THE TRANS-ATLANTIC SLAVE TRADE
AND THE EVOLUTION OF MISTRUST IN
AFRICA: AN EMPIRICAL
INVESTIGATION

by Nathan Nunn and Leonard Wantchekon

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by Nathan Nunn and Leonard Wantchekon

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The Trans-Atlantic Slave Trade and the Evolution of Mistrust in Africa: An Empirical Investigation

Abstract

Trust is increasingly perceived as having a significant effect on trade, public goods provision, conflict resolution and even democratic consolidation. In this paper we investigate the historical determinants of trust within Africa, by testing for a long-term impact of the intensity of the slave trades on the level of interpersonal trust and trust in local institutions. We find that the number of slaves taken from an ethnic group between 1400 and 1900 is negatively correlated with how much individuals from that group trust others, especially those closest to the respondent, such as co-ethnics, relatives, and neighbors. A history of slaving is negatively correlated with trust of governments, and this effect is stronger for local governments than for national governments. This is true even controlling for individual’s perception of government’s performance. We confirm that the effect of slave exports on trust is causal by using the historic distance between the geographic location of ethnic groups and the coast as an instrument for the number of slaves taken from that group.

1 We thank seminar participants at Columbia University, Georgia Tech, Harvard University, and Yale University, as well as Michael Bratton, Elisabeth Ndour, and Ifedayo Olufemi Kuye for valuable comments. We also thank Sayon Deb for excellent research assistance.
1. Introduction

Several studies have recently documented the importance of trust for economic development (e.g., Tabellini, 2008; Knack and Keefer, 1997; Fafchamps, 2006), for international trade (e.g., Greif, 1989; den Butter et al. 2003; Guiso et al. 2007a), and for political institutions (e.g., Warren, 1999; Putnam, 2000). In these studies, trust is viewed as an “optimistic expectation or belief regarding the behavior of others”.

Trust arises either from repeated interpersonal interactions or from a superior knowledge about the social environment in which one lives (Platteau, 1994). It enables economic agents to engage in mutually beneficial market transactions and warring factions to sign peace agreements and communities to invest in local public goods.

Given that trust is central to economic and political development, it is important to understand its determinants. In a recent paper, Alesina and La Ferrara (2002) use data from US localities to identify three individual-specific factors that reduce trust: (1) a recent history of traumatic experiences (2) membership in minority groups that feel discriminated against (e.g., black and to a lesser extent, women), (3) low education and income. In another study that uses data from 64 countries, Bjornskow (2006) finds a strong negative correlation between generalized trust on one hand, social polarization, ethnic diversity and communist legacy on the other.

An important dimension of the debate on determinants of trust is the role of historical factors. The dominant view expressed in Fukuyama (1995) and Putnam (2000) is that trust originates from shared values that are crucially shaped by cultural heritage. Others point to evidence suggesting that trust is crucially affected by current experiences in the form of information flows, organization membership and risk-sharing relationships (Fisman and Khanna, 1999; Shapiro, 1987). In line with the “trust-as-historical-residue” hypothesis, Tabellini (2005) finds that levels of education and the extent of democracy in the 18th century are important determinants of current levels of interpersonal trust in Europe. Guiso et al. (2007c) find empirically link differences in social capital within Italy to whether the city was independent in the 11th to 14th centuries.

In this paper we consider the historical determinants of trust within Africa. Specifically, we test for a long-term impact of the intensity of the trans-Atlantic and Indian Ocean slave trades on the level of interpersonal trust and trust in local institutions. Early in the slave trade, slaves

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1Gambetta (1988) writes: “when we say we trust someone or someone is trustworthy, we implicitly mean that the probability that he will perform an action that is beneficial …is high enough for us consider in some form for cooperation with him. Correspondingly, when we say that someone is untrustworthy, we simply that probability is low enough for us to refrain from doing so.”
were taken primarily through state organized raids and warfare. However, data on the manner of enslavement towards the end of the trans-Atlantic slave trade suggest that by the end of the slave trade, the environment of pervasive insecurity created by the slave trade caused individuals to turn on others within their own communities. There are well documented example of friends and acquaintances selling each other slavery (Koelle, 1854; Hair, 1965), and even of family members selling relatives into slavery (Piot, 1996).

There is strong anthropological evidence suggesting that the memories of the slave trade have been preserved through oral traditions, rituals, and historical imaginations in contemporary Africa. Shaw (2004, p. 3) indicates that slave trade is made vividly present in Sierra Leone to the point where, money and commodities are linked to an invisible city of “witches whose affluence was built on the theft of human lives”. As well, Simpson (2004, p. 4) provides numerous narratives illustrating the way in which the experiences of the trans-Atlantic slave trade in Ghana, Benin and Nigeria have come to be incorporated into the cultural repertoires of the people, and have been transferred through oral tradition.

There are also elements of oral traditions that demonstrate a history and a culture of mistrust that can be traced back to the legacy of slave trade. In slave dealing areas in Nigeria, such as Badagry, some communities are considered living symbols of cruelty and wickedness because of the role their ancestors played in the slave trade. Other prominent slave trading communities such as Arochukwu in Eastern Nigeria are associated with deceit and trickery (Simpson, 2004, p. 42). In the same way, the Fon, whose ancestors were subjects of Dahomey Kingdom, one of the epicenters of the slave trade in West Africa, are associated with dishonesty. In Benin popular culture, untrustworthiness is defined as being capable of tricking one’s friend or neighbor into slavery. This can be most clearly seen from the common Fon saying: “Me elo na sa we du”, which translates to “This person will sell you and enjoy it”. It is a saying that is used to describe someone who is deceitful. A Wolof saying “Ki meun na la diaye, lekke sa ndiegue” also has the same meaning, linking deceit directly to the selling of others into slavery. These examples illustrate the great extent to which the slave trade has permeated into much of African culture.

Despite these examples, we do not yet have empirical evidence of the long-term effects of the slave trades on interpersonal trust. In this paper, using survey data on individual’s trust of others from the Afrobarometer, we test whether individuals belonging to an ethnic group that was heavily impacted by the slave trades in the past are less trusting of others today. Because of the richness
of the Afrobarometer data we are able to test for the effect of the slave trade on different types of trust. Specifically, we examine the following measures of trust: (i) trust of those closest to you, such as neighbors, relatives, and others of the same ethnicity (ii) trust of those less well known to you, such as those from different ethnicities (iii) trust of political figures and leaders, such as local leaders, and leaders at the national level.

We find that the number of slaves taken from an ethnic group between 1400 and 1900 is negatively correlated with how much individuals in that group trust others. Perhaps surprisingly, we find that the slave trade has as strong an effect on the trust of others that are close to the respondent, such as others within the same ethnic group, relatives, and neighbors. This finding is consistent with the fact people were often tricked or kidnapped by others who were very close to them, such as family members and friends.

We find that the relationship between the slave trade and mistrust is also apparent in the trust of political figures. A history of slaving is negatively correlated with trust of governments, and this effect is stronger for local governments than for national governments. We find that this is true even controlling for individual’s perception of how well the government is doing. This suggests that because of the culture of mistrust developed by the slave trade, ancestors of those heavily impacted by the slave trades remain highly suspicious of governments, and this mistrust is above and beyond any suspicion arising because of poor government performance. In other words, the legitimacy of democratic institutions is adversely affected by the legacy of the slave trade, and does not solely depend on how well they perform.

An alternative explanation for these findings is that more slaves were supplied by ethnic groups that initially had lower levels of trust, and these lower levels of trust persist today. In other words, causality runs from trust to the slave trade, and not from the slave trade to trust. We pursue a number of strategies to identify the direction of causality in our OLS estimates. One strategy is to use how far an ethnic group was from the coast during the slave trades as an instrument for the number of slaves taken from that ethnic group.

There is ample historical evidence suggesting that the instrument is relevant, but it is far less clear that it satisfies the necessary exclusion restrictions. The most likely reason why the exclusion restriction may fail is that distance from the coast tends to be correlated with income (see Rappaport and Sachs, 1999). In addition, studies have shown that an individual’s income tends to be positively correlated with measured levels of trust (e.g., Alesina and La Ferrara, 2002). Therefore,
through this income channel distance from the coast will be negatively correlated with income and negatively correlated with trust. As we will discuss in detail, this correlation is unable to explain our IV finding. In fact, this income channel will bias the IV estimate towards zero.

The IV results confirm our OLS estimates. According to the IV estimates the slave trades have a significant negative effect on trust within Africa.

We also perform a falsification exercise and examine the reduced form relationship between distance from the coast and trust within Africa and within Asia. Within Africa, we find a strong positive relationship between distance from the coast and trust. This is expected given our IV estimates. Places further from the coast had less slaves taken in the past, and therefore exhibit higher levels of trust today. We also examine this relationship outside of Africa, in Asia. The trust data are from the Asiabarometer. Our IV strategy relies on the assumption that the distance from the coast only affects trust through the slave trade. Therefore, if we examine the reduced form relationship between distance from the coast and trust outside of Africa, we expect to see no relationship if our exclusion restrictions are satisfied. Where there was no slave trade, there is no relationship between distance from the coast and trust. This is exactly what we find. Looking within Asia, we estimate a statistically insignificant relationship between distance from the coast of the respondent and reported trust in the local government.

2. Historical Background and Theoretical Framework

A. Historical Background

Historic account suggest that early in the slave trade, those sold into slavery were almost exclusively prisoners of war. Because raids often involved villages raiding other villages, this form of slave procurement often caused relations between villages to turn hostile, even if these villages had previously formed federations or other ties (see for example Inikori, 2000). There are numerous historical accounts, documenting this detrimental effect of the slave trade (see Hubbell, 2001; Azevedo, 1982; and Klein, 2001). Heightened conflict between communities over a period of three to four hundred years may have resulted in increased mistrust of those outside of one’s ethnic group.

However, data on the manner of enslavement in the 19th century suggests that by the end of the slave trade, slaves were being taken in a wide variety of different ways. Table 1 reports
information on the manner of enslavement for a sample of slaves from Free Town, Sierra Leone. The slaves were interviewed by Sigismund Koelle during the 1840s.

<table>
<thead>
<tr>
<th>Manner of Enslavement</th>
<th>Percentage</th>
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<tr>
<td>Taken in a war</td>
<td>24.3%</td>
</tr>
<tr>
<td>Kidnapped or seized</td>
<td>40.3%</td>
</tr>
<tr>
<td>Through a judicial process</td>
<td>16.0%</td>
</tr>
<tr>
<td>Sold/tricked by a relative, friend, etc.</td>
<td>19.4%</td>
</tr>
</tbody>
</table>

*Table 1. The Method of Enslavement of Koelle’s Informants*

*Notes: The data are from Sigismund Koelle’s Linguistic Inventory. The sample consists of 144 informants interviewed by Koelle for which their means of enslavement is known.*

In the sample, the most common manner of enslavement was kidnappings, with just under 40% of the slaves in the sample being taken in this manner. The next most common manner of enslavement was the capture of slaves during wars, with 25% of the slaves captured in this manner. Amazingly, almost 20% of the slaves were sold by relatives or friends. These slaves were sold by family members, or they were tricked into slavery by acquaintances and supposed friends. The survey by Koelle (1854) documents numerous accounts of individuals being sold into slavery by family members, relatives, and “supposed friends”. One of the more notable accounts is of a slave that was sold into slavery after being “enticed on board of a Portuguese vessel” by “a treacherous friend”. The most extreme example of this manner of enslavement is probably the Kabre of Northern Togo, who during the nineteenth century developed the custom of selling their own kin into slavery (Piot, 1996).

The final category reported in the table is for slaves that entered slavery through the judicial process, for example when convicted of witchcraft, adultery, theft, or murder; 16% of the slaves in the sample entered slavery in this way.

One explanation for why individuals turned on others within their community is that this was caused by the general environment of insecurity that arose because of the increased conflict between communities at the time. Because of this insecurity, individuals required weapons, which could be obtained from Europeans, to defend themselves. The slaves needed to trade with the Europeans were often obtained through local kidnappings and violence (Mahadi, 1992; Hawthorne, 1999). Europeans and slave traders also played a role in promoting this internal conflict. Slave
merchants and raiders formed strategic alliances with key groups inside villages and states in order to extract slaves (see the accounts of Barry, 1992; Inikori, 2003; and Klein, 2003).

Akyeampong (2001) provides a remarkable example of a drumming group that was tricked into slavery in Atorkor (Ghana) in the 1850s. The chief of Whuti, who was also a slave trader, was jealous of the leader of a group of drummers, because the leader of the drummers fancied the chief’s wife. The chief then arranged with a slave merchant named Dokutsu, who had contact with European slave traders, for the entire group of 40 drummers to be sold into slavery. It was arranged with the Europeans that the group of drummers would be tricked on board the slave ship. The drummers were told that the Europeans on board the ship were interested in their drums and would like to hear them perform. The drummers were served rum on board the ship and became drunk. Before they were able to realize what was happening the ship had sailed off, headed for the New World.

Walter Hawthorne in his book Planting Rice and Harvesting Slaves writes of the Beafaes of the Guineau Bissau region of Africa. Hawthorne documents the decentralized and interpersonal nature of slave capture in the region, writing that “the Atlantic slave trade was insidious because its effects penetrated deep into the social fabric of the Upper Guinea Coast—beyond the level of the state and to the level of the village and household … Hence, in many areas, the slave trade pitted neighbor against neighbor…” (pp. 106–107).

Hawthorne also provides a particularly telling example, which is taken from Almada (1984). Households located near ports were able to profit from the slave trade by ‘tricking’ unsuspecting strangers and then selling them to merchants. Almada writes that “these Beafaes are so smart, that if a yokel arrives from the interior, they pretend that they want to give him shelter, and they receive him into their homes. After a few days have passed, they persuade him that they have friends on the ships, and that they would like to take him and have a party. But when they go to the ships, they sell him. In this way they trick many yokels.” (Hawthorne, 2003, p. 106; Almada, 1984, p. 117).

During the Atlantic trade, even Africans that worked for the Europeans as boatmen, deckhands, and translators were not immune to the insecurity and predatory atmosphere that existed during the slave trade. African mariners and traders were often enslaved directly by the Europeans or by other Africans (Akyeampong, 2001, pp. 8–9). Akyeampong (2001) quotes Bolster (1997) who writes that the “African mariners in the slave trade exhibited the nervous detachment of men
simultaneously smug about their own favored positions and constantly leery of their European employers’ potential duplicity or of other Africans’ revenge”.

The fact that slaves were often taken or tricked into slavery by others within the same community or ethnic group, suggests that the slave trade may not only have affected the trust of those outside of one’s community, but it may have also affected the evolution of trust in those closest to you, such as friends, neighbors, and relatives. As well, because historically it was often the case that chiefs were also slave merchants and traders, or they were forced to sell their own people into slavery, the slave trade may have also resulted in an evolution of mistrust for political figures, particularly local leaders.

B. Theoretical Framework

As discussed in the previous section, some of the methods of enslavement, such as trickery and kidnapping, required the complicity of relatives and neighbors and this may have led an erosion of interpersonal trust in local communities. These, as well as other methods of enslavement such as warfare and the use of the traditional judicial process, may have led to a breakdown of rule of law and to the deterioration of the legitimacy of local state institutions. Mistrust generated by stories of personal betrayal and community breakdown have been transmitted through family histories, and religious and cultural practices. As discussed in Nunn (2007), raids, warfare, and civil conflict during the slave trade also prevented state institutions from playing a meaningful role in combating the deterioration of social cohesion and trust in local communities.

This historical process is consistent with models of the evolution of cooperation developed in Bisin and Verdier (2000, 2001), Tabellini (2008) and Guiso, Sapienza and Zingales (2007). Guiso et al. present a model in which parents transmit to children priors on how trustworthy others are. They derive equilibrium behaviors that exhibit status quo bias in which communities are stuck in low levels of trust across generations. In particular, a tragic event or series of tragic events that lowers the return to trusting can have long term and permanent effects on the level of trust in a society.

Tabellini (2008) also provides a theoretical framework that explains the combined effect of the past legacy of low cooperation (mistrust) and institutions on current level of trust. In his model, individuals inherit norms of cooperation from their parents and make political choices (through voting) that determine the quality of institutions (e.g., rule of law). He shows that transmission
of norms of cooperation strengthens or weakens institutional quality. As a result, when there is a negative shock to an internal norm of cooperation, not only will the next generation be less trusting, but it will also choose weaker institutions, and the lower trust and weaker institutions persist in future generations.

3. Data Sources and Description

A. Afrobarometer Data

Data on the trust of individuals in Africa today are from the Afrobarometer surveys. The Afrobarometer is an independent and non-partisan research project conducted by CDD, IDASA and MSU. Implemented by national partners, Afrobarometer measures economic conditions and the political atmosphere in African countries. The questionnaire is standardized to facilitate comparison between the covered countries. The surveys are based on interviews conducted in the local languages of a random sample of between 1,200 and 2,400 people per country. The Afrobarometer, as of 2005, covers the following 18 countries: Benin, Botswana, Cape Verde, Ghana, Kenya, Lesotho, Madagascar, Malawi, Mali, Mozambique, Namibia, Nigeria, Senegal, South Africa, Tanzania, Uganda, Zambia, Zimbabwe. In 2008, a fourth round of surveys are being conducted in these countries as well as in Liberia and Burkina Faso.

Because of data limitations, only 17 of the 18 Afrobarometer countries are in our analysis. For Cape Verde Islands, the ethnicity of the respondent is not recorded. In total, there is a potential sample of 23,093 respondents. Of these respondents, 5,876 either (i) listed ‘other’ as their ethnicity (ii) listed their ethnicity as their country (iii) were an ethnicity that is not an indigenous Africa ethnicity, or (iv) listed an indigenous ethnicity that could not yet be matched to the slave trade data. This leaves a potential sample of 17,217 respondents.

Our analysis considers various measures of interpersonal and political trust. The Afrobarometer asks respondents how much they trust relatives, neighbors, those from their own ethnic group or tribe, and those from other ethnic groups. The exact wording of each question is shown in Table 2. For the question about other ethnic groups, the question is specific to the country. For example respondents from Kenya are asked how much they trust “Kenyans from other ethnic groups”.

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2The minimum sample of 1,200 people gives a margin of error of 3% and a degree of confidence of 95%.
Table 2. Overview of the Trust of Others.

<table>
<thead>
<tr>
<th>Response</th>
<th>Your relatives?</th>
<th>Your neighbors?</th>
<th>People from your own ethnic group or tribe?</th>
<th>&lt;People&gt; from other ethnic groups?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>1,410</td>
<td>2,724</td>
<td>2,811</td>
<td>4,476</td>
</tr>
<tr>
<td>Just a little</td>
<td>3,713</td>
<td>5,792</td>
<td>6,318</td>
<td>7,281</td>
</tr>
<tr>
<td>Somewhat</td>
<td>5,168</td>
<td>6,316</td>
<td>6,109</td>
<td>5,263</td>
</tr>
<tr>
<td>A lot</td>
<td>10,337</td>
<td>5,758</td>
<td>5,274</td>
<td>3,291</td>
</tr>
<tr>
<td>Total</td>
<td>20,628</td>
<td>20,590</td>
<td>20,512</td>
<td>20,311</td>
</tr>
</tbody>
</table>

Table 3. Overview of the Trust of the Government.

<table>
<thead>
<tr>
<th>Response</th>
<th>The president?</th>
<th>The ruling party?</th>
<th>Parliament?</th>
<th>Your elected local government council?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>3,203</td>
<td>4,225</td>
<td>3,531</td>
<td>3,991</td>
</tr>
<tr>
<td>Just a little</td>
<td>4,029</td>
<td>4,422</td>
<td>4,830</td>
<td>4,869</td>
</tr>
<tr>
<td>Somewhat</td>
<td>4,279</td>
<td>4,687</td>
<td>5,425</td>
<td>5,321</td>
</tr>
<tr>
<td>A lot</td>
<td>9,511</td>
<td>7,340</td>
<td>6,406</td>
<td>6,033</td>
</tr>
<tr>
<td>Total</td>
<td>21,022</td>
<td>20,674</td>
<td>20,192</td>
<td>20,214</td>
</tr>
</tbody>
</table>

The respondents can choose to answer either (i) not at all, (ii) just a little, (iii) somewhat, or (iv) a lot. They also have the option of answering that they do not know. The distribution of responses for each question are summarized in Table 2. A number of characteristics of the responses are notable. First, as expected, the level of trust of individuals closer to the respondent, such as relatives, is higher than those further from the respondent, such as individual’s form other ethnic groups. However, a non-negligible number of respondents still report that they do not trust their relatives at all. This shows relatively low levels of trust even of individuals closest to the respondents.

Table 3 reports similar figures four survey questions about the respondent’s trust in various parts of the local and national government. The table reports respondents’ responses to questions of how much they trust the president, the ruling party, parliament, and their locally elected government council. Perhaps surprisingly, individual’s appear to show the highest reported levels
of trust in the president and the lowest reported levels of trust in the local council.

B. Tribe Level Slave Export Data

We construct tribe level slave export figures from Nunn’s country-level slave export estimates (2008). The country level slave export figures were constructed by combining data on the total number of slaves shipped from all ports and regions of Africa with data on the ethnic origins of slaves shipped from Africa. These estimates cover all four of Africa’s slave trades - the trans-Atlantic, Indian Ocean, Red Sea, and trans-Saharan - and the period from 1400 to 1900. The country-level slave export estimates are disaggregated into ethnicity level estimates using the ethnicity samples from Nunn (2008). This procedure is only possible for the trans-Atlantic and Indian Ocean slave trades. For the trans-Atlantic slave trade, a sample of over 80,000 slaves exists for which their ethnic identity is known. This sample comes from 54 different samples with 229 ethnic designations reported. For the Indian Ocean slave trade, a sample of over 21,000 slaves is available, with 80 different ethnicities reported.

The ethnicity data for the Red Sea and trans-Saharan slave trade are not sufficient to construct ethnicity level estimates of the slaves shipped during these slave trades. We therefore restrict our analysis to sub-Saharan countries that were affected primarily by the trans-Atlantic and Indian Ocean slave trades. Since the trans-Atlantic slave trade was by far the largest of the slave trades, the omission of the Red-Sea and trans-Saharan slave trades will not likely have a large impact. As well, in Nunn (2008) it is shown that the impact of the slave trades as a whole is driven almost solely by the trans-Atlantic slave trade.

An important part of the construction of the ethnicity level slave export figures relies on the correct aggregation and matching of different ethnicity names to a common classification scheme. Using a variety of different sources, all ethnicities reported in the primary and secondary sources are matched to the classification scheme constructed and mapped by George Peter Murdock (1959). The authors of the secondary sources, from which the data were taken, generally also provide a detailed analysis of the meaning and locations of the ethnicities recorded in the historic records. In many of the publications, the authors created maps showing the locations of the ethnic groups recorded in the documents. This helped significantly in mapping the different ethnic designations into a common ethnicity classification.
Maps of the intensity of the trans-Atlantic and Indian Ocean slave trades are shown in Figures 1 and 2. The maps show the boundaries of the ethnic groups categorized and mapped by Murdock (1959). The shade of each polygon indicates the number of slaves of that ethnicity taken during the relevant slave trade between 1400 and 1900. As shown, the trans-Atlantic slave trade impacted much of the African continent. Slaves were taken from not only West Africa and West-Central Africa, but also Eastern Africa as well. The much smaller Indian Ocean slave trade was confined primarily to Eastern Africa. The patterns of slaving observed in the data and illustrated in the maps, are consistent with the qualitative evidence on the sources of slaves taken during the trans-Atlantic and Indian Ocean slave trades.

Figure 3 shows a map of the 17 countries included in our analysis. These countries are shaded in with a dark brown. The two additional countries which will be surveyed in the 2008 round of the Afrobarometer are also indicated in light shading.
Figure 2. Ethnicities Shipped During the Indian Ocean Slave Trade.
Figure 3. Countries Included in the 2005 and 2008 Rounds of the Afrobarometer Surveys.
4. Empirical Results

A. OLS Estimates

We begin our analysis by examining the relationship between an ethnic group’s past slave exports and its current level of intra-group trust. We examine this relationship with the following estimating equation:

\[
\text{trust}_{i,e,c} = \alpha_c + \beta \text{slave exports}_{e,c} + X'_{i,e,c} \delta + X'_{c} \gamma + \epsilon_{i,e,c}
\]

where \( i \) indexes individuals, \( e \) ethnic groups, and \( c \) countries. The variable trust denotes the measures of trust reviewed above. As we have seen the respondents choose between (i) not at all, (ii) just a little, (ii) somewhat, and (iv) a lot. From their answers we calculate a value of trust which takes on the value of 0, 1, 2, or 3, where 0 corresponds to the response “not at all” and 3 to the response “a lot”.\(^3\) \( X_{i,e,c} \) denotes a vector of individual level characteristics that are included as control variables. \( X_{c} \) denote a vector of ethnic group characteristics. These controls will be described in detail as they are introduced to the estimating equation. Our coefficient of interest is \( \beta \), the estimated effect of the slave trade on trust today. Because our variable of interest, slave exports, only varies at the ethnicity level, we cluster all standard errors at the ethnicity level, allowing for non-independence of observations within ethnic groups.

Estimates of the equation (1) for intra-ethnic group trust are reported in Table 4. In the first column, we show estimates of (1) with individual level control variables included only. The individual level control variables are: the respondent’s sex, the respondent’s age and age squared, fixed effects for the respondents perceived income relative to others, fixed effects for the educational attainment of the respondent, and an indicator variable for whether the respondent lives in an urban or rural area. The income fixed effects are based on the respondent’s view regarding their living condition relative to others: (i) much worse, (ii) worse, (iii) same, (iv) better, or (v) much better. The education fixed effects are for the following categories: (i) no formal schooling, (ii) informal schooling only, (iii) some primary schooling, (iv) primary school completed, (v) some secondary school/high school, (vi) secondary school completed/high school, (vii) post-secondary qualifications, but no university, (viii) some university, (ix) university completed, and (x) post-graduate.

\(^3\)These are the numeric values used for each response in the original Afrobarometer surveys.
## Table 4. Estimates of the Determinants of Intra-Group Trust.

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>slave exports (millions)</strong></td>
<td>-.708***</td>
<td></td>
<td></td>
<td>-1.43***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.112)</td>
<td></td>
<td></td>
<td>(.232)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>exports/area</strong></td>
<td></td>
<td>-.016***</td>
<td></td>
<td></td>
<td>-0.032***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.005)</td>
<td></td>
<td></td>
<td>(.010)</td>
<td></td>
</tr>
<tr>
<td><strong>ln (exports/area)</strong></td>
<td></td>
<td></td>
<td>-.154***</td>
<td></td>
<td>-0.317***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(.033)</td>
<td></td>
<td>(.068)</td>
<td></td>
</tr>
<tr>
<td><strong>Individual controls</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>District ethnicity controls</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Country fixed effects</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Number observations</strong></td>
<td>19,421</td>
<td>19,421</td>
<td>19,421</td>
<td>19,421</td>
<td>19,421</td>
<td>19,421</td>
</tr>
<tr>
<td><strong>Number ethnicities</strong></td>
<td>183</td>
<td>183</td>
<td>183</td>
<td>183</td>
<td>183</td>
<td>183</td>
</tr>
<tr>
<td><strong>R-squared</strong></td>
<td>0.14</td>
<td>0.14</td>
<td>0.14</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
</tr>
</tbody>
</table>

The unit of observation is an individual. Standard errors are clustered at the ethnicity level. The individual controls are for age, age squared, indicator variable for male and its interaction with age and age squared, 5 income fixed effects, 10 education fixed effects, 20 religion fixed effects, and an indicator for whether the respondent lives in an urban or rural location. The district ethnicity controls include a measure of ethnic fractionalization at the district level and a measure of the share of the population of the ethnic group of the respondent. *** indicates significance at the 1% level.
To save space, we do not report the estimated coefficients and standard errors for the control variables. Their coefficients are generally consistent with the findings from previous studies, such as Alesina and La Ferrara (2002). We find that trust is increasing (but at a decreasing rate) in age, increasing in income, and is higher for males than for females. These results are consistent with previous finding. However, we also find that trust is generally decreasing in an individual’s level of education. This finding is opposite to Alesina and La Ferrara’s finding that trust is increasing in the education of the respondent. We also find that urban areas are less trusting than rural areas. As far as we know this relationship has not been considered previously.

The second column of the table report the same estimates with ethnicity level controls included in the estimating equation. These controls are meant to capture factors that affect the historical characteristics of ethnic groups. Based on information on the location of ethnic groups in the 19th century, which is from Murdock (1959), we construct measures of the geographic environment of ethnic groups. The measures we include are: the ruggedness of the land, the proportion of the land that is tropical, and the proportion of the land that is desert. These geographic characteristics may affect how isolated historically an ethnic group was from other ethnic groups and therefore the level of intra- and inter-group trust. Because these geographic characteristics may also be correlated with the number of slaves taken from the group during the slave trade, we include them as controls in our estimating equation. None of these control variables are statistically significant in the estimates.

As reported, the estimated coefficients for slave exports are negative and statistically significant. This result is consistent with the slave trades adversely affecting individuals’ trust of others from their own ethnic group.

An important issue when examining the effects of the slave trades on interpersonal trust in Africa is whether the effects of the slave trades on trust can be disentangled from the effects of the slave trade on the formation of institutions, which in turn affects trust. Because the slave trade is expected to lead to the deterioration of trust in both people and institutions, and because trust and good domestic institutions are likely to reinforce one another, it is extremely difficult to disentangle these two factors. Individuals will trust others more when the rule of law is strong. In this environment, even though people may not be inherently trusting of others, a strong legal system will affect behaviors, which will in turn affect individuals’ expectations and trust.

We pursue a number of strategies to try to begin to disentangle the direct trust effect of the slave
Table 5. Marginal Effects of the Ordered Logit Estimates.

| Response to trust of own ethnic group question: | Marginal effects, \( \frac{dP_i}{dx} \): |
|------|---------------------|---------------------|---------------------|
|      | exports (millions) | exports/area        | ln exports/area      |
|      | (1)                | (2)                | (3)                |
| Not at all | .143***         | .003***           | .032***           |
|         | (.023)           | (.001)            | (.007)            |
| Just a little | .206***         | .005***           | .046***           |
|         | (.036)           | (.002)            | (.010)            |
| Somewhat | -.093***         | -.002***          | -.021***          |
|         | (.017)           | (.0007)           | (.005)            |
| A lot   | -.256***         | -.006***          | -.057***          |
|         | (.043)           | (.002)            | (.012)            |
| Individual controls | Yes         | Yes               | Yes               |
| District ethnicity controls | Yes   | Yes               | Yes               |
| Country fixed effects | Yes   | Yes               | Yes               |
| Number observations | 19,421 | 19,421           | 19,421            |
| Number ethnicities | 183    | 183              | 183               |
| Pseudo R-squared | 0.06 | 0.06             | 0.06              |

Marginal effects are reported evaluated at the means. In the estimating equations the unit of observation is an individual. Standard errors are clustered at the ethnicity level. The individual controls are for age, age squared, indicator variable for male and its interaction with age and age squared, 5 income fixed effects, 10 education fixed effects, 20 religion fixed effects, and an indicator for whether the respondent lives in an urban or rural location. The district ethnicity controls include a measure of ethnic fractionalization at the district level and a measure of the share of the population of the ethnic group of the respondent. *** indicates significance at the 1% level.
trades from the trust-through-institutions effect of the slave trades. The first is to include country level fixed effects in our estimating equation. This strategy follows Tabellini (2007). If within a country formal institutions are held constant, then country fixed effects will capture differences in the institutional environment faced by individuals.

Estimates with country fixed effects are reported in column 3 of Table 4. For the OLS estimates, including country fixed effects causes the magnitude of the estimated coefficient to decrease slightly from \(-0.189\) to \(-0.162\). This suggests that part of the relationship between trust and the slave trades may be accounted for by the effect of the slave trades on country level institutions, which in turn affect how much its citizen trust one another. However, given that the coefficient only decreases by less than 15\%, the indirect channel appears to be relatively small compared to the total relationship between the slave trades and trust.

It is possible that formal institutions vary within a country, possibly at the district level. If this is the case, and if institutional quality is correlated by trust, then part of the estimated \(\beta\) may still be capturing the effect of the slave trades on trust working through domestic institutions. We will return to the issue of trying to disentangle institutions from the cultural component of trust below, where we consider how the results change when we control for province and district fixed effects, to capture institutional differences at this level.

An alternative to constructing a continuous dependent variable and estimating (1) using OLS is to estimate individual’s responses using an ordered logit. These estimates are presented in columns 4 to 6 of the table. As shown, the results are qualitatively identical if an ordered logit estimation is used. For the remainder of the paper we report OLS estimates. All results are robust to ordered logit estimation.

We also examine whether slave exports are correlated with the other measures of trust in others considered in Table 2. OLS estimates are summarized in Table 6. Given that individuals’ responses about the different trust measures are highly correlated, it is not surprising that slave exports are also correlated with the other measures of interpersonal trust.

\(a.\) Trust in Governments

We also consider the relationship between a history of the slave trade and respondents’ levels of trust in the president, the ruling political party, and parliament. The advantage of these trust measures is that within each country the respondents are being asked about their trust of an individual
Table 6. OLS Estimates of the Determinants of the Trust of Others.

<table>
<thead>
<tr>
<th></th>
<th>Inter-group trust</th>
<th>Trust of neighbors</th>
<th>Trust of relatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Ln normalized slave exports</td>
<td>-.078** (.031)</td>
<td>-.101*** (.029)</td>
<td>-.131*** (.031)</td>
</tr>
<tr>
<td>Individual controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Ethnicity controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Country fixed effects</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Number observations</td>
<td>19,247</td>
<td>19,247</td>
<td>19,493</td>
</tr>
<tr>
<td>Number ethnicities</td>
<td>183</td>
<td>183</td>
<td>183</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.07</td>
<td>0.11</td>
<td>0.11</td>
</tr>
</tbody>
</table>

The unit of observation is an individual. Standard errors are clustered at the ethnicity level. The individual controls are for age, age squared, indicator variable for male and its interaction with age and age squared, 5 income fixed effects, 10 education fixed effects, 20 religion fixed effects, and an indicator for whether the respondent lives in an urban or rural location. The district ethnicity controls include a measure of ethnic fractionalization at the district level and a measure of the share of the population of the ethnic group of the respondent. *** indicates significance at the 1% level.

or group that is the same across respondents. This is unlike the questions of inter-personal trust, where, for each respondent, the group of neighbors, relatives, and co-ethnics being asked about is different for each individual. The actual trustworthiness of the individuals or groups being asked about may be determined in part by the institutional and legal environment. When respondents are asked about national level political groups, the trust worthiness of the object is arguably being held more constant.

The OLS estimates for these measures of trust in the government are reported in Table 7. As shown, without or with country fixed effects, an individual’s trust of the president, the ruling party, and parliament is negatively correlated with the number of slave exported from the respondent’s ethnic group during the slave trade.

We next turn to the political process at the local level. As discussed, the Afrobarometer also asks respondents about their trust and satisfaction with their locally elected government council. Table 8 reports estimates of (1) using this trust measure as the dependent variable. In the first two columns, the dependent variable is an individual’s opinion of the performance of their local government councilor. Individual’s were asked the following question whether they approve or disapprove of the way your local elected government councillor has performed his/her job over
Table 7. OLS Estimates of the Determinants of the Trust of the Government.

<table>
<thead>
<tr>
<th></th>
<th>Trust president</th>
<th>Trust ruling party</th>
<th>Trust parliament</th>
<th>Trust local council</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ln normalized slave exports</td>
<td>-.190*** (.063)</td>
<td>-.201*** (.057)</td>
<td>-.183*** (.055)</td>
<td>-.145*** (.039)</td>
</tr>
<tr>
<td>Individual controls</td>
<td>Yes Yes</td>
<td>Yes Yes</td>
<td>Yes Yes</td>
<td>Yes Yes</td>
</tr>
<tr>
<td>Ethnicity controls</td>
<td>Yes Yes</td>
<td>Yes Yes</td>
<td>Yes Yes</td>
<td>Yes Yes</td>
</tr>
<tr>
<td>Country fixed effects</td>
<td>No Yes</td>
<td>No Yes</td>
<td>No Yes</td>
<td>No Yes</td>
</tr>
<tr>
<td>Number observations</td>
<td>18,998</td>
<td>18,998</td>
<td>18,675</td>
<td>18,675</td>
</tr>
<tr>
<td>Number ethnicities</td>
<td>183</td>
<td>183</td>
<td>183</td>
<td>183</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.11</td>
<td>0.22</td>
<td>0.10</td>
<td>0.10</td>
</tr>
</tbody>
</table>

The unit of observation is an individual. Standard errors are clustered at the ethnicity level. The individual controls are for age, age squared, indicator variable for male and its interaction with age and age squared, 5 income fixed effects, 10 education fixed effects, 20 religion fixed effects, and an indicator for whether the respondent lives in an urban or rural location. The district ethnicity controls include a measure of ethnic fractionalization at the district level and a measure of the share of the population of the ethnic group of the respondent. *** indicates significance at .001 level.

the past 12 months. Respondents then chose between the following responses: (i) strongly (ii) disapprove, (iii) approve, or (iv) strongly approve. The responses are coded to created a variable that takes on the values 1 to 4, where strongly disapprove is coded as 1 and strongly approve is coded as 4.

In the first two columns the dependent variable is the constructed measure of how much each respondent approves of the job done by their local government councilor. The estimates show that an individual’s approval is adversely affected by a history of past slave exports. This may be because, A as discussed in Nunn (2008), the slave trade resulted in a deterioration of local political structures and networks, which are important for well functioning local politics today. Because the variation in the perceived performance of the local councilor may capture differences in local political institutions, in columns 3 to 6 we re-estimate equation (1) controlling for each individual’s approval of the performance of their local government councilor. In column 3 and 5, we re-estimate (1) with trust in local council as the dependent variable. In columns 4 and 6, we also control for the perceived performance of the local councilor. In both specifications, an individual’s trust in their local councilor is positively correlated with the respondent’s approval of the performance of his or her local councilor.

This relationship is extremely strong and highly significant. As well, including this variable,
Table 8. OLS Estimates of the Determinants of the Trust of Local Government, Controlling for Perceived Performance.

<table>
<thead>
<tr>
<th>Performance of local council</th>
<th>Trust in locally elected council</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>Ln normalized slave exports</td>
<td>-.088***</td>
</tr>
<tr>
<td></td>
<td>(.019)</td>
</tr>
<tr>
<td>Performance measure</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance fixed effects</td>
<td>n/a</td>
</tr>
<tr>
<td>Individual controls</td>
<td>Yes</td>
</tr>
<tr>
<td>District ethnicity controls</td>
<td>Yes</td>
</tr>
<tr>
<td>Country fixed effects</td>
<td>Yes</td>
</tr>
<tr>
<td>Number observations</td>
<td>17,156</td>
</tr>
<tr>
<td>Number ethnicities</td>
<td>182</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.12</td>
</tr>
</tbody>
</table>

The unit of observation is an individual. Standard errors are clustered at the ethnicity level. The individual controls are for age, age squared, indicator variable for male and its interaction with age and age squared, 5 income fixed effects, 10 education fixed effects, 20 religion fixed effects, and an indicator for whether the respondent lives in an urban or rural location. The district ethnicity controls include a measure of ethnic fractionalization at the district level and a measure of the share of the population of the ethnic group of the respondent. *** indicates significance at the 1% level.

decreases the magnitude of the estimated coefficient for slave exports. Without fixed effects the magnitude of the coefficient decreases from −.211 to −.160, and with fixed effects the coefficient decreases from −.164 to −.130. However, both coefficients remain highly significant. Even controlling for a measure of the perceived performance of the local government council, which as shown in columns 1 and 2 also appears to be affected by the slave trade, slave exports continue to have a negative effect on trust.

The fall in the magnitude of the coefficients is approximately consistent with the estimated indirect effect of the slave trade on trust through worse political performance. For example, consider the specification with country fixed effects. The indirect effect of slave exports is:

<table>
<thead>
<tr>
<th>Political Trust</th>
<th>President (1)</th>
<th>Ruling Party (2)</th>
<th>Parliament (3)</th>
<th>Local Council (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ln normalized slave exports</td>
<td>-0.142***</td>
<td>-0.140***</td>
<td>-0.119***</td>
<td>-0.151***</td>
</tr>
<tr>
<td></td>
<td>(.054)</td>
<td>(.041)</td>
<td>(.041)</td>
<td>(.024)</td>
</tr>
<tr>
<td>Village level public goods indicators</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Individual controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Ethnicity controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Country fixed effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Number observations</td>
<td>14,901</td>
<td>14,663</td>
<td>14,325</td>
<td>14,299</td>
</tr>
<tr>
<td>Number clusters</td>
<td>159</td>
<td>160</td>
<td>160</td>
<td>159</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.22</td>
<td>0.20</td>
<td>0.19</td>
<td>0.19</td>
</tr>
</tbody>
</table>

The unit of observation is an individual. Standard errors are clustered at the ethnicity level. The individual controls are for age, age squared, income fixed effects, education fixed effects, and an indicator for whether the respondent lives in an urban or rural location. The ethnicity controls include geographic measures of the environment of the historic locations of each ethnicity. The Public goods provision controls include measures of whether the village of the respondent has: electricity, piped water, sewage, a health clinic, or a school. *** indicates significance at the 1% level.

\[ -0.163 \times 0.226 = -0.037 \]. The magnitude of this effect which is very close to the observed decline in the magnitude of the slave trade coefficient (.034) when performance is also controlled for. This provides a rough estimate of the magnitudes of the direct effect of slave exports on trust, and the indirect of slave exports through political performance on trust.

The last test controls for the existence of public goods in each village. The Afrobarometer survey records for each respondent whether electricity, piped water, sewage, a health clinic, and a school are available. Using this information we construct five indicator variables, one for each public good, that each equals one if the respondent’s village has access to the relevant public good. We include these as control variables in our estimating equation in an attempt to control for the quality of government services provided to the respondent. The results are reported in Table 9. As shown, after controlling for these indicator variables we still find a significant negative relationship between slave exports and trust in the local government.
B. **IV Estimates**

To this point we have identified a relationship between individual’s reported levels of trust in other and the number of slaves from the individual’s ethnic group that were shipped overseas during the trans-Atlantic and Indian Ocean slave trades. In this section we turn to the issue of causality.

As indicated, there are two leading explanations for the relationships we have found. One is that ethnic groups that were inherently less trusting were more likely to be taken during the slave trades. Today these groups continue to be less trusting. As a result, we observe a negative relationship between slave exports in the past and trust today. We are uncertain whether the history of the slave trades supports this explanation. We feel that the historic accounts that we have reviewed seem to suggest that individuals who were inherently more trusting appear to have been *more* likely to be kidnapped or tricked into slavery, not less likely. (Remember the examples from Koelle and the story of the drumming group from Anlo, Ghana.)

Although we feel that this explanation for the relationships shown in the previous section is not highly compelling, if it is correct, then this is also a very interesting finding. The evidence would then show that historically transmitted traits, like an individual’s level of trust, can persist for centuries in very different economic and social environments.

A second explanation, which we find more plausible is that ethnic groups that were the most severely exposed to the slave trades become less trusting of others inside and outside of their communities and families. The historical evidence reviewed in Section A indicates that this is a plausible explanation. In this section, we try and distinguish between these two competing hypothesis. Specifically, we try and identify whether the slave trade had a causal impact on trust.

For identification of the causal effect of the slave trade on trust we use instrumental variables (IV). We use the historic distance of each ethnic group from the coast as an instrument for slave exports. The history of Africa’s slave trade leave little doubt that the instrument is relevant. Places closer to the coast had more slaves taken. The critical issue is then whether the instrument satisfies the exclusion restriction. Specifically, the question is whether an ethnic group’s historic distance from the coast is correlated with any other factors (other than the slave trade) which may have affected how trusting the ethnic group is today.

We expect that the historic distance of an individual’s ethnicity from the coast will be positively correlated with the individual’s current distance from the coast, and there are many reasons why an individual’s current distance from the coast may be correlated with trust. The most obvious
channel works through income. As shown in Rappaport and Sachs (2003) locations further from the coast tend to have lower per capita income levels. Studies also find that individuals with higher income have higher measures of reported trust (e.g., Alesina and La Ferrara, 2002; Guiso, Sapienza, and Zingales, 2007). Therefore, through this income channel individuals further from the coast will tend to have lower levels of trust. We find this violation of our exclusion restriction the most likely candidate. We consider this violation in detail below.

As shown in Table 10, the IV estimates also show a negative and statistically significant relationship between slave exports and trust today. It is useful to think about how the potential violation of the exclusion restriction discussed above will affect the estimates. Given the negative IV estimate of the effect of the slave trade on trust, the concern is that this may be driven by the fact that individuals living further from the coast (who also had ancestors that were less affected by the slave trades), are today more trusting. A violation of the exclusion restriction in this direction would result in an IV estimate showing a negative relationship between the slave trade and trust even if one does not exist. However, as discussed, the evidence reviewed above suggests that the income channel discussed suggests that people living further from the coast tend to be poorer and less trusting, not more trusting. Therefore, this violation of the exclusion restriction will tend to bias the IV estimate towards zero, rather than inflating its magnitude.

An empirical check of the validity of the exclusion restrictions are reported in Table 11. The table reports the reduced form relationship between the distance from the coast and trust of the locally elected government council. The first four columns report show for Africa a strong positive relationship between an ethnic group’s historic distance from the coast and its members’ stated level of trust today. According to the point estimates, an increase in the distance measure of 1,000 kilometers increases the trust measure by about .40, which is a significant amount.

In columns 5 to 8, we estimate the same reduced form relationship between distance from the coast and trust for Asia. The sample includes the following countries: Japan, South Korea, China, Malaysia, Thailand, Vietnam, Myanmar, India, Sri Lanka, and Uzbekistan. In the data, a broadly defined location is given for each respondent. For each location, we calculate the minimum distance to the coast. It is important to note that this distance measure is slightly different than the distance measure used for the Africa sample. In the Asiabarometer data it is a measure of the distance from the current location of the respondent to the coast, but in the Africa data it is a measure of the historic distance of the respondent’s ethnic group. However, because one concern
Table 10. IV Estimates of the Effect of the Slave Trade on Trust.

<table>
<thead>
<tr>
<th></th>
<th>Intra-group (1)</th>
<th>Relatives (2)</th>
<th>Neighbors (3)</th>
<th>Local council (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ln normalized slave exports</td>
<td>-.268***</td>
<td>-.234***</td>
<td>-.277***</td>
<td>-.230***</td>
</tr>
<tr>
<td>(-.085)</td>
<td>(0.56)</td>
<td>(.064)</td>
<td>(.049)</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.13</td>
<td>0.12</td>
<td>0.15</td>
<td>0.18</td>
</tr>
</tbody>
</table>

Second Stage. Dep var: Trust measure

| Historic distance of ethnic group from coast | -.0014*** | -.0014*** | -.0014*** | -.0014*** |
| (0.003)                                     | (0.003)   | (0.003)   | (0.003)   |

First Stage. Dep var: Ln normalized slave exports

<table>
<thead>
<tr>
<th>Individual controls</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>District ethnicity controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Country fixed effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Number observations</td>
<td>19,421</td>
<td>19,523</td>
<td>19,493</td>
<td>18,255</td>
</tr>
<tr>
<td>Number ethnicities</td>
<td>183</td>
<td>183</td>
<td>183</td>
<td>182</td>
</tr>
<tr>
<td>F-statistic</td>
<td>15.87</td>
<td>15.64</td>
<td>15.88</td>
<td>19.23</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.68</td>
<td>0.68</td>
<td>0.68</td>
<td>0.69</td>
</tr>
</tbody>
</table>

IV estimates are reported. The unit of observation is an individual. Standard errors are clustered at the ethnicity level. The individual controls are for age, age squared, a gender indicator variable and its interaction with age and age squared, 5 'living conditions' fixed effects, 10 education fixed effects, 20 religion fixed effects, and an indicator for whether the respondent lives in an urban or rural location. The district ethnicity controls include a measure of ethnic fractionalization at the district level and a measure of the share of the population of the ethnic group of the respondent. *** indicates significance at the 1% level.
is that the historic distance may be correlated with the current distance, this is still a meaningful measure to consider. A second difference is that in the Asiabarometer the question is: “How much do you trust your local government?”, which is a slight differences in the wording in the Afrobarometer: “How much do you trust your locally elected government council?”. The available answers for the two questions are the same, and we construct our dependent variable in the same manner. As well, we used the same set of control variables is included in both sets of estimates.

The results show no relationship between the distance from the coast and trust in the Asia sample. This is suggestive. In the sample of countries where the slave trade occurred we see a very strong robust positive relationship between distance from the coast and trust.\footnote{If we examine, current distance from the coast and trust a similar relationship is found.} In Asia, where the slave trade was absent, the estimated relationship between distance from the coast and trust is zero. These results provide suggestive evidence that our exclusion restriction is likely satisfied. That is, the results suggest that within Africa, distance from the coast appears to only affects trust through its effect on the number slave exported during the slave trade.

An additional strategy that we also pursue is to control for the current distance of each respondent from the coast when using the historic ethnic distance as an instrument in our IV estimates. For each respondent we know the city/town/village that he or she lives in. Examples of the towns

\begin{table} 
\centering
\caption{Reduced Form Relationship between Distance from the Coast and Trust in Africa and Asia.}
\begin{tabular}{lrrrrrrrr}
\hline
& \multicolumn{4}{c}{Africa} & \multicolumn{4}{c}{Asia} \\
\cline{2-9}
& (1) & (2) & (3) & (4) & (5) & (6) & (7) & (8) \\
\hline
Distance from the coast & .0004*** & .0004*** & .0004*** & .0003*** & -.0001 & -.0002*** & .00006 & .00006 \\
(\textit{.00016}) & (\textit{.00013}) & (\textit{.00009}) & (\textit{.00008}) & (\textit{.00009}) & (\textit{.00007}) & (\textit{.00008}) & (\textit{.00007}) \\
Individual controls & No & Yes & No & Yes & No & Yes & No & Yes \\
Country fixed effects & No & No & Yes & Yes & No & No & Yes & Yes \\
Number observations & 20,215 & 19,864 & 20,215 & 19,864 & 5,409 & 5,409 & 5,409 & 5,409 \\
Number clusters & 183 & 183 & 183 & 183 & 57 & 57 & 57 & 57 \\
R-squared & 0.01 & 0.09 & 0.16 & 0.17 & 0.01 & 0.12 & 0.19 & 0.22 \\
\hline
\end{tabular}

A unit of observation is an individual. The dependent variable in the Asia sample is the respondent's answer to the question: "How much do you trust your local government?". The categories for the answers are the same in the Asiabarometer as in the Afrobarometer. The dependent variable was also constructed in the same manner in both samples. Distance from the coast is measured in kilometers. Standard errors are clustered at the ethnicity level in the Africa regressions and at the location level in the Asia regressions. The individual controls are for age, age squared, an indicator variable for male and its interaction with age and age squared, education fixed effects, and religion fixed effects. *** indicate significance at the 1% levels.

\end{table}
are shown in Figure 4. In total, there are over 3,000 towns/villages recorded the Afrobarometer. Using ARCGIS we calculate the distance from the town to the nearest point on the coast. This is our measure of how close the respondent is from the coast today. As shown in Figure 5, the contemporaneous distance measure is highly correlated with the historic distance from the coast of each respondent’s ethnic group.

The IV results, controlling for each respondent’s current distance from the coast, are reported in Table 12. As shown, the estimated impact of slave exports on trust changes little. The magnitudes and statistical significance are similar to those reported in Table 10. The current distance of a respondent from the coast enters with a positive coefficient. Based on the results of previous studies, this result is surprising. Since individuals further from the coast are expected to be poorer, and since lower incomes reduce trust, then we would expect distance from the coast to be negatively correlated with trust. Instead we find a positive coefficient. Although the explanation for this is not central to this paper, it may be the result of a non-negative relationship between distance from
Figure 5. Correlation between the distance to the coast of the respondent in 2005 and the average distance to the coast of the respondent’s ethnic group in 1800s.
the coast and income. As shown by Nunn and Puga (2007), because of Africa’s unique history, the relationship between geographic characteristics and income can be very different inside Africa than they are outside Africa.

C. Exploring the Consequences of Mistrust: Civic Engagement and Vote-Buying

Having provided evidence of a causal relationship between exposure to the slave trades and trust today, we now examine the potential consequences of lower trust. Specifically, we examine whether there is evidence that trust affects the way individuals participate in the political process, as measured by whether they attend local council meetings, contact a local councillor about a
Table 13. The Relationship Between Trust and the Behavior of Individuals

<table>
<thead>
<tr>
<th></th>
<th>Attend a meeting</th>
<th>Contact local councillor</th>
<th>Feel violence is sometimes justified</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Trust local council</td>
<td>.057***</td>
<td>.044***</td>
<td>.043***</td>
</tr>
<tr>
<td></td>
<td>(.013)</td>
<td>(.012)</td>
<td>(.008)</td>
</tr>
<tr>
<td>Local council performance</td>
<td>.038***</td>
<td>.060***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.013)</td>
<td>(.013)</td>
<td></td>
</tr>
<tr>
<td>Trust President</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>President performance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>District ethnicity controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Country fixed effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Number observations</td>
<td>17,093</td>
<td>17,093</td>
<td>17,124</td>
</tr>
<tr>
<td>Number ethnicities</td>
<td>182</td>
<td>182</td>
<td>182</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.18</td>
<td>0.18</td>
<td>0.16</td>
</tr>
</tbody>
</table>

The unit of observation is an individual. Standard errors are clustered at the ethnicity level. The individual controls are for age, age squared, a gender indicator variable and its interaction with age and age squared, 5 income fixed effects, 10 education fixed effects, 20 religion fixed effects, and an indicator for whether the respondent lives in an urban or rural location. The district ethnicity controls include a measure of ethnic fractionalization at the district level and a measure of the share of the population of the ethnic group of the respondent. *** indicates significance at the 1% level.

problem, or feel that violence is sometimes justified.

The dependent variable in the first two columns of Table 13 is a quantification of respondents’ answers to the following question: In the past year often have you attend community meetings? Respondents answered: (i) no, would never do this, (ii) no, but would do if had the chance, (iii) yes, once or twice, (iv) yes, several times, or (v) yes, often. Their answers were coded into a variable that took on the values 0, 1, 2, 3, 4. The value 0 corresponds to the first category and 4 to the fifth category. As shown in the table, the higher an individual’s trust in the local council, the more likely he or she is to attend local community meetings. As shown in the second column, this remains true even after controlling after controlling for the individual’s satisfaction with the performance of the local council.

In columns 3 and 4 of the table, the dependent variable is based on respondents answer to
the following question: In the past year how often have you contacted your local government councillor? The respondents answered: (i) never, (ii) only once, (iii) a few times, and (iv) often. The responses were coded in a variable taking on the values 0, 1, 2, and 3. As shown, respondents that were more trusting of their local council were more likely to make contact.

The results of Table 13 show that respondents that trust their local councillors more, contact their local councilor more often. Again, this result is robust to controlling for individuals’ perceived performance of their local council.

The final outcome considered is each respondent’s attitude towards political violence. The respondents were given two statements: (A) “Violence is never justified in politics today”, and (B) “In this country, it is sometimes necessary to use violence in support of a just cause”. Respondents were then instructed to choose one of the following responses about the extent to which they agree or disagree with the two statements: (i) agree very strongly with A, (ii) agree with a, (iii) agree with b, or (iv) agree very strongly with B. Respondents were also allowed to answer that they agree with neither, or that they do not know. We omit observations that chose one of the last two responses, and construct a measure that takes on the values 1, 2, 3, and 4, each number corresponding to (i), (ii), (iii) and (iv), respectively.

As shown individuals that trust their local councillor more are less likely to feel that violence is sometimes justified. Conversely respondents that trust the president less are more inclined to feel that violence is sometimes justified.

The results Table 13 show that different ethnic groups have different levels of trust for local and national politicians, and that some of these differences are driven by variant experiences during the slave trades. Politicians may take these different levels of in trust into account when making decisions. For example, the dominant strategy often employed by politicians is to make campaign promises to try and persuade voters that when in office they will follow through on the campaign promises. However, if voters have inherently low levels of trust towards candidates, then candidates may rationally foresee that voters will not be persuaded by these promises. As a result politicians may be forced to pursue an alternative strategy to obtain votes, such as the exchange of up-front favors and gifts for votes, i.e. clientelism. We examine whether the data support this possibility. Specifically, we test whether politicians’ giving of gifts up-front in exchange for votes is correlated with the trust of voters.

In practice, politicians’ decisions of whether to give gifts for votes are not made on an individual
by individual basis. That is, a politicians cannot observe the level of trust of each individual, and therefore they cannot condition their actions on this. Instead, politicians only have a general sense of the level of trust that certain groups of people have in them. These groups may be certain ethnic groups of people living in certain regions of the country.

Because the relevant unit of analysis is something much larger than the individual, when examining the data we aggregate our up to the district level. The results are similar if the data are aggregated to other levels, such as the city or ethnicity level.

Our dependent variable of interest is a measure of whether election incentives were offered to the respondent in the last election. Respondents were asked the following question: “And during the <year> election, how often (if ever) did a candidate or someone from a political party offer you something, like food or a gift, in return for your vote?” Respondents answered either: (i) never, (ii) once or twice, (iii) a few times, or (iv) often. From these responses we code a variable that takes on the values 0, 1, 2, or 3.

Estimation results are reported in Table 14. The same set of control variables as before is used, except now district averages are used rather than individual measures. In columns 1 to 3, we examine whether individuals’ trust in political figures affects whether election incentives are offered. The results in columns 1 and 2 show that a district’s average level of trust in the president and its average level of trust in the local council are both negatively correlated with election incentives being offered.

Of interest is the fact that trust in the president appears to be more highly correlated with the giving of election incentives. This is consistent with intuition, since it is trust in national level political figures, not local level political figures, that should matter. In the third column, we examine this potential difference further by including both measures in the estimating equation. As shown, the coefficient for trust in local council becomes insignificant, while the coefficient for trust in the president remains essentially unchanged. One explanation for this finding is that individuals have different levels of trust for local and national politicians. Since the question is about clientelism in the previous national election, it is reassuring that the form of trust that is important is trust in the national political figure.

In columns 4 to 6, we undertake a similar exercise, looking instead at intra- versus inter-group trust. The results here are similar to the findings when looking at trust of the local council versus trust of the president. Trust of those most familiar and closest to the respondent (intra-group
### Table 14. The Relationship Between Trust and the Behavior of Politicians

<table>
<thead>
<tr>
<th></th>
<th>Dep var: Election incentives offered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>Trust president</td>
<td>-.136***</td>
</tr>
<tr>
<td></td>
<td>(.026)</td>
</tr>
<tr>
<td>Trust local council</td>
<td>-.071***</td>
</tr>
<tr>
<td></td>
<td>(.029)</td>
</tr>
<tr>
<td>Inter-group trust</td>
<td>-.115***</td>
</tr>
<tr>
<td></td>
<td>(.028)</td>
</tr>
<tr>
<td>Intra-group trust</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>(.030)</td>
</tr>
<tr>
<td>Individual controls</td>
<td>Yes</td>
</tr>
<tr>
<td>Ethnicity controls</td>
<td>Yes</td>
</tr>
<tr>
<td>Country fixed effects</td>
<td>Yes</td>
</tr>
<tr>
<td>Number observations</td>
<td>1,151</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.30</td>
</tr>
</tbody>
</table>

A unit of observation is a district. The individual controls are district level averages of the age, age squared, as well as the proportion of the respondents that fall into each income category, education category, and the fraction of respondents that live in an urban location. The ethnicity controls include district level averages of the respondents' ethnicity based historic geographic measures of the environment of their ethnicity. The measures include the land's terrain ruggedness, its distance from the coast, the proportion of the land that is desert, that is tropics, and the prevalence of malaria. *** indicates significance at the 1% level.
trust), and trust of those less well known and further from the respondent (inter-group trust) are both negatively correlated with clientelism, but it is inter-group trust that appears to matter most.

5. Conclusions

This paper provides empirical evidence suggesting that low levels of interpersonal trust and trust in political institutions in Africa can be traced back to the legacy of the slave trade. In particular, we find that trust in relatives, neighbors, and co-ethnics is adversely affected by historical exposure to the slave trade. We also find evidence consistent with the hypothesis that intrinsic trust in government, civil engagement, tolerance of violence, and vote-buying are also affected by the intensity of the slave trade. Given the centrality of trust for development, governance and democracy, our results indicate that coping with legacy of the slave trade at the individual and group levels should be part of any reasonable development strategy in Africa.

At a broader level, our study illustrates a way which a shared tragic group experience such as the Holocaust and the Soviet Red Terror affect intra group cohesion. Presumably this would depend on whether the external threat are entirely out-group or are also in-group members, as well as how the victims learn to cope with the consequences of the tragedy. Along these lines, one may argue that while the Holocaust may have had opposite effects on intra-group cohesion and trust compared to the slave trades, the Soviet Red Terror may have had similar effects to the Slave Trade.
References

Akyeampong, Emmanuel. 2001. “History, Memory, Slave-Trade and Slavery in Anlo (Ghana),” 


Almada, André Álvarez de. Trato Breve dos Rios de Guiné. Translated by P.E.H. Hair. Liverpool: 
University of Liverpool.

Azevedo, Mario. 1982. “Power and Slavery in Central Africa: Chad (1890–1925).” Journal of 
Negro History, 67: ???.

Barry, Boubacar. 1992 “Senegambia from the Sixteenth to the Eighteenth Century: Evolution 
of the Wolof, Sereer, and ‘Tukuloor’,” in B.A. Ogot, ed., General History of Africa: Volume 5, 
Africa from the Sixteenth to the Eighteenth Century (University of California Press, Berkeley, 

Barry, Boubacar. 1988. Senegambia and the Atlantic Slave Trade (Cambridge University Press, 

General History of Africa: Volume 5, Africa from the Sixteenth to the Eighteenth Century (University 

Bisin, Alberto and Thierry Verdier. 2000. “Beyond the Melting Pot: Cultural Transmission, 
Marriage, and the Evolution of Ethnic and Religious Traits.” Quarterly Journal of Economics, 
115(3): 955–988.

Bisin, Alberto and Thierry Verdier. 2001. “The Economics of Cultural Transmission and the 

son.” Public Choice, 130: 1–21.


