, the Makua used the common tactic of raiding weaker neighbors and then trading their slaves in exchange for guns. By the 1850s, the Makua had established themselves as a major exporter of slaves (Isaacman, 1989). This timeline matches the observations in our conflict data, where the 19th century is the only century with a recorded conflict for the Makua.

Once the supply of slaves from neighboring lands began to be exhausted, however, the Makua made the fateful decision to turn against themselves. This self-destructive strategy led to revolts and swiftly eroded the cohesion and stability of Makua society by the 1870s (Isaacman, 1989). As the British consul, Frederic Elton, reported, “Fighting is constantly going on, dissensions being actively promoted by the unscrupulous dwellers on the coast, anxious to purchase the prisoners taken by the successful side, and utterly careless as to who is the winner” (Alpers, 1975, p. 227). Elton observed that the wounds caused by the Makua’s descent into anarchy ran deep: “The fear of slave-dealers’ raids . . . has engendered a suspicious uneasiness among the villagers for so many years, that is [*sic*] has now become an innate feature of the Makua character, is marked upon their faces, and colours every action of their lives at the present day” (Alpers, 1975, p. 227).

3 Data

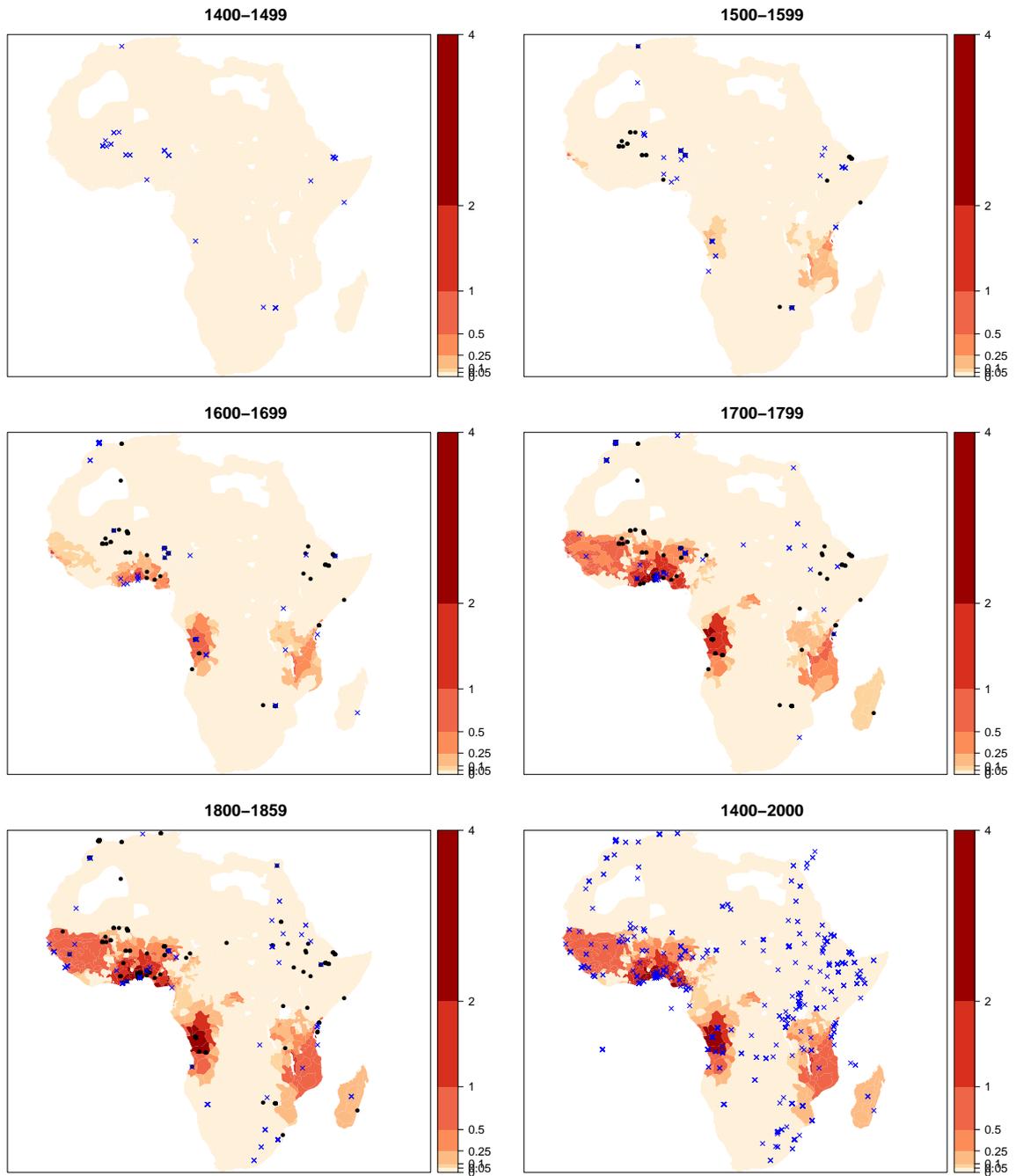
3.1 Slave Trade Data

The data on slave exports are taken from Nunn and Wantchekon (2011). The dataset contains an estimate of the number of slaves exported from each Murdock (1959) ethnic group for each century between 1500 and 1900. The dataset contains a separate estimate for the trans-Atlantic and Indian Ocean slave trades.⁸

Our main slave trade variable is the cumulative number of slaves exported in the trans-Atlantic and trans-Indian Ocean slave trades from a given ethnic group and their geographic neighbors in the current and preceding centuries divided by the area of the ethnic group in square kilometers. Including slave exports from neighboring locations accounts for the geographic spillovers where conflict in a neighboring ethnic group can induce own-ethnicity slave

⁸The data excludes the trans-Saharan and Red Sea slave trades.

Figure 1: Conflict and Slave Exports



Notes: Each panel plots the location of conflicts in a given time period (blue crosses) along with the location of previously recorded conflicts (black dots). The red intensity scale indicates relative intensity of our measure of slave exports which is cumulative across time periods.

exports. Including the cumulative number of slave exports from the current and previous centuries accounts for the temporal dynamics where previous slave exports can induce long-run animosity across ethnic groups and create a norm of conflict. We then take the log transformation. Appendix Table A2 shows the robustness of the results to alternative choices of variable construction.

Formally, for a given ethnic group i and century t our slave variable is

$$S_{it} = \log \left[1 + \left(\sum_{j \in N(i)} \sum_{\tau \leq t} s_{j\tau} \right) / \left(\sum_{j \in N(i)} a_i \right) \right]$$

where $s_{j\tau}$ is the number of slaves exported from ethnic group j in century τ , $N(i)$ is the set of neighbors of ethnic group i including i , and a_i is the area of ethnic group i in square kilometers. This measure of slave trade intensity captures the cumulative and dynamic nature of the slave trade along with its geographic spillovers.

3.2 Conflict Data

Our data on conflict locations originally come from Brecke (1999) who constructs a dataset of conflicts occurring across the globe from 1400-2000 with at least 32 fatalities in a given year.⁹ The Brecke (1999) data are known to be incomplete, but they represent the best known dataset on conflicts during this time period in Africa. The dataset was constructed by compiling numerous previous “dictionaries” of wars and conflicts along with other academic work, historical atlases and chronologies, and encyclopedias by military historians.¹⁰

The original dataset does not have latitude and longitude associated with the conflicts. We, therefore, construct a geocoded dataset of the Brecke (1999) conflicts that occurred in Africa using three sources. For conflicts starting between 1400 and 1699, we use the geocoded dataset from Besley and Reynal-Querol (2014).¹¹ For conflicts starting between 1700 and 1900, we use

⁹A conflict is coded in the dataset for each year that it surpasses the 32 fatality benchmark.

¹⁰Initially, the Brecke (1999) dataset contained 3213 observations with additional sources expected to bring the total to between 4000 and 4500 observations. By 2001, the number of observations had increased to 3516 with the expectation to increase this to somewhere between 4500 and 5000 once all sources were utilized (Brecke, 2001). For geocoding the 1901–2000 period, we use a version of the conflict dataset which contains 3708 observations, and for which Brecke expects the number of observations could continue to grow by 20 percent or more. As of May 24, 2019, the version downloadable from <https://brecke.inta.gatech.edu/research/conflict/> also contains 3708 observations.

¹¹The Besley and Reynal-Querol (2014) occasionally gives multiple locations/observations for a single record in the Brecke (1999) dataset.

the geocoded dataset from Fenske and Kala (2017). And, for conflicts starting between 1901 and 2000, we construct our own geocoded dataset.¹² We also construct an indicator for whether the conflict contained non-African actors to a significant degree and remove these observations from our data.¹³

Given the geocoded dataset, we can assign each conflict to its corresponding ethnic group based on the longitude and latitude locations. We then construct two variables. First, we create an indicator for whether any conflict occurred in the ethnic group during a given century. Second, we create a count of the number of years in the century in which a conflict occurred.¹⁴

Figure 1 plots the location of the conflicts in each century along with the relative slave trade intensity in each ethnic group. Looking at the changes over the centuries, there is a visible shift in conflict locations from the interior to the coast in West Africa that aligns with the rise of the trans-Atlantic slave trade. The second panel of Figure 2 also shows that the general temporal trends in African conflict align with the rise of the trans-Oceans slave trades.

Throughout, we restrict our regressions to data from sub-Saharan Africa and exclude data from North Africa.

4 Results

4.1 Empirical Specification and Main Results

Our primary interest is understanding the manner in which the slave trade shaped Africa's propensity for conflict and how this relationship has changed overtime. There are two issues with this. First, the data on the slave trade likely contains measurement error. Second, reverse causality and selection into the slave trade can bias results.

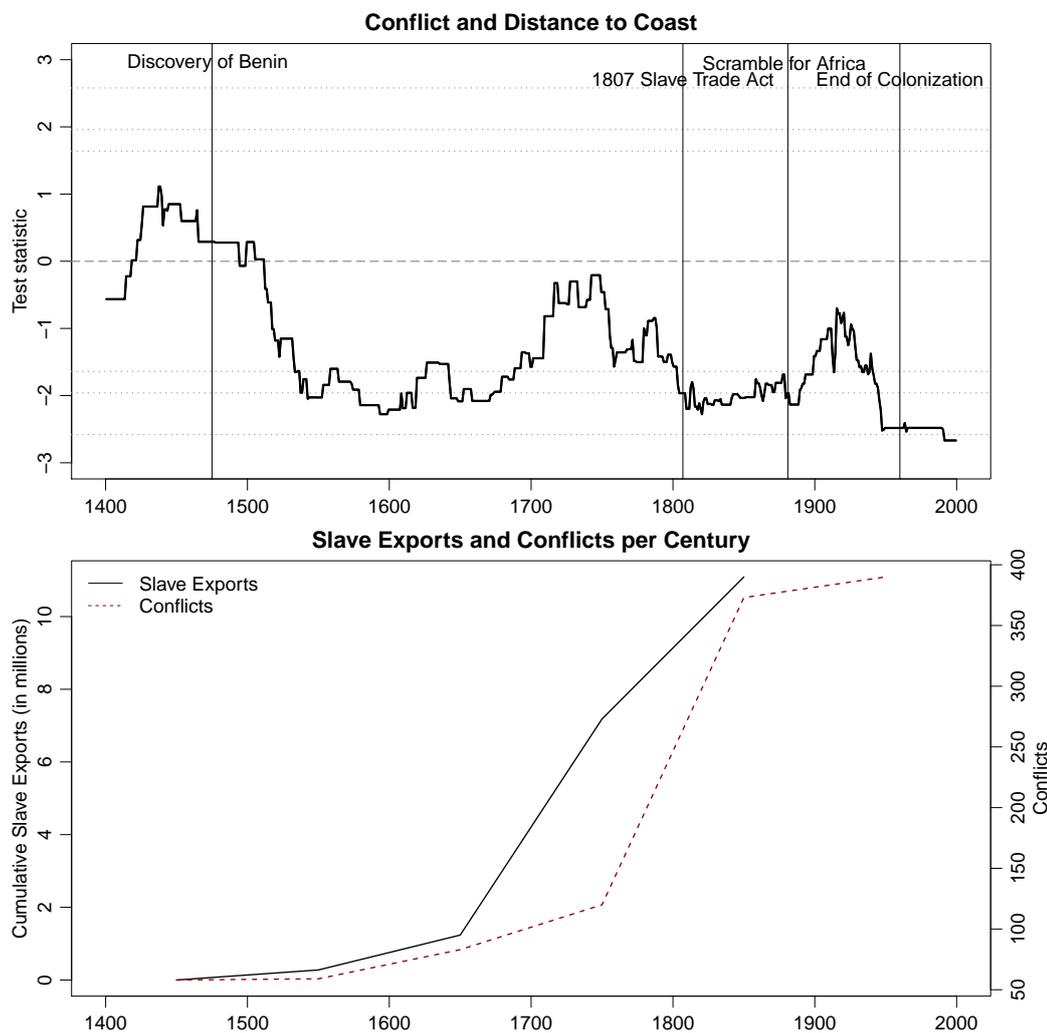
To address these concerns, our identification strategy takes two parts. *First*, the temporal richness of our conflict data allows for the use of a difference-in-difference strategy comparing ethnic groups with different levels of exposure to the slave trade before and after the trade's onset. As Figure 1 highlights, there are important temporal correlations in the location of conflicts—often occurring in regions that experienced conflict prior to the slave trade in the 1400s. Our empirical strategy will control for these fixed differences across ethnic groups.

Second, we exploit heterogeneity in trade costs across ethnic groups. All else being equal,

¹²We exclude 37 observations for which we were unable to obtain sufficient information on the conflict.

¹³The Fenske and Kala (2017) dataset already contains such a distinction. The Online Appendix reports the results from including conflicts with major foreign actors. We identify the involvement of foreign actors primarily by

Figure 2: Temporal Trends in Distance to Coast, Slave Exports, and Conflict



Notes: The top panel shows the test statistic from OLS regressions of conflict indicators on the log distance to coast. The conflict data is restricted to 100 year windows between 1400 and 2000, and the regression is repeated across for each window. The test statistic is plotted at the midpoint of the window and robust standard errors are used. Controls include region fixed effects, the log of the distance to a main pre-colonial empire, an indicator for a city in 1400, mean agricultural suitability, mean elevation, an indicator for rivers, an indicator for lakes, and malaria suitability. The horizontal lines represent thresholds at 1.64, 1.96, and 2.58. The bottom panel shows the cumulative number of slave exports (in millions) from Africa in the trans-Atlantic and trans-Indian slave trades from Nunn (2008), as well as the count of the number of ethnic group-year pairs experiencing conflict each century.

ethnic groups closer to the coast could more readily participate in the overseas slave trades (Nunn and Wantchekon, 2011). Furthermore, the primary European intervention in Africa

the short description given to the conflict in Brecke (1999).

¹⁴The Brecke (1999) dataset indicates the start and end years of each conflict.

during this time period revolved around the slave trade (as documented in Table 1), and it was not until the late 19th century that colonial ambitions really started to take root in Africa (Michalopoulos and Papaioannou, 2016).

If coastal proximity only effects conflict through the slave trade, we would expect there to be no correlation between the two in the period before the overseas slave trades. While the various slave trades were an ongoing phenomenon across many centuries, the trans-Atlantic slave trade primarily occurred between 1500-1850 with the Brazilian abolition of the slave trade in 1850 marking the end of the era.

To test this empirically, we run the follow OLS regression:

$$c_{it} = z_i\omega_t + x_{it}\delta + \eta_{it}, \quad (1)$$

where c_{it} is an indicator for conflict occurring in a given location i at time t , x_{it} is a set of control variables,¹⁵ and z_i is the log of the distance (in km) of an ethnic group's centroid to the coast. Under our assumptions, we would expect the coefficient ω_t on the log of the distance to the coast z_i to be zero before 1500 and negative after 1500.

Figure 2 shows the estimated test statistics for the coefficient on distance to coast when using 100-year rolling windows to measure conflict. It also displays the cumulative number of slaves exported via the trans-Atlantic and trans-Indian trades along with the number of observed ethnicity-year pairs with conflict over the same time period. We see the rise of the negative relationship between distance to coast and conflict coincides with the rise of slave exports and is insignificant prior to 1500. This test provides empirical support for the role of the slave trade in driving the relationship between distance to coast and conflict in Africa. The Online Appendix reports additional results allowing for the intensive margin of conflict and using a probit specification—both providing similar conclusions. Furthermore, the second panel of Figure 2 shows that overall conflict trends in Africa and the rise of the slave trade are temporally correlated.

Combining the two sources of identification, our main estimating equations take the following form:

$$c_{it} = \alpha_i + S_{it}\beta + x_{it}\delta + \epsilon_{it} \quad (2)$$

¹⁵The data for the ethnic group level controls come from Michalopoulos and Papaioannou (2016), whose dataset contains 10 less ethnic groups than the slave trade dataset constructed by Nunn and Wantchekon (2011). As such, we exclude these 10 ethnic groups from our sample.

$$S_{it} = \tilde{\alpha}_i + (z_i \times \bar{S}_{rt})\omega + x_{it}\gamma + \nu_{it}, \quad (3)$$

where c_{it} is a measure of conflict in location i at time t , α_i ($\tilde{\alpha}_i$) are ethnic-group fixed effects, S_{it} is the slave trade intensity measure defined in the data section above, x_{it} are a vector of controls, z_i is the log of the distance from an ethnic group's centroid to the coast, and \bar{S}_{rt} is the log of one plus the cumulative slave exports from region r at time t .¹⁶ In our baseline specifications for the pre-colonial period, we estimate the above using 2SLS with fixed effects, and our set of time periods t are: 1400-1499, 1500-1599, 1600-1699, 1700-1799, and 1800-1859.¹⁷

Intuitively, our empirical strategy pivots off of the spatial and temporal variation highlighted above in Figures 1 and 2. We compare the levels of conflict in ethnic groups before and after the slave trade (first difference) and across ethnic groups with differential exposure to the slave trade (second difference). Since exposure to the slave trade has both endogeneity and measurement error concerns, we instrument slave trade exposure with the distance to the coast z_i weighted by the intensity of the slave trade in a given region \bar{S}_{rt} .¹⁸ The distance to coast z_i exploits the spatial variation in slave exports highlighted in Figure 1, and the regional level of slave trade participation \bar{S}_{rt} exploits the temporal growth in the slave trade highlighted in the second panel of Figure 2 along with its regional heterogeneity.¹⁹ As shown in the first panel of Figure 2, distance to coast is unrelated to conflict propensity prior to the onset of the slave trade. Since we use data from multiple time periods, standard errors are clustered at the ethnic-group level.

Our main results are shown in Table 2. Column (1) is our baseline specification and includes ethnic-group fixed effects along with region-century fixed effects, Column (2) allows for separate linear trends across a set of controls, and Column (3) interacts this set of controls with century indicators. The set of control variables includes the log of the distance to a main pre-colonial empire, an indicator for a city in 1400, mean agricultural suitability, mean elevation, an indicator for rivers, an indicator for lakes, and malaria suitability. Across Columns (1)-(3), we see a large and positive coefficient on slave exports that is significant at conventional levels. Furthermore, as controls are added, the coefficient is relatively stable. Our F-statistic on the

¹⁶Our regions are South, Central, East, and West Africa. As noted previously, we exclude North Africa. See the Online Appendix for a map depicting these divisions.

¹⁷To account for the different length of time across the centuries, we scale the conflict indicator and the number of observed conflicts by $\frac{100}{x}$ where x is the period's timespan.

¹⁸We include region-time fixed effects across specifications when using the $z_i \times \bar{S}_{rt}$ instrument so that \bar{S}_{rt} does not drive the identification directly.

¹⁹For example, after the 1807 Slave Trade Act, slave exports from West Africa declined dramatically and shifted further south and to East Africa.

first stage regression is close to 50 across specifications alleviating concerns regarding weak instruments.

Table 2: Pre-Colonial Impact of the Slave Trade on Conflict

	Conflict Indicator				Log(1 + Conflicts)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Slave Exports	0.156*** (0.054)	0.134** (0.065)	0.143** (0.062)	0.034 (0.026)	0.172*** (0.058)	0.141** (0.064)	0.158** (0.064)	0.058 (0.056)
Clusters	764	764	764	764	764	764	764	764
Sample	3820	3820	3820	3820	3820	3820	3820	3820
Ethnic Group FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region-Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls (Linear)	No	Yes	No	No	No	Yes	No	No
Controls (Flexible)	No	No	Yes	No	No	No	Yes	No
Estimator	2SLS	2SLS	2SLS	OLS	2SLS	2SLS	2SLS	OLS
F-statistic	54.0	48.8	49.7	—	54.0	48.8	49.7	—

Notes: The table shows regressions of measures of conflict on our slave trade variable S_{it} . Columns (1)–(4) use an indicator for conflict as the dependent variable, and columns (5)–(8) use the log of one plus the number of years with conflict (both dependent variables scaled by timespan). Columns (1)–(3) and (4)–(7) use the log of the distance of an ethnic groups centroid to the African coast as an instrument interacted with the total slave exports from a region in a given time period and 2SLS for estimation. Columns (4) and (8) use OLS. All columns include ethnic group and region-time fixed effects. Controls includes the log of the distance to a main pre-colonial empire, an indicator for a city in 1400, mean agricultural suitability, mean elevation, an indicator for rivers, an indicator for lakes, and malaria suitability. The ‘Controls (Linear)’ specification allows for linear trends in the control variables. The ‘Controls (Flexible)’ specification interacts each control variable with century indicators. Standard errors clustered at the ethnic group level are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

The 10th and 90th percentile of our slave exports variable are 0 and .857 for the 1800-1860 time period. Thus, Column (1) suggests that going from the 10th to the 90th percentile in slave exports increases the likelihood of a recorded conflict by 8 percentage points during the same period.²⁰ This is economically significant as only 4 percent of ethnic groups have a recorded conflict during this period.

Column (4) uses OLS to estimate equation (2) ignoring the endogeneity of slave exports and shows a smaller positive relationship between slave exports and conflict, but is insignificant at conventional levels. These findings are consistent with Nunn (2008) who argues that it was areas with higher levels of initial development and lower levels of conflict propensity that were more likely to engage in the slave trade with Europeans. More densely populated areas were better able to sustain the demographic shock of the slave trade, and more violent societies were better able to resist European intervention. Huillery (2010) finds a similar impact of conflict propensity on European settlement patterns in West Africa, where more violent societies better resisted European colonization and settlement.²¹ Measurement error could also be contributing

²⁰ $.857 \times .156 \times .6 = .08$. Note that we scale by .6 as our dependent variable is correspondingly scaled.

²¹ While these arguments in the previous literature explain variation in the cross-section, they can also apply to the panel variation in the data that we exploit.

to the changes in the magnitude of coefficient estimates.

We also examine the impact of the slave trade on the intensive margin by replacing the conflict indicator in equation (2) with the log of one plus the count of the number of years in a century with conflicts. The structural equation for slave exports is left unchanged. The results for this are shown in Columns (5)-(8). The results align qualitatively with Columns (1)-(4). Slave exports increased conflict on both the extensive and intensive margins.

4.2 Heterogeneity

Table 3: Pre-Colonial Impact of the Slave Trade on Conflict by Century

	Conflict Indicator				Log(1 + Conflicts)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Time Period:	1500	1600	1700	1800	1500	1600	1700	1800
Slave Exports	0.568*	0.252**	0.079*	0.203***	0.555	0.300***	0.086*	0.215***
	(0.328)	(0.108)	(0.046)	(0.075)	(0.371)	(0.115)	(0.051)	(0.074)
Clusters	764	764	764	764	764	764	764	764
Sample	1528	1528	1528	1528	1528	1528	1528	1528
Ethnic Group FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region-Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Estimator	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
F-statistic	11.3	34.7	43.9	64.6	11.3	34.7	43.9	64.6

Notes: The table shows 2SLS regressions of measures of conflict on our slave trade variable S_{it} after restricting the data to various time periods. The log of the distance of an ethnic groups centroid to the African coast interacted with the cumulative total slave exports from each region is used as an instrument. Columns (1)–(4) use an indicator for conflict as the dependent variable, and columns (5)–(8) use the log of one plus the number of years with conflict (both dependent variables scaled by timespan). Columns (1) and (5) restrict the data to the 1500-1599 time period, columns (2) and (6) restrict the data to the 1600-1699 time period, columns (3) and (7) restrict the data to the 1700-1799 time period, and columns (4) and (8) restrict the data to the 1800-1859 time period. Standard errors clustered at the ethnic group level are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

We next turn to examining how the impact of the slave trade varied across the duration of the trade. Table 3 repeats the estimation of equation (2) after restricting the data to each pre-colonial time period. Columns (1)-(3) show large and significant estimated effects in the 1500s and 1600s that fade in magnitude by the 1700s.²² Consistent with Fenske and Kala (2017), we see a resurgence in the 1800s that aligns with the 1807 Slave Trade Act. The 1807 Slave Trade Act induced an economic shock to the slave trading regions as British fleets attempted to suppress the slave trade in West Africa—driving the slave trade to South-Central Africa, particularly the Angolan region, and East Africa. Columns (5)-(8) tell a qualitatively similar story when examining the intensive margin.

²²Brecke (1999) also notes a global decline in conflict during the 1700s.

We also examine the differential impact across regions of Africa. During most of this time period, West Africa was the primary exporter of slaves through the trans-Atlantic slave trade. East Africa also had an ongoing slave trade via the Indian Ocean slave trade, but this was of a smaller magnitude.²³ For West Africa, our coefficient estimate in Column (1) of Table 4 is positive and significant at the five percent level despite the substantial drop in sample size. It is also of similar magnitude to our coefficient estimate in Table 2. For East Africa, we see an economically important positive coefficient, but it is statistically insignificant. The same can be said for Central Africa which became a larger player in the slave trade after the 1807 Slave Trade Act which shifted much of the trans-Atlantic slave trade south. For South Africa, our instrument is too weak to place any confidence in the estimates, though they are positive and quite large. Across restrictions, the F-statistic on the first stage is largest for West Africa where we might expect the spatial variation in slave trade intensity to be greatest. Taken together, the spatial heterogeneity across Africa aligns well with the spatial distribution of the African slave trade.

Table 4: Pre-Colonial Impact of the Slave Trade on Conflict by Region

Region:	Conflict Indicator				Log(1 + Conflicts)			
	(1) West	(2) East	(3) South	(4) Central	(5) West	(6) East	(7) South	(8) Central
Slave Exports	0.133** (0.060)	0.247 (0.169)	1.596 (1.349)	0.099 (0.143)	0.174** (0.071)	0.074 (0.156)	2.570 (2.372)	0.094 (0.081)
Clusters	250	217	88	209	250	217	88	209
Sample	1250	1085	440	1045	1250	1085	440	1045
Ethnic Group FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region-Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Estimator	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
F-statistic	29.9	10.6	2.4	12.0	29.9	10.6	2.4	12.0

Notes: The table shows 2SLS regressions of measures of conflict on our slave trade variable S_{it} after restricting the data to various regions. The log of the distance of an ethnic groups centroid to the African coast interacted with the cumulative total slave exports from each region is used as an instrument. Columns (1)–(4) use an indicator for conflict as the dependent variable, and columns (5)–(8) use the log of one plus the number of years with conflict (both dependent variables scaled by timespan). Standard errors clustered at the ethnic group level are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

4.3 Robustness

One potential concern is measurement error in the conflict data. European involvement in the slave trade may have increased the likelihood of historical accounts being kept for conflicts near

²³The trans-Saharan and the Red Sea slave trades were also present, but lack data at the ethnic group level for analysis.

slave trade activity (i.e., the coast). Part of this concern is already alleviated by our choice to restrict attention to conflicts with only African actors and excluding those with major European interventions. However, we can also examine whether controlling for other forms of European presence, such as pre-colonial explorer routes, colonial railroads, or Christian missions, attenuates our findings. For this, we examine both dropping ethnic groups containing one of these lines, controlling for differential trends in the number of lines passing through an ethnic group, and controlling for differential trends in the distance of an ethnic group's centroid from the line using data on explorer routes and colonial railways from Nunn and Wantchekon (2011) and data on Christian mission locations from Nunn (2010).²⁴ It is important to note that these additional controls and sample selection procedures are post-treatment and, thus, are susceptible to the general issues associated with post-treatment controls. The results of this are shown in Table A1. The coefficients on slave exports remain positive and significant across all specifications except when dropping ethnic groups with explorer routes [p-value=.11].

As a further test of our identification strategy, we repeat the specification in Figure 2 for West and North Africa individually in Appendix Figure A1. In this case, North Africa is a falsification test for whether distance to coast is related to conflict mechanically. Note that, with our difference-in-differences strategy, it is *changes* in the relationship between distance to coast and conflict that drives our identification. While there is an initial positive relationship between distance to coast and conflict in West Africa, we see a general trend towards a negative relationship which aligns with the rise of the slave trade. In contrast, for North Africa which was not exposed to the same slave trade shock but for which measurement error concerns still exist, we see no such trend. These results further suggest our identification strategy is capturing a slave trade specific shock rather than shifts in measurement error or other economic shocks.

We also perform various transformations of the main variables, including removing the log transformation, restricting attention to a single slave trade, removing neighbor slave exports, and using the log of the cumulative total number of slaves exported in the trans-Atlantic and trans-Indian ocean slave trades across all of Africa rather than the regional specific version in our construction of the instrument. The results of these specifications are show in Table A2, and, again, we see qualitatively similar conclusions as our main result in Column (1) of Table 2.

Table A3 examines the effect of restricting the sample by slave exports. Across most sample

²⁴Implemented by interacting these values with century indicators. The data on Christian missions are based on a 1924 map.

restrictions, slave exports have a positive and significant effect on conflict. The one exception is when restricting observations to ethnic groups with at least 0.5 slave export per square kilometer from their own ethnic group or their neighbors. In this case, we see an insignificant positive estimate and a substantially reduced sample size. Columns (4)–(6) of Table A3 show that the results are robust when using the small sample correction or when standard errors are clustered at the country level or the region level.

5 Persistence and Mechanisms

5.1 Persistence

Did the impact of the slave trade on conflict propensity in Africa persist and contribute to Africa's high levels of conflict today? The first clue to this answer lies in Figure 2. Around the turn of the 19th century as Europeans were partitioning Africa amongst themselves and administering colonial rule, we see a decline in the distance to the coast and conflict relationship. At the end of colonialism, we see a resurgence of the coast-conflict relationship.

Table 5 estimates equation (2) using data from 1400-1499 as the pre-slave trade period and data from either 1860-1960 (colonial) or 1960-2000 (post-colonial) as the post-slave trade period. This allows for estimating the long run impact of the slave trade on conflict in Africa while controlling for time-invariant differences in conflict propensities. Columns (4)-(6) show strong evidence that the slave trade-conflict relationship persisted into the post-colonial period. On the other hand, Columns (1)-(3) show less evidence that such a strong relationship existed during Africa's colonial period.

Table 5: Persistent Impact of the Slave Trade on Conflict in Africa

	Conflict Indicator						Log(1 + Conflicts)					
	Colonial			Post-Colonial			Colonial			Post-Colonial		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Slave Exports	0.035 (0.040)	0.072 (0.049)	0.056 (0.059)	0.297** (0.122)	0.388*** (0.143)	0.399** (0.169)	0.065 (0.052)	0.125** (0.062)	0.088 (0.077)	0.299*** (0.113)	0.379*** (0.138)	0.368** (0.154)
Clusters	764	764	764	764	764	764	764	764	764	764	764	764
Sample	1528	1528	1528	1528	1528	1528	1528	1528	1528	1528	1528	1528
Ethnic Group FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region-Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Colonial Controls	No	No	Yes	No	No	Yes	No	No	Yes	No	No	Yes
Estimator	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
F-statistic	64.6	59.5	41.9	64.6	59.5	41.9	64.6	59.5	41.9	64.6	59.5	41.9

Notes: The table shows 2SLS regressions of measures of conflict on our slave trade variable S_{it} using $z_{it} \times \bar{S}_{rt}$ as an instrument. Columns (1)–(6) use an indicator for conflict as the dependent variable, and columns (7)–(12) use the log of one plus the number of years with conflict. ‘Controls’ allows for differential linear trends based on the log of the distance to a main pre-colonial empire, an indicator for a city in 1400, mean agricultural suitability, mean elevation, an indicator for rivers, an indicator for lakes, and malaria suitability. ‘Colonial Controls’ allows for differential linear trends based on the log of the distance to nearest explorer route, the log of the distance to the nearest rail, and the log of the distance to the nearest Christian mission. Columns (1)–(3) and (7)–(9) restrict data to 1400–1499 and 1860–1959; and columns (4)–(6) and (10)–(12) restrict data to 1400–1499 and 1960–2000. Standard errors clustered at the ethnic group level are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

There are several reasons why one might expect the effect to be suppressed during the colonial period. For one, Europeans provided a common enemy that diverted attention away from inter-ethnic African conflict. Furthermore, Europeans could have suppressed conflict and reduced the returns to violent behavior. Lastly, traditional forms of governance and state centralization could have been disrupted which may have prevented the necessary organization for armed conflict. The removal of colonialism in the 1960s across much of Africa brought along with it increased returns to conflict in terms of political and resource rents, a political vacuum as Europeans left, and the removal of a common enemy. These changes to the economic and political incentives for conflict may explain the variation over time. Consistent with this hypothesis, the Online Appendix shows a strong positive impact of the slave trade on conflicts with foreign actors during the colonial period, but no significant impact on the post-colonial period.

One caveat with the above 2SLS regressions is that the exclusion restriction may be less valid after the onset of Africa's colonial period, as colonial interactions were predominantly close to the coast which will be correlated with our instrument. However, when allowing for differential linear trends in the logs of the distance to the nearest colonial rail, the distance to the nearest explorer route, and the distance to the nearest Christian mission (see Columns 3, 6, 9, and 12), the results in Table 5 are relatively unchanged.

The Online Appendix examines various ACLED and UCDP conflict indicators and counts as outcomes. Since these data sources only include contemporary data, we instrument slave exports with cross-sectional variation in distance to coast. While showing some variation, these results are broadly consistent with the slave trade increasing conflict propensity—suggesting the results are not unique to the Brecke (1999) conflict data.

5.2 Mechanisms

One of the common themes in the literature on conflict in sub-Saharan Africa is the role of natural resources (Collier and Hoeffler, 2002). To examine whether the natural resource curse could be the driving mechanism for the impact of the slave trade on contemporary conflict, we first construct an indicator for whether an ethnic group has petroleum or diamond deposits.²⁵ Neither petroleum nor diamonds were heavily traded commodities prior to the late 19th century (Black, 2012; Ndumbe and Cole, 2005). Therefore, their presence should have no differential effect on conflict in the pre-colonial period. Furthermore, during the colonial period, European

²⁵As defined by Michalopoulos and Papaioannou (2016). The Online Appendix reports results for petroleum and diamonds separately.

powers controlled the human and natural resources and suppressed inter-ethnic group conflict over them. However, theoretical predictions and previous empirical evidence suggest that, given the capital intensive nature of petroleum and diamond extraction, the commodification of these resources along with the end of the colonial era should lead to increased returns to appropriation (Dal Bo and Dal Bo, 2011; Dube and Vargas, 2013). The rise of foreign demand for slave exports can be viewed as a historical shock to the creation of institutions with a comparative advantage in appropriation.

Table 6: The Slave Trade and the Resource Curse

	Pre-Colonial		Colonial		Post-Colonial	
	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Variable:	Indicator	Log	Indicator	Log	Indicator	Log
Slave Exports	0.188** (0.081)	0.159** (0.076)	0.004 (0.040)	0.007 (0.054)	0.121 (0.128)	0.086 (0.105)
Slave Exports × Resources	0.033 (0.180)	0.197 (0.222)	0.095 (0.105)	0.206 (0.155)	0.630* (0.324)	0.788** (0.360)
Resources × Century	0.019 (0.071)	-0.026 (0.064)	0.003 (0.046)	-0.025 (0.067)	-0.091 (0.111)	-0.146 (0.111)
Dependent Clusters	764	764	764	764	764	764
Sample	1528	1528	1528	1528	1528	1528
Ethnic Group FE	Yes	Yes	Yes	Yes	Yes	Yes
Region-Time FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table shows various linear instrumental variable regressions regressing a (scaled) conflict outcome for various time periods on our slave trade variable S_{it} along with its interaction with an indicator for natural resources using $z_{it} \times \bar{S}_{rt}$ along with its interaction with an indicator for natural resources as instruments. Columns (1) and (2) use conflict data from 1400-1499 and 1800–1860. Columns (3) and (4) use conflict data from 1400-1499 and 1860–1960. Columns (5) and (6) use conflict data from 1400-1499 and 1960–2000. Columns (1), (3), and (5) use the conflict indicator, whereas Columns (2), (4), and (6) use the log of one plus the number of conflicts. ‘Resources’ is an indicator for whether the ethnic group has petroleum or diamond deposits. Standard errors clustered at the ethnic group level are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

To examine whether the natural resource curse could be the driving mechanism for the impact of the slave trade on contemporary conflict, we interact our measure of slave trade intensity along with our instrument with the natural resource indicator. We then examine the main effect of the slave trade along with the interaction with the natural resource indicator for the pre-colonial, colonial, and post-colonial periods.²⁶ We also allow for a separate linear trend for ethnic groups containing natural resource deposits. The results are displayed in Table 6.

²⁶And, the 1400-1499 time period is still used as the pre-intervention period to all for fixed effects estimation.

Columns (1)-(4) show that the interaction with the natural resource indicator and slave exports is insignificant in the pre-colonial and colonial periods whereas the main effect of the slave trade is still significant in the pre-colonial period. However, Columns (5)-(6) show that, after colonialism, the main effect of the slave trade is positive but insignificant. Instead, the effect of the slave trade on contemporary conflict outcomes is driven by ethnic groups with natural resources.

These results suggest that the slave trade created institutions focused on conflict over resources. In the pre-colonial period, these conflicts were fought over human resources—slaves. During the colonial period, European powers controlled the human and natural resources and suppressed inter-ethnic group conflict over them. However, at the end of the colonial period and the end of European control of resources, we see a sharp increase in conflict in areas with natural resources. The fact that the spatial incidence of the slave trade on conflict changed over-time to be concentrated in areas with natural resources also highlights the value of this extended analysis and decompression of history.

The results also suggest that the natural resource curse in Africa may have its historical roots in the slave trade. In the 1400s, neither diamonds nor petroleum were important commodities in Africa. Therefore, the change in the impact of these commodities between the 1400s and more contemporary periods can be interpreted as the impact of the commodification of these natural resources on conflict. When examining the interaction between the natural resource indicator and the century time trend, we actually observe a negative estimate in the contemporary period. Absent the slave trade, our estimates suggest that ethnic groups with natural resources experience relatively *less* conflict. And, thus, any impact of natural resources on contemporary conflict is driven by its interaction with the slave trade.²⁷

Another potential mechanism for the persistent relationship between the slave trade and conflict is national institutions—both formal and informal. If national institutions are an important driving force of this relationship, then controlling for country fixed effects should attenuate the estimates significantly. It is important to note that contemporary national borders in Africa were drawn at the close of the 19th century with the Scramble for Africa (Michalopoulos and Papaioannou, 2016). Therefore, we would expect little-to-no change in coefficient estimates with the inclusion of country-specific linear trends in the pre-colonial period, but a larger change in estimates during the post-colonial period.

²⁷The Online Appendix repeats this exercise after excluding the slave trade variables and finds evidence for a general resource curse in the contemporary period.

Table 7 shows the results of the 2SLS specifications when country-century indicators are also included across three time periods: 1800–1860, 1860–1960, and 1960–2000. Panel A uses the conflict indicator as the outcome, while Panel B uses the log of one plus the number of conflicts. Consistent with the predictions for the national institutions mechanism, Column (6) in Panel A and Panel B shows a 53 and 69 percent decrease relative to Column (5) in the estimated coefficient in the post-colonial period respectively when including country-specific linear trends, and neither coefficient are significant. This attenuation in the coefficient estimate suggests slave trade induced variation in national institutions may be important mediators for the prolonged relationship between the slave trade and conflict. In contrast, Column (2) in Panel A and Panel B shows only a 25 and 29 percent decrease relative to Column (1) in the coefficient for the pre-colonial period, and the coefficient in Panel B is still significant. Furthermore, consistent with national institutions being important only after the Scramble for Africa, adding the country-specific linear trends decreases precision in the pre-colonial period but increases precision in the post-colonial period.

Table 7: Role of Institutions

	Pre-Colonial		Colonial		Post-Colonial	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: Conflict Indicator</i>						
Slave Exports	0.203*** (0.075)	0.153 (0.097)	0.035 (0.040)	-0.028 (0.045)	0.294** (0.122)	0.138 (0.104)
<i>Panel B: Log(1 + Number of Conflicts)</i>						
Slave Exports	0.216*** (0.074)	0.154* (0.088)	0.067 (0.052)	-0.011 (0.055)	0.295*** (0.113)	0.091 (0.087)
Clusters	764	764	764	764	764	764
Sample	1528	1528	1528	1528	1528	1528
Ethnic Group FE	Yes	Yes	Yes	Yes	Yes	Yes
Region-Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Country Trends	No	Yes	No	Yes	No	Yes
F-statistic	64.4	39.5	64.4	39.5	64.4	39.5

Notes: The table shows various linear instrumental variable regressions regressing a (scaled) conflict outcome for various time periods on our slave trade variable S_{it} using $z_{it} \times \bar{S}_{rt}$ as an instrument. Columns (1) and (2) use conflict data from 1400-1499 and 1800–1860. Columns (3) and (4) use conflict data from 1400-1499 and 1860–1960. Columns (5) and (6) use conflict data from 1400-1499 and 1960–2000. ‘Country Trends’ interact country indicators with century indicators. All specifications also interact indicators for split ethnic groups (defined at the 10 percent threshold) with century indicators. Standard errors clustered at the ethnic group level are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

Recent work has also shown that the African slave trade decreased trust and increased polygyny (Nunn and Wantchekon, 2011; Dalton and Leung, 2014). While conflict may decrease lev-

els of trust, low levels of trust may also sustain higher levels of conflict in equilibrium. High levels of polygyny can increase the proportion of young men that are unmarried and who may be susceptible to engaging in armed conflict. Therefore, both of these may be channels for the persistent impact of the slave trade on conflict. Table A4 in the Appendix shows that the estimated impact of slave exports on the modern era is relatively unchanged when allowing for differential trends in contemporary trust or polygyny.

Overall, these results demonstrate the deeply linked relationships between the slave trade, extractive or “grabber friendly” institutions, and conflict in Africa.

6 Conclusion

The slave trade fundamentally shaped African societies. While both slavery and the slave trade existed in Africa before the onset of European trade in the 16th century, the European shock to the demand for slaves faced by African societies drastically increased the number of slave exports. We show that this European demand shock and rise in slave exports increased the number of inter-African conflicts near the coast, suggesting a causal relationship between the slave trade and the rise in conflict. This provides one of the first empirical examinations of how the trans-Atlantic slave trade reshaped the pre-colonial economic conditions in Africa. We also show that regions with higher levels of participation in the slave trade exhibit higher levels of conflict today—suggesting the slave trade may explain part of Africa’s increased propensity for conflict.

We document three key facts regarding the persistent impact of the slave trade on inter-ethnic group conflict in sub-Saharan Africa. First, there is no effect during the colonial period. Second, the persistent effect on contemporary conflict is driven primarily by ethnic groups with natural resource deposits. And, third, national institutions appear to be an important mediating mechanism. Combined, these facts suggest that the slave trade helped create institutions supporting appropriation and conflict over natural resources that may explain Africa’s contemporary conflict propensity.

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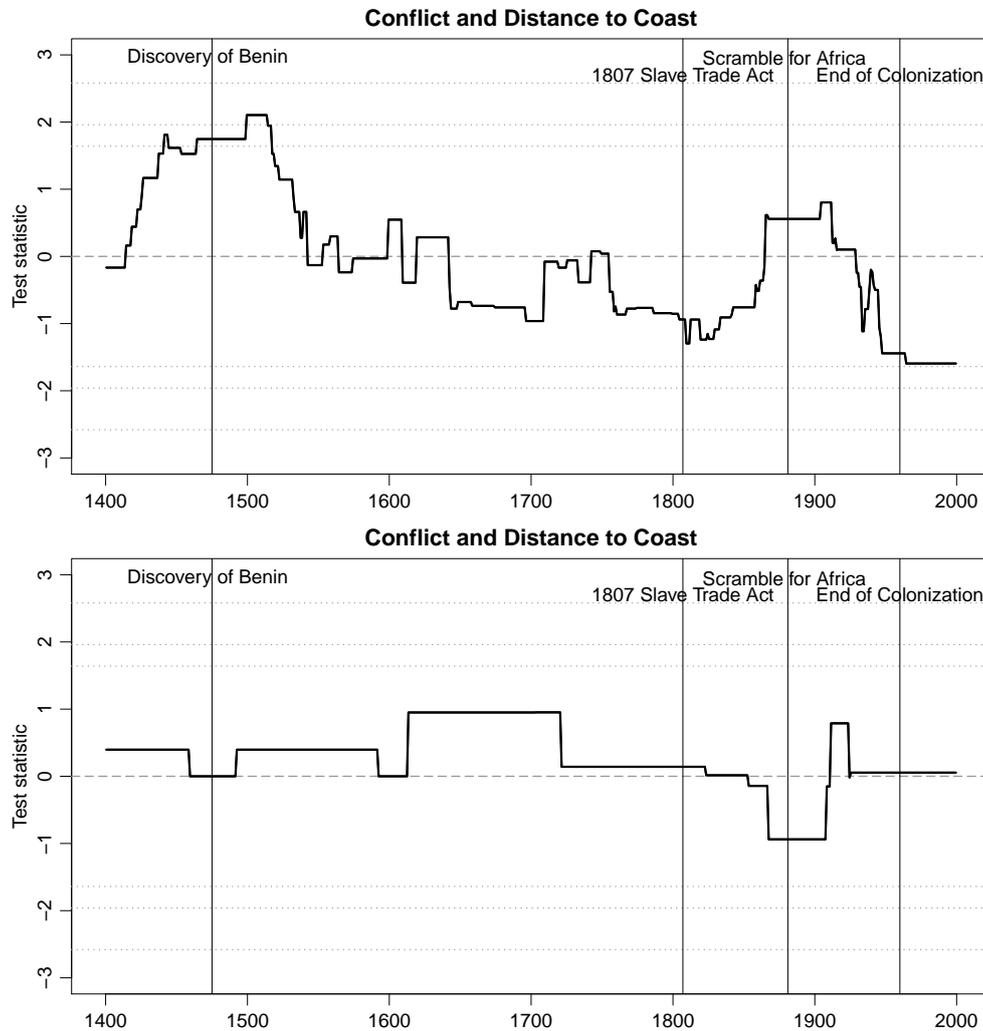
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7 Appendix

Figure A1: Temporal Trends in Distance to Coast and Conflict – West vs North Africa



Notes: Top panel shows the test statistic from OLS regressions of a conflict indicator on the log distance to coast for West Africa; the bottom panel repeats this process but for North Africa. The conflict data is restricted to 100 year windows between 1400 and 2000 and the regression is repeated across for each window. The test statistic is plotted at the midpoint of the window and robust standard errors are used. Controls include region fixed effects, the log of the distance to a main pre-colonial empire, an indicator for a city in 1400, mean agricultural suitability, mean elevation, an indicator for rivers, an indicator for lakes, and malaria suitability. The horizontal lines represent thresholds at 1.64, 1.96, and 2.58.

Table A1: Robustness to Additional Colonial Controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Slave Exports	0.146*** (0.047)	0.132** (0.052)	0.104** (0.053)	0.078 (0.049)	0.140*** (0.050)	0.134*** (0.048)	0.132** (0.060)	0.146*** (0.057)	0.151*** (0.057)
Clusters	668	764	764	479	764	764	465	764	764
Sample	3340	3820	3820	2395	3820	3820	2325	3820	3820
Ethnic Group FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region-Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F-statistic	43.9	53.1	47.1	39.2	54.9	53.1	26.0	47.8	48.0

Notes: The table shows various 2SLS regressions regressing an indicator for conflict in a given century on our slave trade variable S_{it} using $z_{it} \times \bar{S}_{r,t}$ as an instrument. Column (1) restricts attention to ethnic groups with no colonial railway; Column (2) includes a count of the number of colonial railways passing through each ethnic group interacted with century indicators; Column (3) includes the log of the distance (in km) of an ethnic group's centroid from the nearest colonial railway interacted with century indicators; Column (4) restricts attention to ethnic groups with no pre-colonial explorer routes; Column (5) includes a count of the number of pre-colonial explorer routes passing through each ethnic group interacted with century indicators; Column (6) includes the log of the distance (in km) of an ethnic group's centroid from the nearest pre-colonial explorer routes interacted with century indicators; Column (7) restricts attention to ethnic groups with no Christian mission; Column (8) includes a count of the number of Christian missions in each ethnic group interacted with century indicators; and Column (9) includes the log of the distance (in km) of an ethnic group's centroid from the nearest Christian mission interacted with century indicators. Standard errors clustered at the ethnic group level are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

Table A2: Robustness to Alternative Variable Transformations

	(1)	(2)	(3)	(4)	(5)	(6)
Slave Exports	0.043** (0.017)	0.176*** (0.062)	1.334** (0.619)	0.252*** (0.095)	1.486** (0.747)	0.170*** (0.057)
Clusters	764	764	764	764	764	764
Sample	3820	3820	3820	3820	3820	3820
Ethnic Group FE	Yes	Yes	Yes	Yes	Yes	Yes
Region-Time FE	Yes	Yes	Yes	Yes	Yes	Yes
F-statistic	19.3	46.8	7.5	23.4	6.0	56.5

Notes: The table shows various 2SLS regressions regressing an indicator for conflict in a given century on various measures of slave exports using $z_{it} \times \bar{S}_{rt}$ as an instrument. Column (1) uses the un-logged version of the slave exports variable (in individuals); Column (2) constructs the logged slave exports variable after restricting attention to the trans-Atlantic slave trade; Column (3) constructs the logged slave exports variable after restricting attention to the trans-Indian slave trade; Column (4) constructs the logged slave exports variable after restricting attention to the trans-Atlantic slave trade and excludes neighbor exports along with neighbor area; Column (5) constructs the logged slave exports variable after restricting attention to the trans-Indian slave trade and excludes neighbor exports along with neighbor area; and Column (6) uses the original slave exports variable but interacts the distance to coast with the total cumulative number of slave exports in a given year across all of Africa rather than the region-specific value. Standard errors clustered at the ethnic group level are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

Table A3: Other Robustness Tests

	(1)	(2)	(3)	(4)	(5)	(6)
Slave Exports	0.158*** (0.056)	0.139 (0.114)	1.805** (0.738)	0.156*** (0.054)	0.156* (0.089)	0.156*** (0.030)
Clusters	626	162	602	764	41	4
Sample	3130	810	3010	3820	3820	3820
Ethnic Group FE	Yes	Yes	Yes	Yes	Yes	Yes
Region-Time FE	Yes	Yes	Yes	Yes	Yes	Yes
F-statistic	49.5	9.6	25.0	54.0	15.6	21.8

Notes: The table shows various instrumental variable regressions regressing an indicator for conflict in a given century on various measures of slave exports using $z_{it} \times \bar{S}_{rt}$ as an instrument. Column (1) restricts observations to ethnic groups with non-zero total slave exports from their own ethnic group or their neighbors; Column (2) restricts observations to ethnic groups with at least 0.5 slave export per square kilometer from their own ethnic group or their neighbors; Column (3) restricts observations to ethnic groups with at most 0.5 slave export per square kilometer from their own ethnic group or their neighbors; Column (4) uses standard errors clustered at the ethnic group level with the small sample correction (the F-statistic uses the standard cluster robust standard errors); Column (5) clusters standard errors at the country level; and Column (6) clusters standard errors at the region level. Standard errors clustered at the ethnic group level, unless otherwise specified, are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

Table A4: Role of Trust and Polygyny

	Conflict Indicator				Log(1 + Conflicts)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Slave Exports	0.160 (0.122)	0.147 (0.120)	0.470 (0.308)	0.436 (0.320)	0.114 (0.101)	0.105 (0.100)	0.468 (0.294)	0.440 (0.302)
Clusters	524	524	182	182	524	524	182	182
Sample	1048	1048	364	364	1048	1048	364	364
Ethnic Group FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region-Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Polygyny Control	No	Yes	No	No	No	Yes	No	No
Trust Control	No	No	No	Yes	No	No	No	Yes
F-statistic	46.7	47.8	12.6	12.7	46.7	47.8	12.6	12.7

Notes: The table shows various 2SLS regressions regressing an indicator of conflict for 1960–2000 on our slave trade variable S_{it} using $z_{it} \times \bar{S}_{rt}$ as an instrument. Columns (1)-(4) use an indicator for conflict as the dependent variable, and columns (4)-(8) use the log of one plus the number of years with conflict. Columns (1), (2), (5), and (6) restrict the sample to ethnic groups with non-missing measures of polygyny. Columns (3), (4), (7), and (8) restrict the sample to ethnic groups with non-missing measures of inter-group trust. ‘Polygyny Control’ interacts contemporary polygyny rates with century indicators. ‘Trust Control’ interacts contemporary measures of trust with century indicators. Data is restricted to 1400-1499 and 1960-2000. Standard errors clustered at the ethnic group level are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

8 Online Appendix

Figure OA1: Regional Divisions

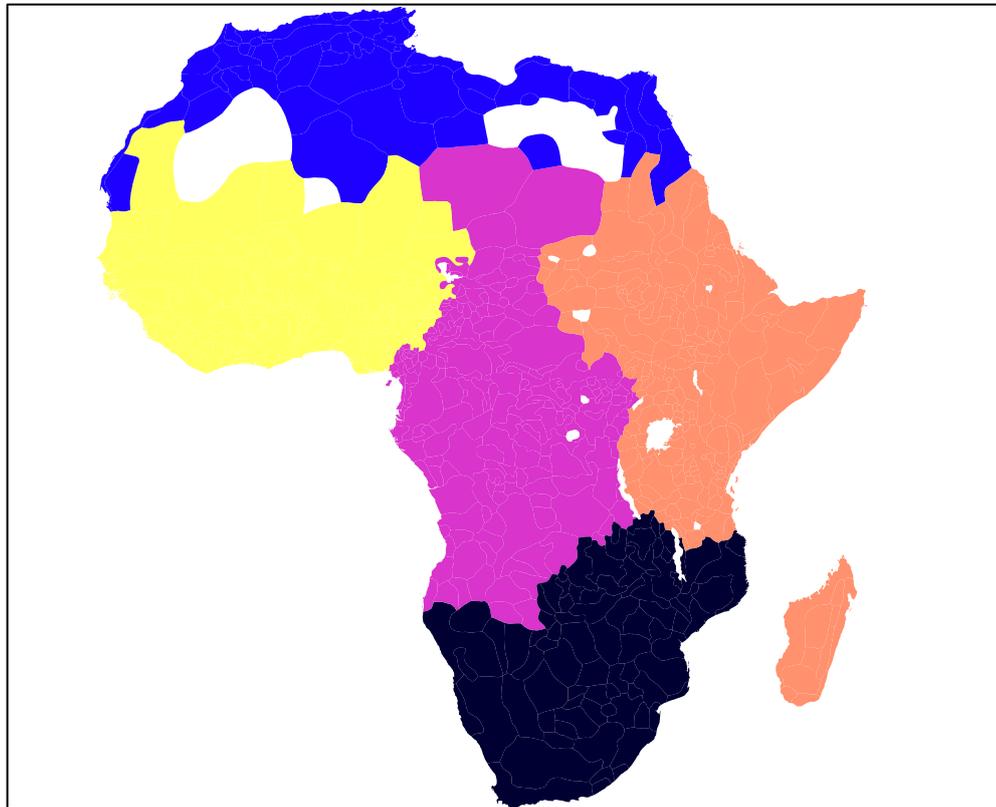
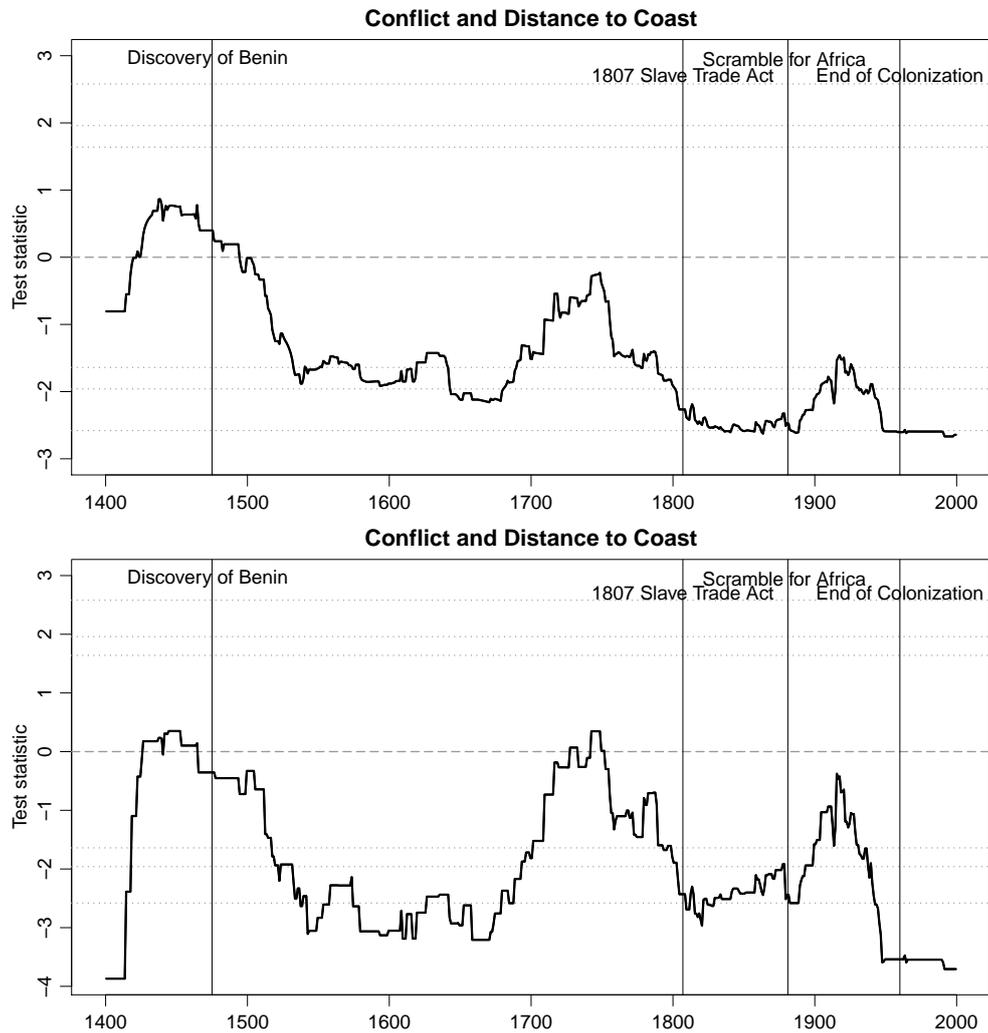


Figure OA2: Temporal Trends in Distance to Coast and Conflict – Alternative Specifications



Notes: Top panel shows the test statistic from OLS regressions of the log of one plus the number of conflict years on the log distance to coast. The conflict data is restricted to 100 year windows between 1400 and 2000 and the regression is repeated across for each window. The test statistic is plotted at the midpoint of the window and robust standard errors are used. Controls include region fixed effects, the log of the distance to a main pre-colonial empire, an indicator for a city in 1400, mean agricultural suitability, mean elevation, an indicator for rivers, an indicator for lakes, and malaria suitability. The horizontal lines represent thresholds at 1.64, 1.96, and 2.58. The bottom panel is the same as the top panel except it uses the conflict indicator as the outcome and probit specification.

Table OA1: Conflicts per Century for Ashanti, Kongo, and Makua

Century	Ashanti	Kongo	Makua
1400–1499	0	1	0
1500–1599	0	5	0
1600–1699	1	2	0
1700–1799	3	0	0
1800–1899	9	0	1

Notes: Table shows the number of recorded inter-African conflicts for each ethnic group per century in our geocoded version of the Brecke (1999) conflict data as determined by whether the ethnic group's name appears in the name of the recorded conflict.

Table OA2: Robustness to Dropping Regions

	(1)	(2)	(3)	(4)
Region Dropped:	South	Central	East	West
Slave Exports	0.142*** (0.053)	0.167*** (0.059)	0.143** (0.057)	0.213* (0.113)
Clusters	676	555	547	514
Sample	3380	2775	2735	2570
Ethnic Group FE	Yes	Yes	Yes	Yes
Region-Time FE	Yes	Yes	Yes	Yes
F-statistic	52.4	42.9	43.6	24.2

Notes: The table shows various 2SLS regressions regressing an indicator for conflict in a given century on our slave trade variable S_{it} using $z_{it} \times \bar{S}_{rt}$ as an instrument. Column (1) drops ethnic groups in southern Africa; Column (2) drops ethnic groups in central Africa; Column (3) drops ethnic groups in eastern Africa; and Column (4) drops ethnic groups in western Africa. Standard errors clustered at the ethnic group level are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

Table OA3: Impact by Century, Including Conflicts with Foreign Actors

	Conflict Indicator				Log(1 + Conflicts)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Time Period:	1700	1800	1860	1960	1700	1800	1860	1960
Slave Exports	0.172*** (0.057)	0.220*** (0.060)	0.238*** (0.070)	0.170*** (0.058)	0.215*** (0.070)	0.362*** (0.096)	0.325*** (0.102)	0.335*** (0.120)
Clusters	764	764	764	764	764	764	764	764
Sample	1528	1528	1528	1528	1528	1528	1528	1528
Ethnic Group FE	Yes							
Region-Time FE	Yes							
Estimator	2SLS							
F-statistic	43.9	64.6	64.6	64.6	43.9	64.6	64.6	64.6

Notes: The table shows 2SLS regressions of measures of conflict on our slave trade variable S_{it} after restricting the data to various time periods. The log of the distance of an ethnic groups centroid to the African coast interacted with the cumulative total slave exports from each region is used as an instrument. Columns (1)–(4) use an indicator for conflict as the dependent variable, and columns (5)–(8) use the log of one plus the number of years with conflict (both dependent variables scaled by timespan). Columns (1) and (5) restrict the data to the 1700-1799 time period, columns (2) and (6) restrict the data to the 1800-1859 time period, columns (3) and (7) restrict the data to the 1860-1960 time period, and columns (4) and (8) restrict the data to the 1960-2000 time period. The conflict variables are constructed using both African only conflicts and conflicts with foreign actors. Standard errors clustered at the ethnic group level are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

Table OA4: Impact by Century, Only Conflicts with Foreign Actors

	Conflict Indicator				Log(1 + Conflicts)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Time Period:	1700	1800	1860	1960	1700	1800	1860	1960
Slave Exports	0.095*** (0.034)	0.192*** (0.062)	0.236*** (0.065)	0.078 (0.055)	0.131*** (0.048)	0.201*** (0.065)	0.284*** (0.090)	0.042 (0.038)
Clusters	764	764	764	764	764	764	764	764
Sample	1528	1528	1528	1528	1528	1528	1528	1528
Ethnic Group FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region-Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Estimator	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
F-statistic	43.9	64.6	64.6	64.6	43.9	64.6	64.6	64.6

Notes: The table shows 2SLS regressions of measures of conflict on our slave trade variable S_{it} after restricting the data to various time periods. The log of the distance of an ethnic groups centroid to the African coast interacted with the cumulative total slave exports from each region is used as an instrument. Columns (1)–(4) use an indicator for conflict as the dependent variable, and columns (5)–(8) use the log of one plus the number of years with conflict (both dependent variables scaled by timespan). Columns (1) and (5) restrict the data to the 1700-1799 time period, columns (2) and (6) restrict the data to the 1800-1859 time period, columns (3) and (7) restrict the data to the 1860-1960 time period, and columns (4) and (8) restrict the data to the 1960-2000 time period. The conflict variables are constructed using conflicts with foreign actors only. Standard errors clustered at the ethnic group level are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

Table OA5: Persistent Impact of the Slave Trade with Alternative Conflict Data, Extensive Margin

Dependent Variable:	(1) All Conflict	(2) Excludes Riots	(3) Excludes Riots/Non-violent	(4) Battles	(5) Violence Against Citizens	(6) Riots	(7) State Conflict	(8) One-sided Conflict	(9) Non-state Conflict
Slave Exports	0.014 (0.073)	-0.002 (0.080)	0.004 (0.080)	-0.015 (0.090)	0.077 (0.093)	0.538*** (0.110)	0.009 (0.098)	0.267** (0.112)	-0.027 (0.086)
Sample	764	764	764	764	764	764	764	764	764
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table shows various 2SLS regressions regressing various measures of conflict between 1960 and 2000 on our slave trade variable S_{it} using the log of the distance of an ethnic groups centroid to the African coast as an instrument. Column (1) is an ACLED civil conflict indicator; Column (2) is an ACLED civil conflict indicator excluding riots and protests; Column (3) is an ACLED civil conflict indicator excluding riots, protests, and nonviolent events; Column (4) is an ACLED battle indicator; Column (5) is an ACLED indicator for violence against citizens; Column (6) is an ACLED indicator for riots; Column (7) is an UCDP indicator for state conflict; Column (8) is an UCDP indicator for one-sided civilian conflict; and Column (9) is a UCDP indicator for non-state conflict. ‘Other Controls’ includes the log of the distance to a main pre-colonial empire, an indicator for a city in 1400, mean agricultural suitability, mean elevation, an indicator for rivers, an indicator for lakes, and malaria suitability. Robust standard errors are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

Table OA6: Persistent Impact of the Slave Trade with Alternative Conflict Data, Intensive Margin

Dependent Variable:	(1) All Conflict	(2) Excludes Riots	(3) Excludes Riots/Non-violent	(4) Battles	(5) Violence Against Citizens	(6) Riots	(7) State Conflict	(8) One-sided Conflict	(9) Non-state Conflict
Slave Exports	1.102** (0.452)	0.719* (0.414)	0.681* (0.410)	0.641 (0.394)	0.897** (0.363)	1.441*** (0.359)	0.603** (0.272)	0.816*** (0.297)	0.072 (0.223)
Sample	764	764	764	764	764	764	764	764	764
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table shows various instrumental variable regressions regressing various measures of log one plus conflict between 1960 and 2000 on our slave trade variable S_{it} using the log of the distance of an ethnic groups centroid to the African coast as an instrument. Column (1) is an ACLED civil conflict count; Column (2) is an ACLED civil conflict count excluding riots and protests; Column (3) is an ACLED civil conflict count excluding riots, protests, and nonviolent events; Column (4) is an ACLED battle count; Column (5) is an ACLED count of violence against citizens; Column (6) is an ACLED count of riots; Column (7) is an UCDP count of state conflict; Column (8) is an UCDP count of one-sided civilian conflict; and Column (9) is a UCDP count of non-state conflict. 'Other Controls' includes the log of the distance to a main pre-colonial empire, an indicator for a city in 1400, mean agricultural suitability, mean elevation, an indicator for rivers, an indicator for lakes, and malaria suitability. Robust standard errors are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

Table OA7: The Slave Trade and the Resource Curse – Petroleum

	Pre-Colonial		Colonial		Post-Colonial	
	(1)	(2)	(3)	(4)	(5)	(6)
Slave Exports	0.238*** (0.086)	0.265*** (0.094)	0.033 (0.042)	0.079 (0.062)	0.251* (0.141)	0.226* (0.124)
Slave Exports × Petroleum	0.003 (0.205)	-0.111 (0.143)	0.103 (0.122)	0.048 (0.103)	0.324 (0.348)	0.297 (0.401)
Petroleum × Century	-0.130 (0.108)	-0.069 (0.069)	-0.096 (0.073)	-0.097* (0.058)	-0.161 (0.183)	-0.038 (0.229)
Clusters	764	764	764	764	764	764
Sample	1528	1528	1528	1528	1528	1528
Ethnic Group FE	Yes	Yes	Yes	Yes	Yes	Yes
Region-Time FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table shows various linear instrumental variable regressions regressing a (scaled) conflict outcome for various time periods on our slave trade variable S_{it} along with its interaction with an indicator for petroleum using $z_{it} \times \bar{S}_{rt}$ along with its interaction with an indicator for petroleum as instruments. Columns (1) and (2) use conflict data from 1400-1499 and 1800-1860. Columns (3) and (4) use conflict data from 1400-1499 and 1860-1960. Columns (5) and (6) use conflict data from 1400-1499 and 1960-2000. Columns (1), (3), and (5) use the conflict indicator, whereas Columns (2), (4), and (6) use the log of one plus the number of conflicts. ‘Petroleum’ is an indicator for whether the ethnic group has petroleum deposits. Standard errors clustered at the ethnic group level are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

Table OA8: The Slave Trade and the Resource Curse – Diamonds

	Pre-Colonial		Colonial		Post-Colonial	
	(1)	(2)	(3)	(4)	(5)	(6)
Slave Exports	0.174** (0.073)	0.138** (0.066)	0.017 (0.038)	0.012 (0.048)	0.197* (0.117)	0.181* (0.104)
Slave Exports × Diamonds	0.416 (0.463)	1.122 (0.843)	0.261 (0.266)	0.783 (0.538)	1.452 (0.944)	1.716* (1.004)
Diamond × Century	-0.042 (0.127)	-0.222 (0.194)	-0.014 (0.075)	-0.135 (0.141)	-0.268 (0.223)	-0.371 (0.227)
Clusters	764	764	764	764	764	764
Sample	1528	1528	1528	1528	1528	1528
Ethnic Group FE	Yes	Yes	Yes	Yes	Yes	Yes
Region-Time FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table shows various linear instrumental variable regressions regressing a (scaled) conflict outcome for various time periods on our slave trade variable S_{it} along with its interaction with an indicator for diamonds using $z_{it} \times \bar{S}_{rt}$ along with its interaction with an indicator for diamonds as instruments. Columns (1) and (2) use conflict data from 1400-1499 and 1800–1860. Columns (3) and (4) use conflict data from 1400-1499 and 1860–1960. Columns (5) and (6) use conflict data from 1400-1499 and 1960–2000. Columns (1), (3), and (5) use the conflict indicator, whereas Columns (2), (4), and (6) use the log of one plus the number of conflicts. ‘Diamonds’ is an indicator for whether the ethnic group has diamond deposits. Standard errors clustered at the ethnic group level are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

Table OA9: The Resource Curse – Extensive Margin

	Dependent Variable: Conflict Indicator					
	(1) 1500	(2) 1600	(3) 1700	(4) 1800	(5) 1860	(6) 1960
Natural Resources × Century	0.013 (0.019)	0.014 (0.026)	-0.019 (0.022)	0.076 (0.047)	0.058 (0.044)	0.182** (0.080)
Clusters	764	764	764	764	764	764
Sample	1528	1528	1528	1528	1528	1528
Ethnic Group FE	Yes	Yes	Yes	Yes	Yes	Yes
Region-Time FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table shows various fixed effect regressions regressing a (scaled) conflict outcome for various time periods on an indicator for natural resources interacted with time. Each column restricts the data to 1400-1499 and an ending time period indicated in the header above. Standard errors clustered at the ethnic group level are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

Table OA10: The Resource Curse – Intensive Margin

	Dependent Variable: Log(1 + Conflict Count)					
	(1)	(2)	(3)	(4)	(5)	(6)
	1500	1600	1700	1800	1860	1960
Natural Resources × Century	0.003 (0.018)	-0.006 (0.017)	-0.027 (0.019)	0.061 (0.038)	0.041 (0.028)	0.179** (0.074)
Clusters	764	764	764	764	764	764
Sample	1528	1528	1528	1528	1528	1528
Ethnic Group FE	Yes	Yes	Yes	Yes	Yes	Yes
Region-Time FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table shows various fixed effect regressions regressing a (scaled) conflict outcome for various time periods on an indicator for natural resources interacted with time. Each column restricts the data to 1400-1499 and an ending time period indicated in the header above. Standard errors clustered at the ethnic group level are in parentheses below. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.