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Do Corruption Experiences Promote Emigration? Observational and Experimental Evidence from Sub-Saharan Africa

John Maara and Barry Maydom

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Do Corruption Experiences Promote Emigration? Observational and Experimental Evidence from Sub-Saharan Africa

John Maara Barry Maydom

University of Nairobi Birkbeck College, University of London

johnmaara75@yahoo.com b.maydom@bbk.ac.uk

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Abstract

How does corruption influence emigration decisions? Previous research has focused on the relationship between individuals' *perceptions* of corruption and their desire to emigrate internationally. In this paper, we argue that personal *experiences* of corruption affect the desire to emigrate even more strongly than perceptions to escape from extortion and demands for bribes. To explore the relationship between corruption experiences and emigration, we analyze three sources of data: the Local Governance Performance Index 2019 survey, Round 7 of Afrobarometer, and an original survey experiment. We use Afrobarometer to model the effect of different types of corruption experiences on both emigration intentions and specific emigration plans. We conduct a vignette experiment in Kenya in which respondents rate the desirability of emigration for a hypothetical countryman with varying experiences of corruption. We analyze the LPGI to explore how local-level experiences of corruption affect community leaders' assessment of the desirability of emigration. We find that personal experiences of corruption are a strong push factor for migration and that this relationship does not vary with education levels. Our study extends the literature by focussing on how personal experiences of corruption shape migration.

Keywords: migration, corruption, bribery, sub-Saharan Africa, Kenya, survey experiment

1. Introduction

Corruption has been endemic in its many forms in most African countries over the past three decades and is widely viewed as a key impediment to sustainable development in the region. A significant share of Africa's GDP is lost through corruption: the African Development Bank (ADB) reports that corruption costs the African economy approximately \$148bn annually (ADB, 2015). Focusing on everyday corruption, Transparency International (TI) estimates that one in four people across 35 African countries pay bribes to access public services (TI, 2019). Recent findings demonstrate little change: TT's Corruption Perception Index reported that the majority of countries in Sub-Sahara Africa (SSA) experienced no significant improvement in tackling corruption between 2012 and 2022. Global crises, including COVID-19, climate change, inflation, armed conflicts, and terrorism, have exacerbated the problem. Using a scale of 0 (highly corrupt) to 100 (very clean), 44 out of 49 countries in SSA score below 50, with an average score of only 32, the lowest of all world regions (TI, 2023).

Corruption can be damaging to an economy in many different ways. Existing research has shown that corruption reduces economic growth (Mauro, 1995; d'Agostino et al., 2016), deters investment (Mauro, 1995), increases poverty and inequality (Gupta et al., 2002; Andres and Ramlogan-Dobson, 2011), dampens foreign direct investment (Cooray et al., 2017) and reduces labour supply (Cooray and Dzhumashev, 2018). More corrupt countries face higher inflation (Özşahin and Üçler, 2017), greater public debt, decreased international trade (De Jong and Bogmans, 2011; Gil-Pareja, 2019), reduced spending on education and health (Mauro, 1998) and increased expenditure on the military (Gupta et al., 2002; d'Agostino et al., 2016).

Although a growing body of research examines the economic consequences of corruption, there is a surprising dearth of empirical evidence on the relationship between corruption and migration, despite their importance for development. Corruption can be a driving force for migration by compromising perceptions of meritocracy if access to jobs is conditional on familial and political connections. This can precipitate underemployment and/or unemployment and lower the returns to human capital, increasing the cost of staying in the home country's labour market. Consequently, citizens of countries with high levels of corruption are encouraged to emigrate, particularly if they have invested in their human capital by attaining high levels of education (Cooray and Schneider, 2016; Arif et al., 2022).

Corruption can also make a jurisdiction less attractive, directly influencing migration. According to the Tiebout-Tullock model, individuals move to a jurisdiction that best represents their preferences. This includes a preference for a lower tax burden jurisdiction over a higher tax burden jurisdiction (Cebula, 2009; Kleven et al., 2020). If we consider corruption as a form of tax

(Cebula, 2009; Poprawe, 2015; Arif et al., 2022), individuals compare corruption for different jurisdictions and "vote with their feet" (Tiebout, 1956). Consequently, a higher corruption 'tax' at the origin will promote out-migration (Poprawe, 2015; Arif et al., 2022).

Research on the corruption-migration nexus has focused on the effect of corruption *perceptions* on emigration. In this paper, we take a different tack by examining the effect of personal *experiences* of corruption on intentions and plans to migrate. While perceiving corruption can certainly influence migration calculations, we argue that the visceral experience of being extorted for, or feeling forced to, offer bribes to access public services or avoid trouble with security services can act as a strong push factor for migration. Even in relatively peaceful societies, such experiences can induce feelings of fear, humiliation, and frustration, increasing the desire to move to another region or country where such experiences are less likely.

In what follows, we use data from the Local Governance Performance Index (LPGI) 2019 survey in Malawi, Kenya, and Zambia, Round 7 of the Afrobarometer survey in 32 African countries, and an original survey experiment in Kenya to examine how both personal experiences of petty corruption and perceptions of grand corruption influence migration intentions.

Our results from Afrobarometer demonstrate that individual experiences of corruption substantially increase intentions and plans to emigrate internationally and that these effects are stronger than those for corruption perceptions. Furthermore, results from the LGPI elite-level dataset suggest that high levels of corruption increase the perception that individuals migrate from the village or neighbourhood to obtain work abroad. To test whether this relationship is causal, we deploy a survey experiment in Kenya and find respondents rate the benefits of emigration higher for hypothetical countrymen who have experienced various forms of corruption than those who have not.

We also explore the extent to which education mediates the effect of corruption on emigration, as emphasized by previous studies (Dimant et al., 2013; Cooray and Schneider, 2016; Arif, 2022; Helms, 2024). In an important departure from this literature, we find no evidence for education moderating the impact of corruption experiences in any of the three datasets.

The rest of the paper is organized as follows. Section 2 reviews the existing literature and states our theoretical expectations for the relationship between corruption experiences and migration intentions. Sections 3 and 4 present and discuss the results from analysis of the Afrobarometer and LGPI survey datasets to examine the relationship between corruption and emigration across a broad range of African countries. Section 5 reports the results of a survey experiment deployed in Kenya designed to assess the causal relationship between corruption

experiences and migration. Section 6 provides a summary and conclusion and discusses the policy implication of the results.

2. The Corruption-Migration Nexus

Existing studies of the relationship between corruption and emigration focus primarily on the macro-level relationship between international migration flows and country corruption scores (Ariu and Squicciarini, 2013; Dimant et al., 2013; Poprawe, 2013; Cooray and Schneider, 2016; Okey, 2016; Arif, 2022). While these studies vary in their data and approaches to estimation, they agree that high levels of corruption are associated with high levels of emigration, particularly the emigration of the highly-skilled or -educated.

Individual-level studies of emigration intentions in Ukraine, Romania, and the Arab World have also found that the more corruption an individual perceives, the more likely they are to aspire to emigrate (Crisan et al., 2019; Etling et al., 2020; Lapshyna, 2014). Hiskey et al. (2014), Ullah and Huque (2020), and Helbling and Morgenstern (2023) similarly demonstrate that corruption forms an important part of the context of insecurity and poor governance that compels Latin Americans and Bangladeshis to emigrate. Analyzing a broader multi-level dataset, Auer et al. (2020) find that both country-level corruption and individual perceptions of corruption are positively associated with individuals' emigration aspirations and plans. Helms (2024), furthermore, finds that the more highly educated are more likely to emigrate when they perceive high levels of corruption.

While these existing studies at both micro- and macro-levels have made important contributions to our understanding of the corruption-migration nexus, they have been rather vague in their conceptualization of 'corruption' and deployed mostly observational research designs. Our study builds on the existing literature by analyzing the effect of personal experiences of everyday corruption on emigration intentions and analyzing data from an original survey experiment to establish whether there is a causal relationship between corruption and emigration. Furthermore, our study is the first to focus on the micro-level emigration-corruption nexus in sub-Saharan Africa.

'Corruption' is a vast concept and can thus be operationalized and measured in many different ways. Broadly understood to mean the abuse of public office for private gain, corruption can refer to such distinct phenomena as the theft of government resources by public officials, the payment of bribes to gain access to the policy-making process, nepotism in hiring for public-sector jobs, and extortion of citizens by police or frontline bureaucrats. Existing studies of the emigration-corruption nexus have relied on either (at the macro-level) expert surveys about the level or control of corruption in a given country at a given time or (at the micro-level) individuals' perceptions of

corruption in general or of specific government agencies in particular. The problems with such measures are well-known. Most survey questions on perceptions of corruption concern officials or institutions with which respondents have little or no first-hand contact (Rose and Pfeiffer, 2015). Expert ratings of corruption or control of corruption draw generalizations of whole countries and, therefore, dismiss heterogeneity across government levels and sectors and between different types of corruption. Furthermore, they are based on the beliefs and opinions of experts and citizens about the behaviour of others, which are not necessarily related to the actual incidence of corruption (Seligson, 2006; Morris, 2008; Treisman, 2007). These problems of conceptualization and operationalization have led to calls to 'unbundle' corruption into more specific components whose causes and effects can be better theorized and measured (Ang, 2020).

Our study focuses specifically on the influence of individuals' experiences paying bribes to obtain public services on their migration decisions. Such petty bribery is the most common type of low-level corruption individuals experience, and the datasets we use have extensive question sets measuring the payment of bribes for different types of public services. By narrowing the scope to bribery experiences, we can be more specific than earlier studies in our conceptualization and measurement of corruption.

Our second key contribution is to offer experimental evidence about the relationship between corruption experiences and emigration. Most existing studies use observational data, which can establish correlations but not causality due to the potential for the endogeneity of corruption to emigration (Arif, 2022; Ariu and Squicciarini, 2013; Dimant et al., 2013; Etling et al., 2020; Lapshyna, 2014; Okey, 2016; Poprawe, 2015). Endogeneity may arise from reverse causality if migration exposes people to corruption, for example to secure expedited delivery of travel documents. Also, there could be unobserved individual and/or household characteristics, for example, motivation or ability, that may be correlated with intentions to emigrate and the likelihood of engaging in corruption. Furthermore, measurement of corruption at the macro level and individual perceptions of corruption come with wide error margins as most corruption takes place away from public view. Thus, treating corruption as exogenous in the migration equation may bias the estimate of the impact of corruption. Some recent studies have used quasiexperimental research designs by deploying instrumental variables for corruption (Auer et al., 2020; Cooray and Schneider, 2016; Ivlevs and King, 2017), but ours is the first to offer original experimental evidence to establish a causal connection between corruption and emigration intentions and plans.

A third contribution of our study is to broaden the geographical scope of studies of the corruption-migration nexus. Previous studies have either been global in scope or focused on

specific countries or regions, including Ukraine (Lapshyna, 2014), Bangladesh (Ullah and Huque, 2020) and the Balkans (Ivlevs and King, 2017). Consequently, their results and policy implications might not always correspond to the political and economic specificities of African countries. The only extant study of emigration and corruption in Africa is that of Okey (2016), who found that corruption (measured by expert surveys) was associated with higher rates of physician emigration across a panel of fifty African countries. Our study is the first to consider the micro-level relationship between corruption and emigration in Africa and to focus on individuals' emigration aspirations across all economic sectors.

Existing research emphasizes that corruption can be an important 'push' factor promoting migration in origin countries and that low levels of corruption in destination countries can be a 'pull' factor. This builds on influential models of migration in which migrants are pushed by low incomes in their home country or region and pulled by wealthier areas with better prospects (Lee, 1966; Harris and Todaro, 1970). High levels of corruption can similarly decrease economic prospects and thus increase the desire to emigrate (Dimant et al., 2013; Cooray and Schneider, 2016). This effect is particularly strong amongst the highly educated, as corruption reduces the benefits of higher levels of human capital; the highly educated are more likely to be both informed about high levels of corruption and able to emigrate. Arif (2022) and Helms (2024) further show that low levels of corruption can also act as a pull factor, attracting migrants seeking to escape corruption in their homelands.

These studies focus on how migrants weigh the costs and benefits of emigration based on perceived corruption in their home countries or regions. Such corruption can take many forms, from government ministers stealing large sums from the public treasury to nepotism in hiring local government officials. Therefore, it is not always clear what respondents in either population or expert surveys have in mind when asked about their perceptions of overall corruption levels.

The most common experience of corruption for citizens of African countries is the payment of bribes to access public services or avoid trouble with the police or other security services. Across 32 African countries (Afrobarometer, 2019), 27% of respondents reported paying a bribe to a police officer in the past year, and 21% reported paying a bribe for household services. We argue that such experiences can be a strong push factor towards emigration that might be even stronger than perceptions of corruption. It has been noted in other spheres of research that experiences and perceptions of corruption can have different kinds of effects, for example, in their influence on voting (Klašnja et al., 2016). Being asked or forced to offer bribes may generate resentment, fear, and frustration, which will likely influence the desire to move to a place where such experiences are less likely. Demands for, or the paying of, bribes to access public services

may also raise or increase concerns about equity and fairness in the distribution of these services; those unable to pay the bribery 'tax' may be unable to access them. Furthermore, these visceral experiences are likely to have a greater effect than a measured consideration of the costs and benefits of living and working in places with different levels of perceived corruption. We therefore posit the following hypotheses:

H1: Experiences of corruption increase the desire to emigrate.

H2: The effect of corruption experiences on the desire to emigrate is stronger than the effect of corruption perceptions.

Different experiences of corruption are likely to vary in how strongly they influence emigration intentions. Consider the difference between being asked for a bribe to continue your journey by an armed police officer at a roadblock in an isolated rural setting and being asked for a bribe by a bureaucrat to speed up your application for a business permit in a busy office. While the latter may be frustrating, the former will likely generate fear, even if any threats are implicit. Refusing to pay a bribe to the bureaucrat might result in a delay in processing or refusal of your permit application, but refusing to pay a bribe to a police officer may result in being the victim of physical violence. Indeed, encounters with the police may generate fear, irrespective of corruption considerations, which the demand for a bribe then compounds. We therefore posit the following additional hypothesis:

H3: The effect of corruption experiences on emigration desires is stronger when the experience is related to the police compared with other government agencies.

As discussed above, education is often considered a key mediating factor in the corruption-migration nexus. Highly educated individuals are likely to suffer more from the distortion of labour markets by corrupt practices like nepotism, which reduce the returns from education. Emigrating to a country with lower levels of corruption can, therefore, increase the benefits from their education, tipping the scales in favour of the benefits of migration to a greater extent than those with lower levels of education.

While this logic clearly applies to the effect of corruption perceptions on migration, it is less evident that the effect of corruption experiences will vary according to experiences of bribery. Demands for bribes tend to affect most sectors of society, and the negative feelings they generate are likely to be common amongst people of all education levels. We therefore expect that there

will be less distinction between the reactions of lowly- and highly-educated people to corruption experiences in terms of emigration desires, and we state the following hypothesis:

H4: The effect of corruption experiences on emigration desires varies less by education than the effect of corruption perceptions.

While we argue that corruption experiences increase the desire to emigrate, we should acknowledge that emigration is not always an option, especially for those without the resources to move abroad or whose legal routes to migration to lower-corruption destinations are limited. Emigration is also only one of many possible responses to corruption experiences; some may seek to reduce this form of corruption by taking formal or informal political action rather than emigrating. In this paper, we investigate whether corruption experiences increase the desire to emigrate, all else being equal, and we hope that future work can build on our findings by untangling the relationships between corruption, migration intentions, and actual migration on the one hand and corruption, migration, and political participation on the other.

3. Corruption Experiences and International Emigration: Evidence from Afrobarometer

We begin our investigation by analyzing data from Round 7 of the Afrobarometer survey project, conducted between 2016 and 2018 in 32 countries in sub-Saharan Africa.¹ Our key questions of interest are those asking about emigration as the dependent variable and corruption and education as the primary independent variables. Afrobarometer includes two questions about emigration. The first asks, "How much, if at all, have you considered moving to another country to live?" with potential answers including "Not at all," "A little bit," "Somewhat," and "A lot." Respondents who answer that they are at least a little bit considering emigration are asked a follow-up question: "How much planning or preparation have you done in order to move to another country to live?" The potential answers to this second question are: "You are not currently making any specific plans or preparations," "You are planning to move in the next year or two but not yet making preparations," or "You are currently making preparations to move, like getting a visa." Figure 1 plots the proportion of respondents in each country who indicate they have at least some intention and plan to emigrate.

¹ Afrobarometer Wave 7 also included two countries in North Africa – Morocco and Tunisia – which are not included in the analysis, keeping our focus on the sub-Saharan region.

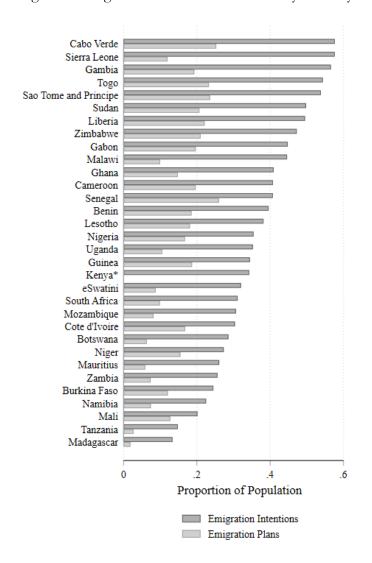


Figure 1: Emigration Intentions and Plans by Country

*The question about emigration plans was not asked in Kenya.

To measure corruption experiences, we use a series of questions about paying bribes for identity documents, water, sanitation or electrical services, school services, health services, police assistance, and to avoid trouble with the police. We create a Corruption Experiences Index by adding this series of variables, each measured on a four-point scale from 'Never' to 'Often.' We normalize the scale of the index so that it runs from 0 (for someone who has not had to pay a bribe) to 1 (for someone who has often paid bribes for all services asked about in the survey). Some respondents would have had more opportunities to offer or be asked for bribes because they have come into contact with a wider range of public services. We therefore created an alternative measure of corruption experiences – Proportion of Corruption Experiences – calculated by dividing the number of services (school services, police, etc.) for which respondents

reported corruption experiences by the number of services with which respondents reported interacting over the previous 12 months.

In Figure 2, we plot the proportion of each country's population that intends to emigrate against the country's mean of the Corruption Experiences Index. We can see a positive correlation between corruption experiences and emigration intentions at the aggregate level.

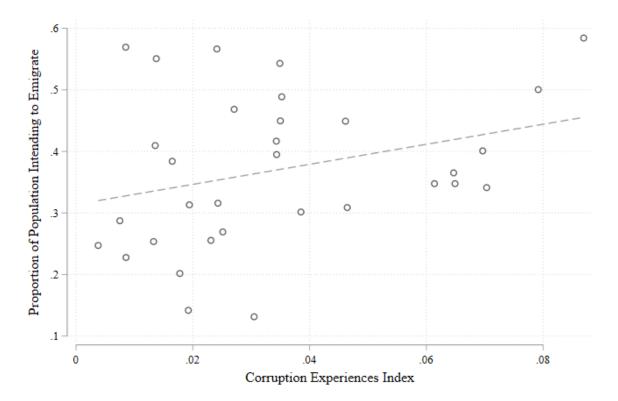


Figure 2: Emigration Intentions and Corruption Experiences

To capture corruption perceptions, we use questions that asked respondents their views on the proportion of people engaged in corruption in these groups or institutions: the office of the president, parliament, national officials, local officials, the police, the judiciary, traditional leaders, NGOs, religious leaders and business leaders. We create a Corruption Perceptions Index by adding this series of variables, each measured on a four-point scale from 'None of them' to 'All of them.' We normalize this scale so that it runs between 0 and to facilitate easier comparisons between the coefficients for the corruption experiences and perceptions indices.

Table 1: Ordered Probit Regression Models on the Relationship Between Corruption and Migration

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable	Plans	Intentions	Plans	Intentions	Plans	Intentions
Corruption Experiences Index	0.587***	0.998***	0.481*	1.360***	0.586***	0.999***
	(0.125)	(0.095)	(0.279)	(0.252)	(0.125)	(0.095)
Corruption Perception Index	0.273***	0.251***	0.274***	0.250***	0.544***	0.408***
	(0.070)	(0.045)	(0.070)	(0.045)	(0.149)	(0.094)
Age	-0.006***	-0.016***	-0.006***	-0.016***	-0.006***	-0.016***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Male	0.155***	0.160***	0.155***	0.160***	0.156***	0.160***
	(0.031)	(0.020)	(0.031)	(0.020)	(0.031)	(0.020)
Household head	-0.001	-0.004	-0.001	-0.004	-0.001	-0.003
	(0.035)	(0.022)	(0.035)	(0.022)	(0.035)	(0.022)
Urban resident	-0.008	0.087***	-0.008	0.087***	-0.006	0.087***
	(0.032)	(0.021)	(0.032)	(0.021)	(0.032)	(0.021)
Wealth: Middle	-0.063*	-0.001	-0.064*	-0.001	-0.063*	-0.000
(reference category: Poor)	(0.037)	(0.024)	(0.037)	(0.024)	(0.037)	(0.024)
Wealth: Rich	-0.050	-0.006	-0.051	-0.007	-0.052	-0.006
	(0.046)	(0.029)	(0.046)	(0.030)	(0.046)	(0.030)
Employment status	-0.002	-0.004	-0.002	-0.004	-0.002	-0.004
	(0.033)	(0.021)	(0.033)	(0.021)	(0.033)	(0.021)
Living conditions: Neutral	0.011	-0.114***	0.011	-0.114***	0.009	-0.115***
(reference category: Bad)	(0.044)	(0.027)	(0.044)	(0.027)	(0.044)	(0.027)
Living conditions: Good	0.036	-0.115***	0.036	-0.116***	0.037	-0.115***
	(0.035)	(0.023)	(0.035)	(0.023)	(0.035)	(0.023)
Education: Primary	0.021	0.068**	0.027	0.091***	0.264**	0.165**
(reference category: None)	(0.051)	(0.030)	(0.056)	(0.033)	(0.112)	(0.064)
Education: Secondary	0.070	0.201***	0.055	0.211***	0.214**	0.279***
	(0.048)	(0.030)	(0.052)	(0.033)	(0.098)	(0.060)
Education: Post-secondary	0.151***	0.240***	0.145**	0.268***	0.208*	0.342***
	(0.057)	(0.037)	(0.062)	(0.039)	(0.119)	(0.074)
Internet usage	0.109***	0.181***	0.109***	0.181***	0.110***	0.181***
	(0.037)	(0.024)	(0.037)	(0.024)	(0.037)	(0.024)
Lived outside country	0.256***	0.525***	0.255***	0.524***	0.257***	0.525***
	(0.029)	(0.020)	(0.029)	(0.020)	(0.029)	(0.020)
Depend on remittances	0.190***	0.072***	0.189***	0.073***	0.188***	0.072***
	(0.032)	(0.021)	(0.032)	(0.021)	(0.032)	(0.021)
Sociotropic economic evaluation	-0.001	-0.052***	-0.001	-0.052***	-0.001	-0.052***
	(0.019)	(0.012)	(0.019)	(0.012)	(0.019)	(0.012)

Primary education*Corruption			-0.007	-0.031*		
experiences			(0.023)	(0.018)		
Secondary education*Corruption			0.013	-0.015		
experiences			(0.018)	(0.016)		
Post-secondary education*Corruption			0.005	-0.033*		
experiences			(0.021)	(0.017)		
Primary education*Corruption					-0.018**	-0.007*
perceptions					(0.007)	(0.004)
Secondary education*Corruption					-0.011*	-0.006
perceptions					(0.006)	(0.004)
Post-secondary education*Corruption					-0.005	-0.007
perceptions					(0.007)	(0.005)
/cut1	0.341***	0.173***	0.335***	0.185***	0.467***	0.240***
	(0.103)	(0.067)	(0.104)	(0.067)	(0.119)	(0.076)
/cut2	1.513***	0.544***	1.506***	0.556***	1.639***	0.611***
	(0.104)	(0.067)	(0.105)	(0.067)	(0.120)	(0.076)
/cut3		0.875***		0.888***		0.943***
		(0.067)		(0.068)		(0.076)
N	9,173	24,764	9,173	24,764	9,173	24,764

Robust standard errors in parentheses. Country dummies included in the models. *** p<0.01, ** p<0.05, * p<0.1

The nature of the emigration questions suggests modelling emigration as a two-stage process: an intention to emigrate followed by the development of specific plans to do so. We initially estimated ordered probit models with sample selection. The first (selection) stage was a probit model of emigration intentions, in which those who answered "Not at all" are coded 0, and all those who reported at least some consideration of emigration are coded 1. The second stage was an ordered probit model of emigration plans. When estimating these models, however, the results of a Wald test indicated that we could not reject the null hypothesis of independent equations, suggesting the data would be better modelled by using separate models for intentions and plans. We therefore report separate ordered probit models for emigration intentions and plans to make full use of the variation in the data.

We control for a set of additional independent variables that might affect both the likelihood of emigrating and experiences/perceptions of corruption. The most important of these is education because we expect those who are more highly educated to be more sensitive to corruption. We test this hypothesis by including an interaction between corruption and education, measured in Afrobarometer on a four-point ordinal scale from no education to post-secondary education. We include a set of demographic controls: gender, age, urban/rural residence, wealth,

employment status, and whether the respondent is the head of their household. We also include variables capturing respondents' perceptions of their living conditions and a sociotropic economic evaluation. Existing international networks are strong predictors of emigration, so we include variables capturing household receipt of remittances, whether the respondent has lived outside the country, and internet usage. A set of country dummies was included to control for country-specific differences.

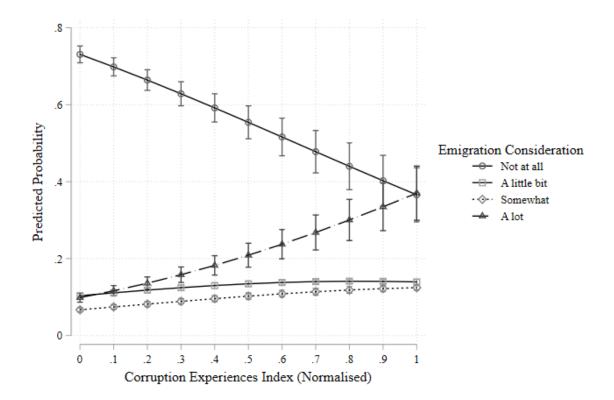
The results of our estimations are displayed in Table 1 above. Models 1 and 2 test our hypotheses that both experiences and perceptions of corruption increase respondents' desire to emigrate but that experiences have a stronger effect. The coefficients for both corruption indices are positive and statistically significant, providing evidence for H1. Corruption experiences and perceptions are associated with both intentions to emigrate and, once someone has decided to do so, more specific plans to move to another country. Of the two measures of corruption, experiences have a stronger association with both emigration intentions and plans. As both indices are normalized to run between 0 and 1, we can directly compare the coefficients. The coefficient for corruption experiences is substantially greater than for corruption perceptions.

The other four models investigate the interaction between corruption and education in their relationship with emigration intentions and plans to test H4. Surprisingly, the results indicate no such interactive effect between education and either corruption experiences or corruption perceptions. This result goes against the grain of much recent research on the corruption-emigration nexus, which finds that the highly educated are more sensitive to corruption (Dimant et al., 2013; Cooray and Schneider, 2016; Arif, 2022; Helms, 2024). The other independent variables included as controls have coefficients of the expected signs: men, those with international linkages and living in urban areas, the young, and the more highly educated are more likely to emigrate; those with better sociotropic and pocketbook economic assessments are less likely to emigrate. Interestingly, wealth and employment status do not have a statistically significant relationship with emigration intentions or plans. In additional models, we test for interactions between wealth and corruption perceptions and experiences but find no significant results.

To explore the substantive effect of corruption on emigration, we plot the predicted probabilities of migration intentions for hypothetical respondents who are 30 years old, female, from a rural area, have a primary school education, and the mean level of each of the other variables in the model, but vary in their experiences or perceptions of corruption. The model predictions in Figure 3 show that those who have not had to pay bribes will have only a 10% probability of considering emigration "a lot," which rises to more than 30% if they have experienced the highest

possible level of corruption. On the other hand, corruption perceptions have much less of a substantive effect on emigration intentions, as shown in Figure 4.

Figure 3: The Effect of Corruption Experiences on Emigration Intentions



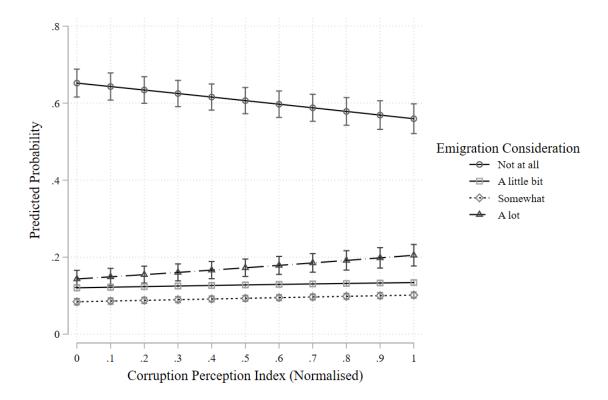


Figure 4: The Effect of Corruption Perceptions on Emigration Intentions

To ensure the choice of corruption experience measure does not drive the results, we estimated models using the Proportion of Corruption Experiences measure described above. This alternative measure is also associated with a greater propensity to intend to emigrate; however, it does not have a statistically significant association with making more specific plans once respondents have decided to emigrate. As with the main models presented above, education does not have a statistically significant interaction with corruption experiences. We also estimate the models separately in high- and low-corruption and high- and low-migration countries: those ranked in the top or bottom half by average Corruption Experiences Index and proportion of population intending to emigrate. Results are substantively similar in these models to those presented above, although corruption experiences have a greater impact on emigration intentions in low-corruption countries. This is likely because corruption is less expected and, therefore, has a greater impact when it is less common.

Does paying bribes for different services or to government officials have different effects on migration intentions and plans? In Table 2, we present the coefficients for a series of models in which each bribery experience variable is entered separately alongside the full battery of control variables described above. All forms of bribery have a statistically significant association with greater emigration intentions; All, except bribes for school and education services, have a similar relationship with greater preparations once an individual has decided to emigrate. The strongest

effects on emigration intentions are caused by bribes to the police to avoid problems or get assistance, although there is only a small difference between the coefficients.

Our analysis of Afrobarometer has provided evidence for our first two hypotheses: corruption experiences are strongly associated with greater emigration intentions, and the effect is stronger than that of corruption perceptions. Evidence for H3 – that bribes to the police will have a greater effect – is more limited and requires further investigation. Contrary to previous research, we find no evidence for an interactive effect between education and corruption experiences or, indeed, with corruption perceptions in their relationship with emigration. One possible explanation is that those with greater education are wealthier and thus find it less burdensome to pay bribes, evening out the greater sensitivity to corruption amongst the highly educated. In additional models, however, we found no interaction between wealth and both corruption perceptions and experience in their relationship with emigration intentions and plans.

Table 2: Coefficients from Models Estimated using
Disaggregated Corruption Experiences

Dependent variable	Plans	Intentions
Paid Bribe for Identity Document	0.998***	0.229***
	(0.095)	(-0.031)
Paid Bribe for Household Services	0.118**	0.209***
	(-0.057)	(-0.040)
Paid Bribe to Avoid Problems with the Police	0.081**	0.262***
	(-0.038)	(-0.027)
Paid Bribe to Get Assistance from the Police	0.201***	0.234***
	(-0.057)	(-0.042)
Paid Bribe for School Services	0.077	0.177***
	(-0.048)	(-0.034)
Paid Bribe for Health Services	0.073*	0.174***
	(-0.044)	(-0.030)

Ordinal probit coefficients with robust standard errors in parentheses.

Each coefficient is from a separate model. Control variables included as in

Table 1. *** p<0.01, ** p<0.05, * p<0.1

4. Corruption Experiences and International Emigration: Evidence from the LGPI

We now turn to the LGPI data, which allows us to further explore the relationship between corruption experiences and international migration. The LGPI is a survey conducted in Kenya, Malawi, and Zambia and is representative of two regions within each country: the capital city region and border regions (Lust et al., 2019). These are the regions where individuals are most likely to have exit options for emigration: those in border regions are geographically close to other countries, while those in capital cities are more likely to be connected to international networks. Indeed, many migration journeys begin with a move from rural areas to capital cities, followed by international mobility. The three countries surveyed in the LGPI have different baseline levels of migration intentions. In Figure 1 above, we saw the percentage of people within countries surveyed by Afrobarometer who intend to emigrate: Malawi is in the top third of countries, Kenya is in the middle third, and Zambia is in the bottom third.

In the Afrobarometer analysis presented above, we focused on individual intentions and preparations to emigrate. Using the LGPI, we focus on community leaders' perceptions about emigration from their neighbourhoods or villages and whether these vary according to the level of corruption reported by respondents in these places. The dependent variable is binary, taking the value of 1 if a village leader/elite thinks people emigrate from the village in search of employment opportunities abroad. We measure the key independent variable of corruption using a Service Corruption Experiences Index, measuring whether people have paid extra money or given a gift to receive a service. The individual components of this index take the value of 1 if a respondent indicates they have paid bribes to get one of the following services: a birth certificate, a business permit, a death certificate, access to electricity, health services, a land title, a marriage certificate, a passport, or access to water. We rescale the index to restrict it between 0 and 1. The greater the index value, the more service corruption a respondent has experienced.

While both perceived corruption and control variables were measured at the individual level, the dependent variable (emigration) was measured at the village level based on community leaders' responses, so we need to use a multilevel model with a contextual-level outcome. We implemented a latent variable approach by applying a multilevel generalized structural equation model. Monte Carlo simulations have shown that this latent class approach method performs better at estimating a micro-macro relationship than aggregation methods and produces unbiased parameter estimates, even in cases where individual-level scores poorly replicate the latent (group-level) scores (Bennink et al., 2013). Our results are reported in Table 3: column (1) presents

estimates for a model without interacting the experienced service corruption index with education, while column 2 reports results for a model including such an interaction.

The results show that service corruption experiences are positively and significantly related to the probability of village leaders' thoughts that people from their village seek to emigrate across borders in search of employment opportunities. The interaction term between experienced service corruption index and education is statistically insignificant, suggesting education does not mediate corruption with international migration.

Table 3: Parameter Estimates of Multilevel Generalized Structural Equation Model Regression

	(1)	(2)
	Without	With
	interaction	interaction
Service Corruption Experiences	0.586***	0.639**
Index	(0.157)	(0.079)
Age	-0.001	-0.001
	(0.003)	(0.003)
Gender	-0.129*	-0.129*
	(0.072)	(0.072)
Married	-0.033	-0.034
	(0.095)	(0.095)
Divorced/separated	0.188	0.185
	(0.140)	(0.140)
Widowed	-0.123	-0.124
	(0.179)	(0.179)
Secondary education	0.424***	0.435***
	(0.076)	(0.077)
Post-secondary education	0.277**	0.244*
	(0.129)	(0.1340)
Employment status	0.017	-0.019
	(0.082)	(0.0820)
Household size	-0.012	-0.012
	(0.014)	(0.014)
Lower-middle wealth	-0.098	-0.098
	(0.073)	(0.073)
Upper-middle wealth	-0.537***	-0.5373***
	(0.148)	(0.148)
Highest wealth	-0.056	-0.058
	(0.100)	(0.100)
Tin roofing	-0.682***	-0.681***

	(0.079)	(0.079)
Service Corruption Experiences	-	-0.213
Index*Secondary education		(0.358)
Service Corruption Experiences	-	0.335
Index*Post-secondary education		(0.460)
M1[Village>Individual]	1.000	1.000
	(0.000)	(0.000)
Var(M1[Village>Individual])		
Constant	-1.446***	-1.452***
	(0.251)	(0.252)
Observations	10,009	10,009

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Next, we disaggregate the results of the nexus between experienced service corruption index and perception of international migration by the capital city and border region samples. The results are presented in Table 4. Results from the capital city sample are presented in columns 1 and 2, while those from the border region sample are reported in columns 3 and 4. The estimates from the capital city sample (columns 1 and 2) reveal a positive and significant relationship between experienced service corruption and the probability of attributing international migration to a search for employment. However, in the border region sample, the effect of experienced service corruption on international migration is not statistically significant.

Our analysis of the LGPI dataset reveals a similar pattern to our examination of the Afrobarometer above. We have found further evidence that bribery experiences make emigration more likely. Additionally, higher levels of education do not make people more sensitive to corruption experiences. There is a wrinkle, however: we only found statistically significant results in the capital city regions, not the border regions. This may be because migration from rural border regions is more likely to be internal, towards capital cities or larger urban areas, rather than international. Indeed, many migration journeys begin with individuals moving first from rural to urban areas and then abroad (King and Skedlon, 2019).

Table 4: Parameter Estimates of Multilevel Generalized Structural Equation Model Regression

(without interaction) (wit		(1)	(2)	(3)	(4)
Interaction		Capital	Capital (with	Border	Border (with
Service Corruption Experiences Index		(without	interaction)	(without	interaction)
Age in years		interaction)		interaction)	
Age in years	Service Corruption Experiences Index	1.432***	1.083*	0.265	0.567
Gender		(0.381)	(0.647)	(0.241)	(0.376)
Gender 0.264 0.275 0.189** 0.187 (0.222) (0.222) (0.091) (0.091) Married 0.486 0.484 -0.090 -0.089 (0.357) (0.359) (0.131) (0.131) Divorced/separated -1.084** -1.084 -0.095 0.099 (0.432) (0.434) (0.179) (0.179) Widowed 0.980** -0.979 -0.343 -0.342 (0.490) (0.491) (0.230) (0.230) Secondary education 0.260 0.196 0.487*** -0.496*** (0.224) (0.236) (0.092) (0.093) Post-secondary education 0.472 -0.572 0.613*** 0.685*** (0.588) (0.588) (0.585) (0.217) (0.221) Employment status -0.622* -0.576 -0.069 0.071 Household size -0.001 -0.002 -0.027 -0.027 (0.045) (0.045) (0.018) (0.018) <t< td=""><td>Age in years</td><td>0.001</td><td>0.001</td><td>0.000</td><td>0.000</td></t<>	Age in years	0.001	0.001	0.000	0.000
Married (0.222) (0.022) (0.091) (0.091) Married (0.486 0.484 -0.090 -0.089 (0.357) (0.359) (0.131) (0.131) Divorced/separated -1.084** -1.084 -0.095 0.099 (0.432) (0.434) (0.179) (0.179) Widowed (0.432) (0.434) (0.179) -0.343 -0.342 (0.490) (0.491) (0.230) (0.230) Secondary education (0.224) (0.236) (0.092) (0.093) Post-secondary education (0.472 -0.572 0.613*** 0.685*** (0.588) (0.585) (0.217) (0.221) Employment status -0.622* -0.576 -0.069 0.071 (0.353) (0.351) (0.115) (0.115) Household size -0.001 -0.002 -0.027 -0.027 (0.045) (0.045) (0.018) (0.018) Lower middle -0.010 0.081 -0.133 -0.134 (0.215) (0.216) (0.094) (0.094) Upper middle -0.523 -0.538 -0.542 -0.548*** (0.373) (0.374) (0.193) (0.193) Highest -0.211 0.189 0.064 0.064 (0.265) (0.266) (0.115) (0.115) Tin roofing -0.902*** -0.912*** -0.544*** -0.541*** (0.207) (0.207) (0.089) Service Corruption Experiences -0.7150.343 (0.495) (0.207) (0.089) Service Corruption Experiences -0.7150.343 (0.495) (0.495) (0.495) Service Corruption Experiences -0.7150.343 (0.495) (0.		(0.007)	(0.007)	(0.003)	(0.003)
Married 0.486 0.484 -0.090 -0.089 (0.357) (0.359) (0.131) (0.131) Divorced/separated -1.084** -1.084 -0.095 0.099 (0.432) (0.434) (0.179) (0.179) Widowed 0.980** -0.979 -0.343 -0.342 (0.490) (0.491) (0.230) (0.230) Secondary education 0.260 0.196 0.487**** -0.496**** Post-secondary education 0.472 -0.572 0.613**** -0.496**** Employment status -0.622* -0.572 0.613*** 0.685**** Employment status -0.622* -0.576 -0.069 0.071 Household size -0.001 -0.002 -0.027 -0.027 Household size -0.001 -0.002 -0.027 -0.027 Lower middle 0.010 0.081 -0.133 -0.134 Lower middle 0.021 (0.216) (0.094) (0.094) Upper middle -0.523 -0.538 -0.542 -0.548*** (0.373)	Gender	0.264	0.275	0.189**	0.187
Divorced/separated -1.084** -1.084 -0.095 0.099 (0.432) (0.434) (0.179) (0.179) Widowed 0.980** -0.979 -0.343 -0.342 (0.490) (0.491) (0.230) (0.230) Secondary education 0.260 0.196 0.487*** -0.496*** (0.224) (0.236) (0.092) (0.093) Post-secondary education 0.472 -0.572 0.613*** 0.685*** (0.588) (0.585) (0.217) (0.221) Employment status -0.622* -0.576 -0.069 0.071 (0.353) (0.351) (0.115) (0.115) Household size -0.001 -0.002 -0.027 -0.027 (0.045) (0.045) (0.048) (0.018) Lower middle 0.010 0.081 -0.133 -0.134 (0.215) (0.216) (0.094) (0.094) Upper middle -0.523 -0.538 -0.542 -0.548*** (0.373) (0.374) (0.193) (0.193) Highest 0.211 0.189 0.064 0.064 (0.265) (0.266) (0.115) (0.115) Tin roofing -0.902*** -0.912*** -0.544*** -0.541*** (0.207) (0.207) (0.089) (0.089) Service Corruption Experiences - 0.715 - 0.343 Index*Post-secondary education (0.815) - 1.509*** -1.519***		(0.222)	(0.222)	(0.091)	(0.091)
Divorced/separated -1.084** -1.084 -0.095 0.099 (0.432) (0.434) (0.179) (0.179) Widowed 0.980** -0.979 -0.343 -0.342 (0.490) (0.491) (0.230) (0.230) Secondary education 0.260 0.196 0.487*** -0.496*** (0.224) (0.236) (0.092) (0.093) Post-secondary education 0.472 -0.572 0.613*** 0.685*** (0.588) (0.585) (0.217) (0.221) Employment status -0.622* -0.576 -0.069 0.071 (0.353) (0.351) (0.115) (0.115) Household size -0.001 -0.002 -0.027 -0.027 (0.045) (0.045) (0.048) (0.018) Lower middle 0.010 0.081 -0.133 -0.134 (0.215) (0.216) (0.094) (0.094) Upper middle -0.523 -0.538 -0.542 -0.548*** (0.373) (0.374) (0.193) (0.193) Highest 0.211 0.189 0.064 0.064 (0.265) (0.266) (0.115) (0.115) Tin roofing -0.902*** -0.912*** -0.544*** -0.541*** (0.207) (0.207) (0.089) (0.089) Service Corruption Experiences	Married	0.486	0.484	-0.090	-0.089
Widowed		(0.357)	(0.359)	(0.131)	(0.131)
Widowed 0.980** -0.979 -0.343 -0.342 (0.490) (0.491) (0.230) (0.230) Secondary education 0.260 0.196 0.487*** -0.496*** (0.224) (0.236) (0.092) (0.093) Post-secondary education 0.472 -0.572 0.613*** 0.685*** (0.588) (0.585) (0.217) (0.221) Employment status -0.622* -0.576 -0.069 0.071 (0.353) (0.351) (0.115) (0.115) Household size -0.001 -0.002 -0.027 -0.027 (0.045) (0.045) (0.018) (0.018) Lower middle 0.010 0.081 -0.133 -0.134 Upper middle -0.523 -0.538 -0.542 -0.548**** (0.373) (0.374) (0.193) (0.193) Highest 0.211 0.189 0.064 0.064 (0.265) (0.266) (0.115) (0.115) Tin roofing -0.902**** -0.912**** -0.544**** -0.541**** <t< td=""><td>Divorced/separated</td><td>-1.084**</td><td>-1.084</td><td>-0.095</td><td>0.099</td></t<>	Divorced/separated	-1.084**	-1.084	-0.095	0.099
Secondary education		(0.432)	(0.434)	(0.179)	(0.179)
Secondary education 0.260 0.196 0.487*** -0.496*** (0.224) (0.236) (0.092) (0.093) Post-secondary education 0.472 -0.572 0.613*** 0.685*** (0.588) (0.585) (0.217) (0.221) Employment status -0.622* -0.576 -0.069 0.071 (0.353) (0.351) (0.115) (0.115) Household size -0.001 -0.002 -0.027 -0.027 (0.045) (0.045) (0.018) (0.018) Lower middle 0.010 0.081 -0.133 -0.134 (0.215) (0.216) (0.094) (0.094) Upper middle -0.523 -0.538 -0.542 -0.548*** (0.373) (0.374) (0.193) (0.193) Highest 0.211 0.189 0.064 0.064 (0.265) (0.266) (0.115) (0.115) Tin roofing -0.902*** -0.912*** -0.544*** -0.541*** Occition -0.027 (0.089) (0.089) Service Corr	Widowed	0.980**	-0.979	-0.343	-0.342
Post-secondary education		(0.490)	(0.491)	(0.230)	(0.230)
Post-secondary education	Secondary education	0.260	0.196	0.487***	-0.496***
Employment status		(0.224)	(0.236)	(0.092)	(0.093)
Employment status -0.622* -0.576 -0.069 0.071 (0.353) (0.351) (0.115) (0.115) Household size -0.001 -0.002 -0.027 -0.027 (0.045) (0.045) (0.018) (0.018) Lower middle 0.010 0.081 -0.133 -0.134 (0.215) (0.216) (0.094) (0.094) Upper middle -0.523 -0.538 -0.542 -0.548*** (0.373) (0.374) (0.193) (0.193) Highest 0.211 0.189 0.064 0.064 (0.265) (0.266) (0.115) (0.115) Tin roofing -0.902*** -0.912*** -0.544*** -0.541*** (0.207) (0.207) (0.089) (0.089) Service Corruption Experiences - 0.715 - 0.343 Index*Secondary education Service Corruption Experiences 1.509 Index*Post-secondary education -2.187*** -2.204*** -1.509*** -1.519***	Post-secondary education	0.472	-0.572	0.613***	0.685***
(0.353) (0.351) (0.115) (0.115) Household size -0.001 -0.002 -0.027 -0.027 (0.045) (0.045) (0.018) (0.018) Lower middle 0.010 0.081 -0.133 -0.134 (0.215) (0.216) (0.094) (0.094) Upper middle -0.523 -0.538 -0.542 -0.548*** (0.373) (0.374) (0.193) (0.193) Highest 0.211 0.189 0.064 0.064 (0.265) (0.266) (0.115) (0.115) Tin roofing -0.902*** -0.912*** -0.544*** -0.541*** (0.207) (0.207) (0.089) (0.089) Service Corruption Experiences - 0.7150.343 Index*Secondary education (0.815) (0.495) Service Corruption Experiences1.509 Index*Post-secondary education -2.187*** -2.204*** -1.509*** -1.519***		(0.588)	(0.585)	(0.217)	(0.221)
Household size -0.001 -0.002 -0.027 -0.027 -0.027 (0.045) (0.045) (0.018) (0.018) Lower middle 0.010 0.081 -0.133 -0.134 (0.215) (0.216) (0.094) (0.094) Upper middle -0.523 -0.538 -0.542 -0.548*** (0.373) (0.374) (0.193) (0.193) Highest 0.211 0.189 0.064 0.064 (0.265) (0.266) (0.115) Tin roofing -0.902*** -0.912*** -0.544*** -0.541*** (0.207) (0.207) (0.089) Service Corruption Experiences - 0.715 - 0.343 Index*Secondary education (0.815) Service Corruption Experiences - 1.509 Index*Post-secondary education -2.187*** -2.204*** -1.509*** -1.519***	Employment status	-0.622*	-0.576	-0.069	0.071
Lower middle (0.045) (0.045) (0.018) (0.018) Lower middle (0.215) (0.216) (0.094) (0.094) Upper middle -0.523 -0.538 -0.542 -0.548*** (0.373) (0.374) (0.193) (0.193) Highest 0.211 0.189 0.064 0.064 (0.265) (0.266) (0.115) (0.115) Tin roofing -0.902*** -0.912*** -0.544*** -0.541*** (0.207) (0.207) (0.089) (0.089) Service Corruption Experiences - 0.7150.343 Index*Secondary education (0.815) (0.495) Service Corruption Experiences 1.509 Index*Post-secondary education (1.139) Constant -2.187*** -2.204*** -1.509*** -1.519***		(0.353)	(0.351)	(0.115)	(0.115)
Lower middle 0.010 0.081 -0.133 -0.134 (0.215) (0.216) (0.094) (0.094) (0.094) Upper middle -0.523 -0.538 -0.542 -0.548*** (0.373) (0.374) (0.193) (0.193) Highest 0.211 0.189 0.064 0.064 (0.265) (0.266) (0.115) (0.115) Tin roofing -0.902*** -0.912*** -0.544*** -0.541*** (0.207) (0.207) (0.089) (0.089) Service Corruption Experiences - 0.7150.343 Index*Secondary education (0.815) (0.495) Service Corruption Experiences 1.509 Index*Post-secondary education (1.139) Constant -2.187*** -2.204*** -1.509*** -1.519***	Household size	-0.001	-0.002	-0.027	-0.027
Upper middle -0.523 -0.538 -0.542 -0.548*** (0.373) (0.374) (0.193) (0.193) Highest 0.211 0.189 0.064 0.064 (0.265) (0.266) (0.115) (0.115) Tin roofing -0.902*** -0.912*** -0.544*** -0.541*** Service Corruption Experiences - 0.715 - -0.343 Index*Secondary education (0.815) (0.495) Service Corruption Experiences - - - -1.509 Index*Post-secondary education - - - - - Constant -2.187*** -2.204*** -1.509*** -1.519***		(0.045)	(0.045)	(0.018)	(0.018)
Upper middle -0.523 -0.538 -0.542 -0.548*** (0.373) (0.374) (0.193) (0.193) Highest 0.211 0.189 0.064 0.064 (0.265) (0.266) (0.115) (0.115) Tin roofing -0.902*** -0.912*** -0.544*** -0.541*** (0.207) (0.207) (0.089) (0.089) Service Corruption Experiences - 0.7150.343 Index*Secondary education (0.815) (0.495) Service Corruption Experiences	Lower middle	0.010	0.081	-0.133	-0.134
(0.373) (0.374) (0.193) (0.193) Highest (0.265) (0.266) (0.115) (0.115) Tin roofing (0.207) (0.207) (0.089) (0.089) Service Corruption Experiences - 0.7150.343 Index*Secondary education (0.815) (0.495) Service Corruption Experiences1.509 Index*Post-secondary education (1.139) Constant -2.187*** -2.204*** -1.509*** -1.519***		(0.215)	(0.216)	(0.094)	(0.094)
Highest 0.211 0.189 0.064 0.064 (0.265) (0.266) (0.115) (0.115) Tin roofing -0.902*** -0.912*** -0.544*** -0.541*** (0.207) (0.207) (0.089) (0.089) Service Corruption Experiences - 0.7150.343 Index*Secondary education (0.815) (0.495) Service Corruption Experiences1.509 Index*Post-secondary education (1.139) Constant -2.187*** -2.204*** -1.509*** -1.519***	Upper middle	-0.523	-0.538	-0.542	-0.548***
(0.265) (0.266) (0.115) (0.115) Tin roofing -0.902*** -0.912*** -0.544*** -0.541*** (0.207) (0.207) (0.089) (0.089) Service Corruption Experiences - 0.7150.343 Index*Secondary education (0.815) (0.495) Service Corruption Experiences1.509 Index*Post-secondary education Constant -2.187*** -2.204*** -1.509*** -1.519***		(0.373)	(0.374)	(0.193)	(0.193)
Tin roofing -0.902*** -0.912*** -0.544*** -0.541*** (0.207) (0.207) (0.089) Service Corruption Experiences - 0.715 - 0.343 Index*Secondary education (0.815) Service Corruption Experiences	Highest	0.211	0.189	0.064	0.064
(0.207) (0.207) (0.089) (0.089) Service Corruption Experiences - 0.7150.343 Index*Secondary education (0.815) (0.495) Service Corruption Experiences1.509 Index*Post-secondary education (1.139) Constant -2.187*** -2.204*** -1.509*** -1.519***		(0.265)	(0.266)	(0.115)	(0.115)
Service Corruption Experiences - 0.715 - -0.343 Index*Secondary education (0.815) (0.495) Service Corruption Experiences - - - -1.509 Index*Post-secondary education (1.139) Constant -2.187*** -2.204*** -1.509*** -1.519***	Tin roofing	-0.902***	-0.912***	-0.544***	-0.541***
Index*Secondary education (0.815) (0.495) Service Corruption Experiences - - - -1.509 Index*Post-secondary education (1.139) Constant -2.187*** -2.204*** -1.509*** -1.519***		(0.207)	(0.207)	(0.089)	(0.089)
Service Corruption Experiences - - - -1.509 Index*Post-secondary education (1.139) Constant -2.187*** -2.204*** -1.509*** -1.519***	Service Corruption Experiences	-	0.715	-	-0.343
Index*Post-secondary education (1.139) Constant -2.187*** -2.204*** -1.509*** -1.519***	Index*Secondary education		(0.815)		(0.495)
Constant -2.187*** -2.204*** -1.509*** -1.519***	Service Corruption Experiences	-	-	-	-1.509
	Index*Post-secondary education				(1.139)
$(0.802) \qquad (0.803) \qquad (0.313) \qquad (0.313)$	Constant	-2.187***	-2.204***	-1.509***	-1.519***
		(0.802)	(0.803)	(0.313)	(0.313)

Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

5. Is the Relationship Between Corruption Experiences and Emigration Causal? Evidence from a Survey Experiment

In the preceding sections, we provided evidence from observational data that suggests corruption experiences to be an important driver of emigration intentions and plans in Africa. To establish whether this relationship is causal, we conducted a survey experiment in Kenya to explore how varying forms of corruption might affect emigration.²

We fielded a survey in Kenya in May 2022 through Pollfish, a company that deploys surveys to respondents who have downloaded a partner app.³ A total of 1304 Kenyans responded to the survey. This survey sample is not representative of the Kenyan population. While a quota ensured equal representation of men and women in the sample, the average survey respondent is more highly educated, has a higher income, and is more likely to be an urban resident than the average Kenyan. These characteristics are associated with a greater propensity to emigrate, so the sample is skewed towards respondents who are already more likely to be considering emigration, making it particularly relevant for answering our research question.

The survey questionnaire comprises nine questions, asking respondents for demographic information and information about their own and their household's experiences of migration and corruption, as well as one question in response to a randomly assigned vignette. The experiment consists of a short vignette about the life of a man named Peter (a common male name in Kenya), followed by the question, "To what extent do you agree that Peter would benefit from emigrating to another country?" The vignette varies on three dimensions in a 2x3x4 factorial design: Peter's education, employment status, and experience of corruption.

The vignette reads: "Peter is a 30-year-old resident of Nairobi. He is married and has a 9-year-old son who attends primary school. Peter has a [primary school/university] education and is currently [unemployed and looking for work/a self-employed agricultural worker/employed as a bank manager]. [Blank/He has been told that he needs to pay bribes for his son to attend a better-performing secondary school./ He sometimes pays bribes to the police to avoid a problem even though he has committed no crime./He has been told that he needs to pay bribes to obtain better

² The survey experiment was pre-registered with the EGAP registry, registration ID 20220509AC: https://osf.io/6e5yk. The experiment received ethical approval from the Ethics Committee of the School of Social Sciences, History and Philosophy at Birkbeck College, University of London, registration code: BBKPOL2021/22-10

³ Pollfish undertakes data quality checks including tests for straight-lining, survey satisficing, and attention, which were supplemented by the authors.

employment opportunities.]" The dependent variable is measured by a five-point ordinal scale from 'strongly agree' to 'strongly disagree' with the idea that Peter would benefit from emigration. Higher scores indicate stronger agreement.

This survey experiment allows us to test the effect of different types of corruption experience (all of which are common in Kenya) on respondents' beliefs in the desirability of emigration for a fellow countryman and how these corruption experiences interact with education and employment status to affect the desirability of corruption. As per H1, we expect those respondents who receive one of the corruption treatments will be more likely to agree Peter would benefit from emigrating than those who did not receive a corruption treatment. We also model the interaction between the education and corruption treatments to see if the effect of the corruption treatments was greater when Peter was portrayed as university-educated rather than primary-educated to help us shed light on H4. Furthermore, we expect that the police bribe treatment will have a stronger effect than the education and employment treatments in line with H3.

Table 5 displays the results of linear regression models, which take the response to the post-vignette question as the dependent variable. The independent variables are the various vignette options that respondents were shown. In Model (1), we can see that receiving any one of the corruption treatments (Peter paying bribes for education or employment or to the police) is strongly and significantly associated with a greater belief in the desirability of emigration compared to the control group who did not receive a treatment. This treatment increases the perceived desirability of emigration by 0.63 points on a five-point scale.

Table 5: Linear Regression Models Testing the Effect of Corruption Treatments on Migration

	(1)	(2)	(3)	(4)
	Any Bribe	Disaggregated	Interaction	Demographic
	Treatment	Bribe Treatments	with Education	Controls
Any Bribes	0.630***	-	0.692***	
	(0.125)		(0.174)	
Education Bribes	-	0.570***	-	0.536***
		(0.152)		(0.153)
Police Bribes	-	0.809***	-	0.770***
		(0.152)		(0.153)
Employment Bribes	-	0.510***	-	0.472**
		(0.152)		(0.153)
University Education	0.479***	0.480***	0.577**	0.483***

	(0.107)	(0.107)	(0.218)	(0.107)
Agricultural Worker	-0.322*	-0.322*	-0.315*	-0.305*
	(0.136)	(0.136)	(0.136)	(0.136)
Bank Manager	-0.533***	-0.532***	-0.538***	-0.513***
	(0.127)	(0.127)	(0.128)	(0.128)
Any Bribes*University	-	-	-0.129	-
Education			(0.250)	
Constant	4.041***	4.041***	3.994***	9.437
	(0.141)	(0.141)	(0.168)	(13.45)
Demographic controls	No	No	No	Yes
Observations	1304	1304	1304	1304

Linear regression models. *p<0.05 **p<0.01 ***p<0.001. Standard errors in parentheses.

Model (2) compares the effects of different kinds of corruption treatments. All three treatments have a strong effect on the perceived desirability of emigration, with the strongest effect for the treatment mentioning bribes paid to avoid trouble with the police. This provides some evidence for H3: bribes paid to security services are more likely to be accompanied by threats and fear, making emigration seem an even better option to escape negative experiences. The results from Model (2) are plotted in Figure 5. Model (3) includes an interaction between receiving any corruption treatment and education. If emigration were considered more beneficial for more highly educated individuals when faced with corruption experiences, we would expect the interaction coefficient to be positive and statistically significant, but it is neither. As we saw in the models using Afrobarometer and LGPI data above, education does not play a mediating role in the relationship between corruption and migration.

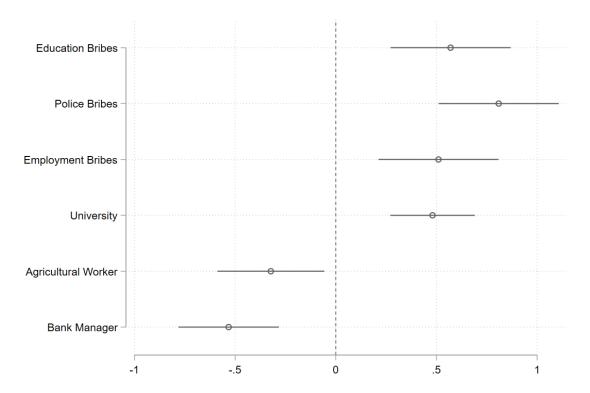


Figure 5: The Effect of Vignette Treatments on Support for Emigration

In all the models, the coefficients for the other vignette options follow our intuition, suggesting the experiment was effective at capturing the causal effect of different variables on the perceived benefits of migration. Those with better current employment status in Kenya were seen as less likely to benefit from emigration: the unemployed reference category was the most favoured to emigrate, followed by agricultural workers, while bank managers were the least favoured to emigrate. If Peter had a university education, however, respondents were more likely to believe he would benefit from emigration, likely because they believed he would have better job prospects if he did so. Model (4) includes a set of demographic control variables: respondents' age, gender, education, and ethnic/tribal identity. The coefficients for the vignette statements do not change in substantive or statistical significance when these control variables are added, suggesting the randomization of the vignettes was successful. To ensure that modelling choices did not affect the results, we estimated an additional set of four ordered logit models with the same variables as in Models (1) to (4) above. The results are similar in substantive and statistical significance to those in the table above.

The results from our survey experiment suggest that corruption experiences are indeed causally related to an increased perception of the desirability of emigration, and this relationship is not influenced by education. The effects are stronger when the corruption experience involves paying bribes to the police compared to paying bribes for employment and education.

6. Conclusion

In this paper, we have demonstrated that corruption experiences are an important driver of emigration. We found evidence from 32 countries in sub-Saharan Africa, surveyed by Afrobarometer, that such experiences increase both general intentions and specific plans to emigrate and that these effects are stronger than those for corruption perceptions. Moreover, education does not affect this relationship; both highly- and lowly-educated respondents were more likely to desire emigration if they had to pay bribes. We found similar results for migration using LGPI data from Kenya, Malawi, and Zambia: community leaders perceive corruption experiences to be a strong driver of the desire to emigrate in their villages and neighbourhoods. We addressed whether this relationship was causal by fielding a survey experiment in Kenya, in which we found information about corruption experiences made emigration more desirable for a fellow countryman. Our results were remarkably consistent across the three data sources, suggesting corruption experiences are a significant 'push' factor for migration in sub-Saharan Africa. The results from Afrobarometer and our survey experiment also suggested that experiencing corruption in the form of paying bribes to the police has a stronger effect than paying bribes to other public officials, although these results are more suggestive than definitive. We attribute the greater sensitivity to police corruption to the explicit or implicit threat made by the police about what will happen if bribes are not paid, making emigration seem more appealing.

Our findings contribute to existing research on the corruption-migration nexus in a number of ways. Firstly, we have explicitly focused on corruption *experiences* – specifically, paying bribes to frontline bureaucrats – while previous work has examined either corruption perceptions or aggregated general corruption measures. Thus, we followed Ang's (2020) advice to 'unbundle corruption' and found that experiences have a greater effect on emigration than perceptions of corruption.

Secondly, we found that education does not moderate the influence of corruption experiences or perceptions on emigration in any of the analyses, a result that cuts against much of the previous literature. Future research could examine whether this is due to ecological fallacy problems affecting macro-level studies, or whether certain aspects of the sub-Saharan African context play a role. Helms (2024) has found that education moderates the micro-level relationship between corruption perceptions and migration aspirations in a large sample of countries, so we suspect the latter explanation.

Thirdly, we have presented the first experimental evidence of a causal relationship between corruption and emigration. Earlier research has used a variety of observational and quasi-experimental designs, but our survey in Kenya is the original experiment to focus on the migration-

corruption nexus. We hope that future experimental research can build on our findings. For example, future work could experimentally manipulate perceptions of corruption and relate them to emigration intentions to provide causal evidence about the connection between perceptions and emigration. Projects with greater resources could also run experiments in a variety of countries to examine which country-level variables might influence the effect of corruption on emigration. Testing the relationship between bribery and emigration intentions in regions other than Sub-Saharan Africa would also help to discover whether education acts as a moderator in other contexts.

Future research could also examine exit-voice dynamics driving individuals' responses to corruption experiences and delve further into the mechanisms linking corruption and emigration intentions. People may react to bribe requests by demanding government action to reduce everyday corruption rather than try to emigrate away from such experiences, choosing voice instead of exit in Hirschman's (1978) classic formulation. Investigating the circumstances in which individuals choose exit or voice in response to corruption would be a fruitful avenue for future work. Emigration is also not an option for many people, so further research could examine how the absence or presence of the possibility of emigration shape responses to corruption.

We have suggested that corruption experiences impose an economic cost, increase concerns about equity and fairness, and, in the case of police bribery, heighten fear. Future research could probe the relative importance of these different mechanisms and how they might interact with each other to connect corruption experiences with emigration; for example, using qualitative interviews and focus groups with potential migrants to better understand the lived experience of corruption and how it relates to migration intentions and plans.

Our findings about the relationship between corruption experiences and emigration has important policy implications. If governments in origin and destination countries want to reduce migration, they would do well to focus on reducing frontline bureaucratic corruption. The payment of bribes for public services not only undermines the efficiency and universality of these services, but it can push citizens to emigrate. As those who act on emigration intentions tend to have the resources – capital, networks, and skills – to do so, corruption can drive away those who might be expected to contribute significantly to development should they stay. Corruption and emigration thus interact in ways that can substantially sap countries' development potential.

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