Corruption Perception, Expectations, and International Migration: New Micro-Level Evidence

Benjamin Helms
Monroe, North Carolina

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Abstract: Existing research on the drivers of international migration neglects the role of political institutions in origin countries, especially how political corruption might generate emigration pressures. I argue that since individuals consider the costs and benefits of migration prospectively, perception of high corruption in one's home country encourages migration due to its effect on the expected future returns of remaining at home versus migrating. I hypothesize that individuals who perceive corruption to be high are more likely to migrate than those who do not, and that corruption perception is especially salient for highly skilled individuals with attractive exit options. Using micro-level data on individuals who live in developing countries, I find support for my argument, suggesting that corruption can generate demand for exit across the developing world. These findings have substantive implications for policymakers in sending and receiving countries who want to manage emigration and immigration flows, respectively.

1 Introduction

The causes of international migration is a burgeoning topic of interdisciplinary research and collaboration. By synthesizing insights from economics, political science, sociology, and other fields, scholars have made great progress in understanding the decision-making process by which individuals decide to migrate (Borjas 1989; Massey et al. 1993; Fitzgerald et al. 2014). We know that wage differentials, the political environment in destination countries, and transnational social networks all shape the calculus of potential migrants (Clark et al. 2007; Fitzgerald et al. 2014; Epstein 2008). What remains under-explored is the importance of political institutions in migrant-sending developing countries, and particularly the role of corruption in creating emigration pressures. This is surprising, given the massive literature in economics and comparative politics documenting the negative impact of corruption on a wide range of socioeconomic and political outcomes in the developing world (e.g. Gupta et al. 2000; Mo 2001; Gingerich 2009; Rose-Ackerman and Palifka 2016). How does corruption influence an individual's cost-benefit analysis of migrating, and how does it interact with the migration drivers that scholars have already identified?

I argue that perception of high corruption in one's home country encourages migration due to its effect on the expected returns of remaining at home versus migrating. Individuals are prospective and know that corruption reduces their income, their access to public goods, and the power of their voice in politics; they also know that high corruption is likely to persist well into the future. As a result, perception of high corruption leads potential migrants to discount the future benefits of remaining at home relative to moving to a destination country with much less corruption. All else equal, I expect individuals who perceive high corruption are more likely to migrate than individuals who perceive low corruption. I also expect corruption perception to be especially salient for highly skilled individuals, who have attractive exit options as a result of the international competition for human capital (Fink et al. 2017; Brucker et al. 2012). Perception of corruption, in other words, operates alongside other economic, political, and social push factors for emigration due to the *prospective* nature

by which potential migrants make decisions.

Understanding the relationship between corruption perception and international migration is crucial for policymakers in both migrant-sending and -receiving countries. If corruption perception is indeed a driver of *em*igration, then sending states should be worried that corruption could cause "brain drain," which has a number of policy implications based on country characteristics (Docquier and Rapoport 2012). One potential recommendation would be to implement programs and design institutions that reduce corruption and, as a result, change corruption perceptions. Meanwhile, receiving countries interested in managing *imm*igration flows should pay attention to the demand for entry that corruption abroad could cause. If this link does indeed exist, then receiving countries could extend financial resources to sending countries for targeting corruption reduction, changing corruption perceptions in the process and reducing immigration pressures.[1]

I draw on a wealth of detailed individual-level data from the Gallup World Poll to test the empirical implications of my argument. I find that when individuals perceive corruption to be widespread, they are more likely to express a preference to migrate. I also find that education level augments this effect: those who hold advanced degrees are even more likely to express a preference to migrate when they perceive corruption to be high compared to relatively less educated individuals. This effect is independent of demographic and socioeconomic factors like gender, age, income, employment, and satisfaction with one's local community. Furthermore, I show how perception of corruption drives life outlook for individuals in the developing world, providing evidence that potential migrants incorporate perceptions prospectively in their decision-making process.

In the next section, I give additional background on the study of corruption in economics and political science and evaluate the handful of existing studies that explore its role in international migration. Next, I build a theoretical framework for understanding corruption perception and its effect on a prospective individual's migration decision. I then turn to

[1]In a similar recommendation, Djajic and Michael (2016) argue that migrant-receiving countries can use foreign aid to cooperate with transit countries on controlling illegal immigration.

describing the data employed in detail, identifying its strengths as well as its weaknesses for testing the expectations of my argument. I present my main empirical findings and attempt to further probe the pathway between corruption perception and migration preferences. Before concluding, I discuss my results in further detail and identify key takeaways for scholars of international migration, as well as for policymakers in both migrant-sending and -receiving countries.

2 Corruption and international migration

Corruption, defined broadly here as the use of publicly entrusted power for private gain (Transparency International), is a prominent area of research in both development economics and comparative politics. There is a voluminous literature, for instance, on the relationship between corruption and economic development, as well as a wide range of other economic outcomes like public goods provision, poverty, and foreign direct investment inflows (Mauro 1995; Shleifer and Vishny 1993; Gupta et al. 2002; Habib and Zurawicki 2002). Political scientists also pay close attention to corruption, focusing especially on how political patronage networks determine outcomes like political participation, vote choice, and political stability (Wantchekon 2003; Stokes 2005; Nichter 2008; Arriola 2009). These topics reflect just a small sampling of the literature across these two fields, and interest in studying corruption has heightened significantly in recent years. It is surprising, therefore, that the link between corruption and emigration pressures in the developing world is relatively unexplored in the international migration literature. This is a potentially significant oversight: the vast majority of migrants come from developing countries, in which corruption often permeates daily political and economic life (World Bank 2016). Leaving corruption unaccounted for could blind both scholars and policymakers to an important driver of emigration.

Figure 1 illustrates the relationship between a country's control of corruption score and emigration rate to OECD countries in a particular year according to the World Bank,

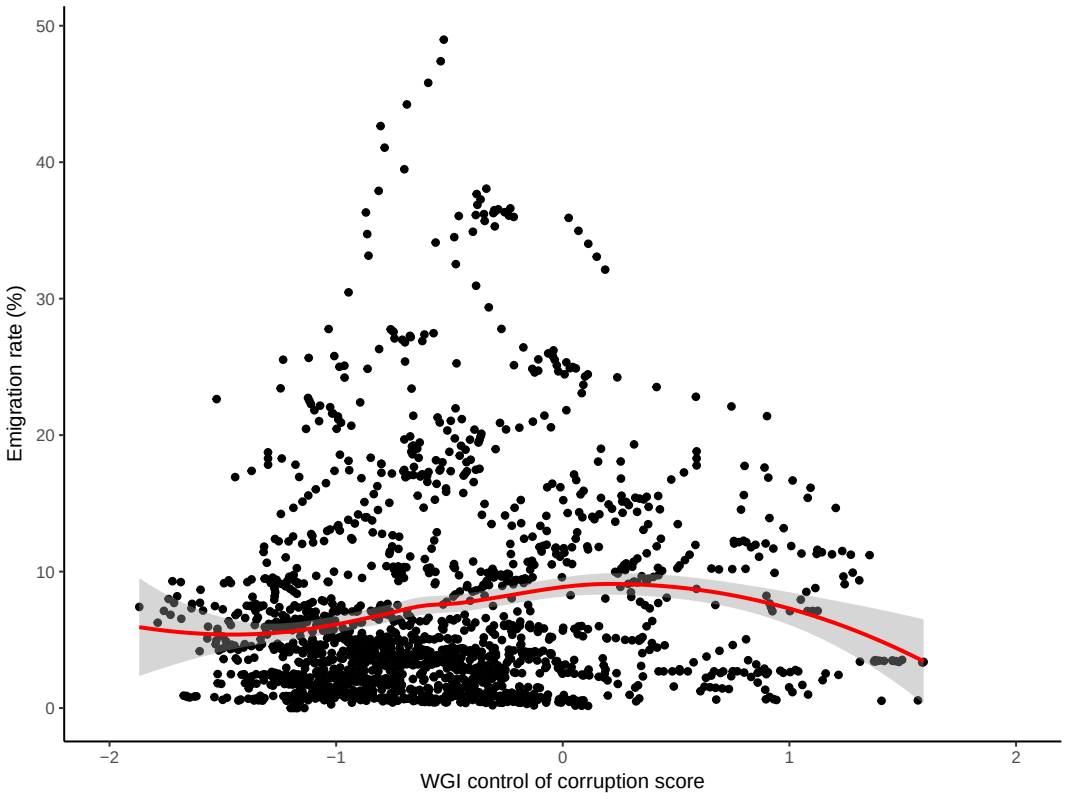

Figure 1: Worldwide Governance Indicators project's control of corruption score and emigration rate to OECD for developing countries, 1996-2010. OECD countries excluded. Countries with fewer than 1,000,000 citizens often have emigration rates in excess of 90 percent and are also excluded. Line fitted using non-parametric local linear regression with shaded 95 percent confidence intervals. Values missing in particular years interpolated using piecewise linear regression. Sources: Worldwide Governance Indicators project (Kaufmann et al. 2010) and World Bank (Ozden et al. 2011).

1996-2010 (Ozden et al. 2011). Values of this index, which comes from the Worldwide Governance Indicators project (Kaufmann et al. 2010), range from -2.5 to 2.5; higher values indicate a better handle on corruption. The scatterplot does not show a strong linear relationship, either positive or negative, between corruption and emigration rates in the developing world. A non-parametric local linear regression suggests a modest inverted-U, cross-sectional relationship between corruption and emigration rate, similar to the "mobility transition" identified by many others (Zelinsky 1971; Dustmann and Okatenko 2014; Dao et al. 2016). For countries with relatively poor control of corruption, we observe lower emigration rates. As a country reaches the "middle of the pack," emigration rates actually

increase, perhaps evidence that controlling corruption initially reduces mobility constraints. But further improvements eventually result in flattening and then falling emigration rates. Of course, a broad range of other factors like economic growth, inequality, political instability, and educational attainment could be masking the actual relationship between corruption and emigration rates at the country level.

Existing literature on the corruption-emigration link is extremely limited and does not produce consistent conclusions. Dimant et al. (2013) find no robust evidence to suggest that corruption has substantive effects on total migration, but they find that it does encourage high-skilled migration. This result, they argue, is due to the deleterious impact of corruption on returns to human capital. In contrast, Poprawe (2015) finds that corruption does increase aggregate migration and does not explore the interactive effect of skill in her gravity model. Cooray and Schneider (2016) find that corruption increases emigration from the developing world, but especially so among the highly skilled population. They also suggest that corruption *intensity* is crucial: when corruption is particularly high, emigration starts to decrease, indicating that extreme corruption can cause mobility constraints.

I argue that extant literature is inadequate to understand the relationship between corruption and emigration for a few reasons. First and foremost, these studies offer no satisfying theory for why corruption should have an effect on emigration after accounting for other migration drivers. Cooray and Schneider, for instance, propose that corruption causes emigration through its indirect effects on working environments, economic growth, inequality, and public goods provision. Such an argument implies that if we control for these other drivers, the statistically significant relationship between corruption and emigration should vanish. Yet this relationship persists despite the fact that these factors are represented in their statistical models. Why should we expect corruption to have an *independent effect* after we take into account previously identified drivers of international migration? I attempt to address this question in the following section.

Second, studies to date operationalize corruption in ways that are divorced from the

relevant unit of analysis in migration theory: the individual. The cross-national indices that scholars have employed are not designed to measure corruption from the perspective of the potential migrant and neglect the possibility that what corruption means varies across national, subnational, or even individual contexts.[2] In other words, these studies fail to account for how corruption operates on the individual level, which I also attempt to address in what follows. Finally, some of the existing cross-national studies use samples that include advanced economies, or do not actually specify what their sample is. Since the vast majority of migrants come from the developing world, we should be focused on individuals from these countries, and not from relatively wealthier countries that are more likely to be migrant destinations (World Bank 2016). As a result, the sample I employ focuses primarily on non-OECD countries. These theoretical and empirical issues hinder a convincing account of why corruption might drive emigration in the developing world.

3 Corruption perception and expectations

I argue that *personal perception of corruption* by individual citizens, not corruption itself or perceptions of others (e.g. businessmen or outside observers), influences the decision to migrate on the micro-level.[3] I define personal perception of corruption as the extent to which an individual believes that corruption is present in his or her daily life, surrounding community, and country in which he or she lives. When forming their corruption perceptions, potential migrants are *prospective* in nature: individuals form expectations about the extent to which corruption will persist into the future. Focusing on personal corruption perception allows for the definition of corruption itself to be context-dependent and variable at the individual level. People decide for themselves what they believe to be corruption and form

[2] A recent body of literature critiques cross-national corruption indices from a number of angles, e.g. Andersson and Heywood 2009; Thomas 2010; Gingerich 2012. For some responses to these criticisms, see Kaufmann et al. 2007.

[3] The focus here is on international labor migration, or the *voluntary* movement of people across national borders, either in a temporary or permanent fashion. I exclude those who are *forced* to migrate, for example refugees and asylum seekers, from my argument and analysis.

their perceptions accordingly. In the context of international migration, thinking about how corruption and its perception varies on the individual level is crucial, since international migration is the product of cost-benefit analyses that play out on the individual level.

Rational, prospective individuals form their perception of corruption based on the most readily available information. First, *personal experience* with corruption is highly salient. For instance, must an individual regularly pay bribes for access to government services? Has that individual been the target of vote-buying strategies from a political party? Personal experience contributes significantly to corruption perception because it constitutes firsthand, vivid knowledge of corruption's existence in one's community. Second, experienced corruption *in one's social network* provides additional information (Cabelkova and Hanousek 2004). Does one's family and friends, for example, suffer from a lack of social services due to elite capture? Experience in one's social network both informs an individual about the extent of corruption and is an indicator for the likelihood that individual will personally suffer from corruption in the future. Finally, corruption-focused media and campaign messaging are also information channels that influence personal corruption perception, to the extent that they are relevant across national and subnational contexts (Zhu et al. 2012).

Since rational individuals form their perception of corruption by incorporating available and relevant information, there is a close relationship between corruption perception and the amount of "actual" corruption in one's community. Individuals are likely to perceive corruption to be high, and to persist well into the future, when corruption is widespread and has been for a long time. In contrast, when the government is relatively corruption-free, individuals perceive that corruption is under control and is likely to remain so further down the road. Of course, perception and reality could diverge. For instance, corruption perception might be sticky: individuals might be reluctant to allow new information to change their prior perceptions. For example, people might still perceive corruption to be high despite media reports that their government's control of corruption has improved in recent years. It might take a critical mass of new information (say, a precipitous fall in experienced corruption) to

change an individual's outlook. Nevertheless, even if personal corruption perception is only loosely related to actual corruption, it still has a significant impact on an individual's desire to migrate. Whether tightly related to actual corruption or not, people still form perceptions that factor into their cost-benefit analysis of international migration.

How exactly does personal corruption perception affect this cost-benefit analysis? While existing studies focus on corruption's indirect effect via other push factors, I argue that personal corruption perception is a direct push factor because potential migrants are *prospective* decision-makers. Individuals know that high corruption degrades their socioeconomic wellbeing and voice in the political system, for example by its deleterious impacts on returns to human capital and public goods provision. When an individual perceives corruption to be high, they also expect that corruption is unlikely to abate any time soon. Since individuals are prospective and believe that corruption will endure, they know that its deleterious impacts on their wellbeing will also persist into the foreseeable future. As a result, perceiving that corruption is high causes an individual to discount the future benefits (and place a premium on the costs) of remaining at home, while not affecting the expected costs and benefits of migrating. In other words, personal corruption perception skews an individual's cost-benefit analysis in favor of migrating due to its negative effect on the expected future returns of remaining at home. Exactly how much it can skew a potential migrant's calculus, and how it might interact with other push factors for international migration, is an open empirical question that I address below.

One can also understand the effect of personal corruption perception in Hirschman's "Exit, Voice, and Loyalty" framework. Hirschman (1970) argues that when individuals are dissatisfied with their government, they typically have a menu of three strategies to advocate for a change to the status quo. First, individuals can exit; they can "vote with their feet" by migrating to another country. Second, they can use their voice by participating in political protests against the government or, in a democratic context, by also voting out politicians they perceive as part of the problem. Finally, individuals can do neither and remain loyal to

the government despite their desire to change the status quo. Such a framework is helpful for the question at hand. When individuals perceive corruption to be highly embedded in government functions, and they also expect corruption to persist well into the future, they understand that using their voice is unlikely to generate real change in the status quo toward lower corruption. And if one is truly dissatisfied based on their perception of corruption, remaining loyal to a corrupt government is an unattractive alternative. The only remaining viable option to affect the status quo, according to Hirschman's argument, is to exit and migrate to a country in which one perceives corruption to be significantly lower.

Whether thinking about a skewed cost-benefit analysis or a decision to vote with one's feet, the empirical implication is the same: those who perceive corruption to be high will migrate in larger numbers than those who perceive corruption to be low. Hypothesis 1 recasts this same logic in terms of a readily testable implication:

> **Hypothesis 1:** *As an individual's personal perception of corruption increases, that individual's probability of migrating increases, all else equal.*

However, we cannot consider personal corruption perception in isolation. In particular, the existing literature suggests that we pay attention to the role of skill. I argue that personal corruption perception is more salient to the decision of those who hold human capital because they have attractive exit options. Advanced countries with information economies rely on services and technological progress for economic growth, but they face shortages of high-skilled labor required to remain internationally competitive (Zimmerman and Kahanec 2011). To compensate, developed countries have rapidly expanded policies that attract highly skilled foreigners, leading to an intense global competition for talent (Czaika and Parsons 2017). As a result, highly skilled individuals in developing countries are likely to have credible exit opportunities. If those same people perceive corruption to be high, then their perceptions are likely to further tip the scales in a cost-benefit analysis that is already skewed towards migrating. In other words, personal corruption perception disproportionately affects highly skilled individuals because they already have higher expected benefits of migrating

and likely do not have mobility constraints. Hypothesis 2 states this logic in an empirical proposition:

> **Hypothesis 2:** *As an individual's level of skill increases, the effect of corruption perception on the probability of migrating increases, all else equal.*

My argument suggests that existing studies omit a significant push factor for international migration in the developing world and do not appropriately consider the prospective nature of migrants. These omissions have potential theoretical and policy ramifications: if personal corruption perception does in fact generate emigration pressures, how can we improve our push models of migration? How can policymakers around the world respond to corruption perception and manage migratory flows in the process? In the following section, I empirically examine this relationship on the micro-level to provide some initial answers.

4 Empirical analysis

4.1 Data and sample

I leverage data from the Gallup World Poll (GWP), a near-globally representative public opinion poll of individuals, to test the empirical implications of my argument. In each country for which it is safe to do so, the GWP conducts a survey of at least 1,000 individuals, and has done so every year since 2005.[4] The result is a wealth of data that is representative of more than 99 percent of the global population, with standardized demographic characteristics as well as political economy-related questions across respondents. The survey includes questions about corruption perception, as well as a number of migration-related questions. This makes the GWP in many ways an ideal dataset for testing the micro-level implications of my argument.

[4]For more populous countries, this number is larger in recent years. For instance, 3,000 people are sampled in India, and nearly 5,000 people are sampled in China.

Since my primary focus is on developing countries, which account for the vast majority of international migration, I exclude most OECD member countries in the analysis.[5] However, I include Israel, Chile, and Mexico despite their OECD membership. All three are substantively interesting cases for international migration, so excluding them from the analysis would prevent generalizability to important cases. In addition, even though Chile and Mexico are in the OECD, GDP per capita in both countries is significantly lower than nearly every other member. Finally, I exclude a handful of non-OECD states that have high incomes, like Hong Kong, Singapore, Bahrain, Saudi Arabia, and Qatar. I use the GWP's yearly survey from 2006-2016 for a total of 503,598 respondents after accounting for missing data.

4.1.1 Measuring migration preferences

The primary outcome of interest is, of course, actual migration: does an individual move to another country or remain at home? The GWP (and any similar survey) does not allow us to observe actual migration, since it interviews citizens currently in their country of origin at a single point in time. We do not observe actual migrants in the sample, but rather *potential* migrants, or those who are currently comparing the costs and benefits of migrating versus remaining at home. In an ideal world, I would employ a longitudinal dataset that includes observations at time t of individuals who are potential migrants, and then additional observations of those same individuals who either choose to migrate or stay at home at time $t + 1$. Unfortunately, such data are not available.

The GWP does allow us to study individual migration *preferences*, an outcome that is both a proxy for actual migration and substantively interesting in its own right. While it is unlikely that every individual who expresses a preference to migrate will actually do so (we know that migration is subject to resources constraints), I argue that preferences and actions are certainly correlated in a rational actor framework. On average, an individual who expresses a preference to migrate is more likely to do so than an individual who does not

[5] See Appendix A for country coverage.

express that same preference. In this sense, I use preferences to proxy for actual migration, as a range of other studies do (e.g. Dustmann and Okatenko 2014; Lovo 2014; Otrachshenko and Popova 2014). Notably, some scholars argue that official statistics actually understate migration because they mask the temporary and/or undocumented movement of people (Dustmann and Okatenko 2014). But studying preferences might also have standalone value. If one accepts that a precondition of voluntary migration is to develop a preference to do so, then migration preferences are on the causal chain to actual migration. For migrant-sending countries, intervening on variables that influence migration preferences would then be a plausible way to reduce out-migration. For migrant-receiving countries, knowing how migration preferences develop can similarly inform decisions on how to manage immigration pressures via the extension of resources to sending countries. In either case, we gain substantial knowledge by studying preferences in this context.

I use responses to the following question in the GWP as a measure of migration preferences: "Ideally, if you had the opportunity, would you like to move permanently to another country, or would you prefer to continue living in this country?" Respondents can answer yes, no, don't know, or refuse to answer; I drop all those without a clear response, leaving a binary measure of migration preferences.

4.1.2 Personal corruption perception

Measuring personal perception of corruption is more straightforward, but tradeoffs emerge between nuance and selecting the proper unit of analysis. The GWP asks the following question, the responses to which I use as a measure of personal corruption perception: "Is corruption widespread throughout the government in (country), or not?" Respondents can answer yes, no, or don't know; I drop all respondents who do not know, which leaves a binary response set. I argue that using an individual-level measure like this allows for a close test of the empirical implications of my theory, which emerge from the micro-level. But a binary response set is clearly blunt, particularly when existing literature indicates that relative

intensity of corruption is an important component of its effects on migration (Cooray and Schneider 2016). I am unfortunately limited by the available data on the individual level. In other words, I trade off nuance in measuring *level* of personal corruption perception for testing my theory on the appropriate unit of analysis.

4.1.3 Control variables and interactions

I also control for a number of variables that potentially influence both personal perception of corruption and expressing a preference to migrate, and add interaction variables to test my theory. Most importantly, I include a measure of educational attainment and its interaction with corruption perception to test Hypothesis 2, that perception of corruption is especially important for highly skilled individuals. The GWP codes individuals based on three different levels of educational attainment: elementary (eight years of schooling or fewer), secondary (equivalent to completing high school and/or some college), and tertiary (completed four years of education beyond high school and/or received a college degree or more). My expectation is that the effect of personal corruption perception on preferring to migrate is highest among tertiary-level respondents and lowest among elementary-level respondents. Existing evidence suggests that education can independently color corruption perceptions, so I also consider it a necessary control (Truex 2011).

I control for two major demographic factors: age and gender. Women are less likely to condone or engage in corruption and also gain less return on migrating than men, especially if they are married (Swamy et al. 2001; Melgar et al. 2010; Lichter 1983; Morrison and Lichter 1988). Meanwhile, older people tend to perceive higher levels of corruption and are also less likely to migrate because they are less able to take advantage of wage differentials compared to younger people (Cabelkova and Hanousek 2004; UNPD 2013). Both are included in the standard GWP questionnaire.

In addition to demographic characteristics, I include income and employment to control for and explore other socioeconomic dynamics. Relatively poorer people pay a larger share of

their income in bribes than richer people, which likely colors their perception of corruption (Hunt and Laszlo 2012). Meanwhile, the relationship between income and migration is well-documented: individuals move to take advantage of wage differentials and only those who have sufficient financial resources can move in the first place (Borjas 1989; Clark et al. 2007; Hatton and Williamson 2011; Dustmann and Okatenko 2014). To account for this, I include household income measured in standardized international dollars using the World Bank's purchasing power parity conversion factor. Existing literature documents that the unemployed perceive higher levels of corruption, and being unemployed can also lead individuals to consider employment opportunities abroad (Gatti et al. 2003; Melgar et al. 2010; DaVanzo 1978). I therefore include a binary measure of employment status in the analysis.

To account for other kinds of migration in response to dissatisfaction with the status quo, I include an additional measure of movement that does not distinguish between domestic and international migration. The GWP asks respondents the following: "In the next 12 months, are you likely or unlikely to move away from the city or area where you live?" Respondents can answer likely, unlikely, don't know, or refuse; I drop all respondents without a clear answer, leaving a binary response set. I control for level of satisfaction with one's local community as well. The overall level of satisfaction with the place one lives is likely to influence personal perceptions of corruption, while also reducing the probability that person prefers to migrate. To capture this, I use responses to the question, "Are you satisfied or dissatisfied with the city or area where you live?" which has a binary yes/no response set.

Finally, I attempt to control for the presence of transnational social networks at the individual level. Perhaps the most robust finding in the international migration literature is that having friends, family, and co-ethnics living abroad significantly shapes a migrant's decision to leave and often determines his or her choice of destination (Portes and Borocz 1989; Portes 1995; Massey et al. 1993; Faist 2000; Sassen 1995; Light et al. 1999; Clark et al. 2007; Fitzgerald et al. 2014). Additionally, new research suggests that having relatives

abroad can affect the attitudes of individuals towards corruption, reducing their likelihood of bribing public officials and encouraging more negative views toward bribe-taking behavior (Ivlevs and King 2017). To control for transnational social networks, I include responses to the following question: "Do you have relatives or friends who are living in another country whom you can count on to help you when you need them or not?" In line with other questions used in the analysis, respondents can answer yes, no, don't know, or refuse; I drop all those without a clear answer to leave a binary response set. Taken together, these control variables address many of the potential factors that could confound the relationship between personal corruption perception and migration preferences.

Table 1 displays summary statistics for selected countries included in the study, represented by aggregating individual-level responses to the country level across the entire sample period.[6] There is large cross-country variation in the percentage of people who prefer to migrate, and less but still noticeable variation in personal corruption perceptions. The percentage of individuals with a tertiary education also varies widely in the sample, from 0.1 percent of respondents in Burundi to more than 35 percent in Taiwan. My other control variables aggregated at the country level fall largely in line with pre-existing data from well-known sources such as the United Nations Population Division and the World Bank, suggesting that my sample from the GWP is indeed near-globally representative and adequate for studying international migration.

[6]Summary statistics for all countries are available in Appendix B.

Table 1: Summary statistics for selected countries

Country	Prefer to migrate (%)	Corruption widespread (%)	Female (%)	Mean age	Tertiary ed. (%)	Mean income ($)	Unemp. rate (%)	Satisfied w/ community (%)	Family abroad (%)	Move from home (%)
Argentina	14.2	84.6	61	45	4.8	18,539	5.2	81.8	26.8	6
Bangladesh	25.1	75.2	51.5	37	3.2	5,776	4.6	89	28.9	7.6
Brazil	13.7	72.8	60.1	43	6	12,589	5.7	75	14.4	9.3
Burundi	18.1	75.8	49.9	34	0.1	1,679	7	53.3	9.5	31.8
Chile	22.7	71.2	58.3	46	13.7	16,095	4.8	81.1	32.6	9.8
Colombia	27.9	84.2	64.2	42	13.2	11,252	9.4	83.1	46	12.1
Ecuador	18.3	73.2	61.2	41	8.9	9,827	8	82.2	42	13.1
Egypt	19.1	86.5	47.6	38	12.8	6,977	4.5	72.2	23.1	21.5
El Salvador	42.1	76.6	52.8	38	7.4	6,279	8.8	82.6	40.2	3.6
Ghana	47.2	87.4	49.9	34	6.1	4,245	10.9	59.6	35.5	16.6
Guatemala	28.2	82.2	53.7	36	6.5	6,550	9.4	87.3	42.4	13
Honduras	43.9	87	53	36	5	6,020	10.6	83.4	48.9	22.1
Haiti	55.3	78.6	50.7	36	4.7	4,014	22.1	44.9	45.3	30.5
Indonesia	3	96.1	56	38	3.6	5,159	2.9	88.3	9.6	10.6
India	7	85	44.9	36	11.2	6,379	4.4	80.8	10.4	16.8
Iran	20.3	81.2	49	36	23.5	16,885	11.5	73	22	10.3
Israel	16.1	87.9	52.3	41	29.3	32,239	4.1	81.1	35.3	9.1
Kazakhstan	15	82	59.1	41	27.3	12,271	3.9	82.4	34.7	6.8
Kenya	27.4	90.7	51.2	32	3.9	4,800	8.8	63.7	25.3	9.2
Mexico	18.2	75.9	51.5	40	10.9	7,225	4.7	78.8	37.2	14.1
Malaysia	10.1	81.8	51.6	37	21.6	29,011	3.1	84.6	16.6	10.9
Nigeria	48.8	92.9	44.4	33	2.8	5,521	7.8	59.7	26.3	20.2
Nicaragua	32	73.7	52.8	36	13.3	6,239	7.9	85.7	53.6	14.7
Pakistan	12.3	85.8	50.1	34	5.9	7,762	4.2	81	20.4	12.9
Philippines	17.2	81.1	57.1	40	14.2	7,072	5.8	86.5	50.8	20.5
Russia	14.2	93.6	62.9	44	29.4	22,006	2.8	77.9	18.9	2
Syria	40.5	69.1	47.2	34	7.6	18,387	5.6	54.1	24.7	35.3
Taiwan	21.8	83.2	53.2	43	36.8	65,915	1.1	83	28.1	8.5
Thailand	3.4	91.7	65	43	9.7	16,209	2.4	92.1	14.4	22.1
Tunisia	26.3	79.4	49.2	38	8.6	11,929	10.3	70	33.4	42.7
Ukraine	24.8	94.1	60.9	45	35.9	14,952	3.4	78	26.6	4.7
Venezuela	16.3	77.3	60.7	42	11.5	12,880	8	79.8	22.3	11.9
Vietnam	12.5	75.5	54.5	42	11.7	9,080	1.9	85.5	11.6	5.9
South Africa	16.4	87.2	53.7	36	10.2	14,229	22.6	59.1	17.7	17.6
Zimbabwe	32.9	85.3	53.6	34	6.1	6,717	10.5	61.1	47	24.4

4.2 Methods

I employ a series of logistic regression models for my analysis, with the outcome being responses to the question I presented above. These models allow me to observe if personal perception of corruption increases the probability that an individual prefers to migrate, offering a test closely matched to the relationships that are predicted by hypotheses 1 and 2. The models are specified in line with the discussion of independent variables and interaction terms above. I also run these models regionally for three major areas of emigration, Latin America and the Caribbean, Asia, and Africa, to explore if my argument holds across different contexts of economic development and corruption levels. I use the GWP's sample weighting scheme to more closely match my sample to global population characteristics.

Binary regression models like logistic regression offer a number of quantities of interest that speak to the hypotheses I present here. In order to show the effect of personal corruption perception on migration preferences, I calculate predicted probabilities of preferring to migrate from the fully specified model when individuals say that corruption is widespread and when individuals say that corruption is not widespread. To test Hypothesis 1, I take the difference between these predicted probabilities for the entire sample. A positive difference between these two values would indicate that perceiving corruption to be widespread increases the probability that one prefers to migrate, which would grand support to Hypothesis 1. To test Hypothesis 2, I take the same difference in predicted probabilities as before, but for each level of education. If the difference in these predicted probabilities is lowest for those with elementary education, higher for those with secondary education, and highest for those with tertiary education, then the results would grant support to Hypothesis 2. I calculate additional similar quantities of interest using my regional models for Latin America, Asia, and Africa to see how the dynamics of corruption perception, education, and migration preferences play out in different emigration corridors.

4.3 Results

4.3.1 Models

Table 2 presents the coefficients of five logistic regression models. Model 1 is simple and contains no interaction terms, while Model 2 is fully specified and interacts corruption perception with educational attainment. Models 3 through 5 represent regional estimations for Latin America and the Caribbean, Asia, and Africa respectively. The coefficient on perceiving corruption to be widespread is positive and statistically significant at the .05 level in both models for the entire sample, indicating that perceiving widespread corruption increases the probability that one prefers to migrate on average. Furthermore, the interaction terms in Model 2 are both statistically significant (the base category is primary education). These results provide some initial support for both of the hypotheses I present above.

Perceiving corruption to be widespread has a positive and statistically significant effect on preferring to migrate across all three regional models as well, granting support for Hypothesis 1 in these specific regions. The interaction terms between corruption perception and educational attainment are positive for all three regions, but they are not statistically significant for the Africa model. This suggests that the effect of personal corruption perception does not depend on education in Africa. In what follows, I further explore this possibility by generating predicted probabilities across regions in line with the discussion above.

Briefly, the signs on the control variables are largely in line with expectations. Perhaps surprisingly, I find that income has essentially no independent effect on migration preferences, after accounting for other socioeconomic factors like education and employment, regardless of region. Being employed is negatively associated with preferring to migrate, while those who have an underlying propensity to move are more likely to express a preference to migrate on average. In general higher educational attainment is positively associated with preferring to migrate, but the opposite is true in Latin America. Those who are satisfied with their community are on average less likely to prefer migrating over remaining at home.

Table 2: Logistic regression models

	Dependent variable:				
			Prefer to migrate		
	All regions	All regions	Latin America	Asia	Africa
	(1)	(2)	(3)	(4)	(5)
Corruption widespread	0.431*	0.352*	0.293*	0.183*	0.439*
	(0.010)	(0.015)	(0.032)	(0.041)	(0.021)
Female	−0.209*	−0.209*	−0.172*	−0.245*	−0.263*
	(0.007)	(0.007)	(0.015)	(0.019)	(0.013)
Age	−0.029*	−0.029*	−0.030*	−0.024*	−0.033*
	(0.0003)	(0.0003)	(0.001)	(0.001)	(0.001)
Income	−0.00000*	−0.00000*	−0.00001*	0.00000*	−0.00000*
	(0.00000)	(0.00000)	(0.00000)	(0.00000)	(0.00000)
Secondary education	0.228*	0.118*	−0.230*	0.143*	0.333*
	(0.008)	(0.019)	(0.038)	(0.054)	(0.033)
Tertiary education	0.305*	0.117*	−0.174*	0.116	0.157
	(0.013)	(0.035)	(0.058)	(0.100)	(0.105)
Employed	−0.318*	−0.318*	−0.406*	−0.277*	−0.029
	(0.012)	(0.012)	(0.024)	(0.039)	(0.021)
Propensity to migrate	0.936*	0.936*	0.595*	0.612*	1.295*
	(0.009)	(0.009)	(0.018)	(0.025)	(0.014)
Satisfied w/ community	−0.684*	−0.683*	−0.631*	−0.529*	−0.468*
	(0.008)	(0.008)	(0.017)	(0.024)	(0.013)
Know someone abroad	0.727*	0.727*	0.829*	0.761*	0.472*
	(0.007)	(0.007)	(0.015)	(0.020)	(0.013)
Corruption X Sec. ed.		0.131*	0.197*	0.132*	0.028
		(0.021)	(0.041)	(0.058)	(0.036)
Corruption X Tert. ed.		0.220*	0.280*	0.440*	0.037
		(0.037)	(0.063)	(0.106)	(0.113)
Constant	−0.268*	−0.204*	0.342*	−0.962*	−0.535*
	(0.019)	(0.020)	(0.044)	(0.061)	(0.033)
Observations	503,598	503,598	109,423	107,521	154,277
Log Likelihood	−235,934.800	−235,904.800	−57,585.520	−35,831.730	−73,490.870
Akaike Inf. Crit.	471,891.600	471,835.700	115,197.000	71,689.460	147,007.700

Note: Standard errors in parenthesis. $*p < .05$

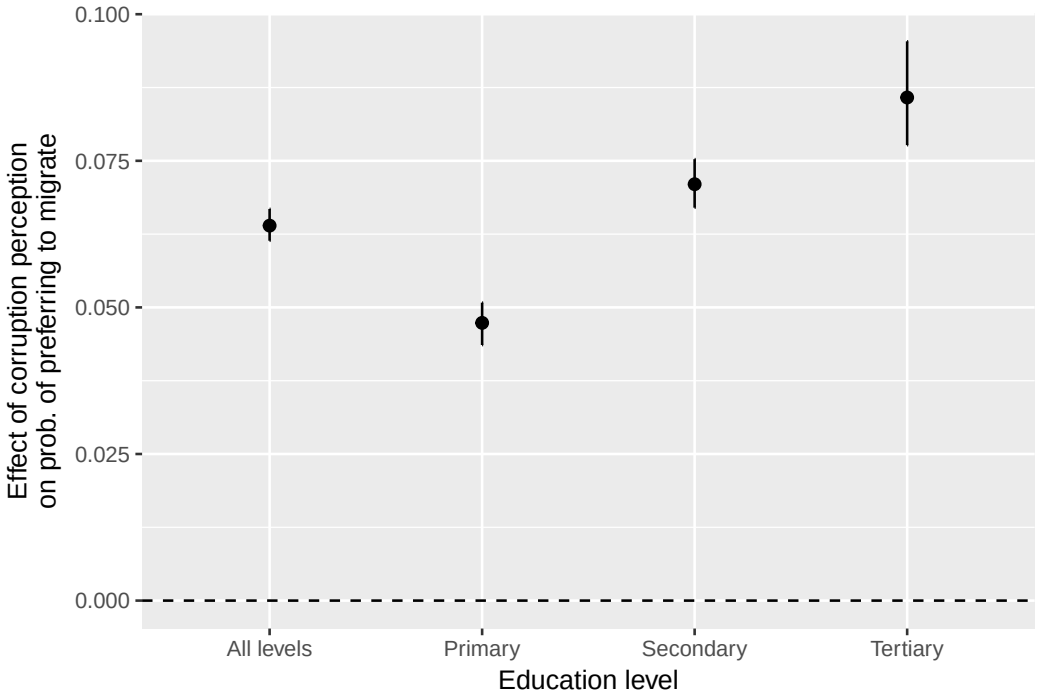

Figure 2: Increase in predicted probability of preferring to migrate due to perceiving widespread corruption. Error bars are 95 percent credible intervals generated through 1000 draws of new coefficients simulated from the posterior.

Finally, having friends and family abroad is positively associated with preferring to migrate, regardless of region.

4.3.2 Quantities of interest

The primary quantity of interest, the increase in predicted probability of preferring to migrate as a result of believing that corruption is widespread, is presented in Figure 2. I display this quantity for the entire sample as well as for each level of education; I also include 95 percent credible intervals for each quantity of interest. The results indicate that perception of corruption has a statistically significant and substantively important impact on preferring to migrate for the population at large, in line with Hypothesis 1. Believing that corruption is widespread, as opposed to believing that it is not widespread, is associated with a 6.4 percentage point increase in the probability of preferring to migrate, on average, after controlling for gender, age, income, education, employment, underlying propensity to

move, community satisfaction, and transnational social networks. This represents a jump from a .174 to a .238 probability that any given individual in the general population prefers to migrate on average. This result is statistically significant at the 0.05 level.

The magnitude of this effect, importantly, depends on educational attainment. For those with an elementary education, the average increase in the predicted probability of preferring to migrate due to perceiving widespread corruption is lower, at 4.7 percentage points. This effect rises to about 7.1 percentage points on average for those with a secondary education. Most strikingly, this effect grows significantly for those with a tertiary education: for this subset of individuals, believing that corruption is widespread, as opposed to believing that it is not widespread, is associated with an 8.6 percentage point increase in the predicted probability of preferring to migrate, on average, after controlling for the relevant factors listed above. For those with a tertiary education, this represents a jump from a .179 to a .265 probability of preferring to migrate on average. Each of these effects are statistically significantly different from zero, and from each other, at the 0.05 level. These results strongly suggest that the effect of corruption perception on migration preferences depends on educational attainment, as predicted by Hypothesis 2.

4.3.3 Regional patterns

How does educational attainment interact with corruption perception across important regions for migration? I use the regional logistic regression models to generate analogous predicted probabilities by region; they are displayed in Figure 3. In short, Latin America and the Caribbean and Asia largely conform to the relationships predicted by both hypotheses, but in Africa only Hypothesis 1 is supported. For those with a tertiary education in Latin America and the Caribbean, the average increase in predicted probability of preferring to migrate due to corruption perception is the highest for any educational subgroup, at over 9 percentage points. This represents a jump from a .19 to a .28 predicted probability of preferring to migrate on average. The increase is statistically significantly different at the

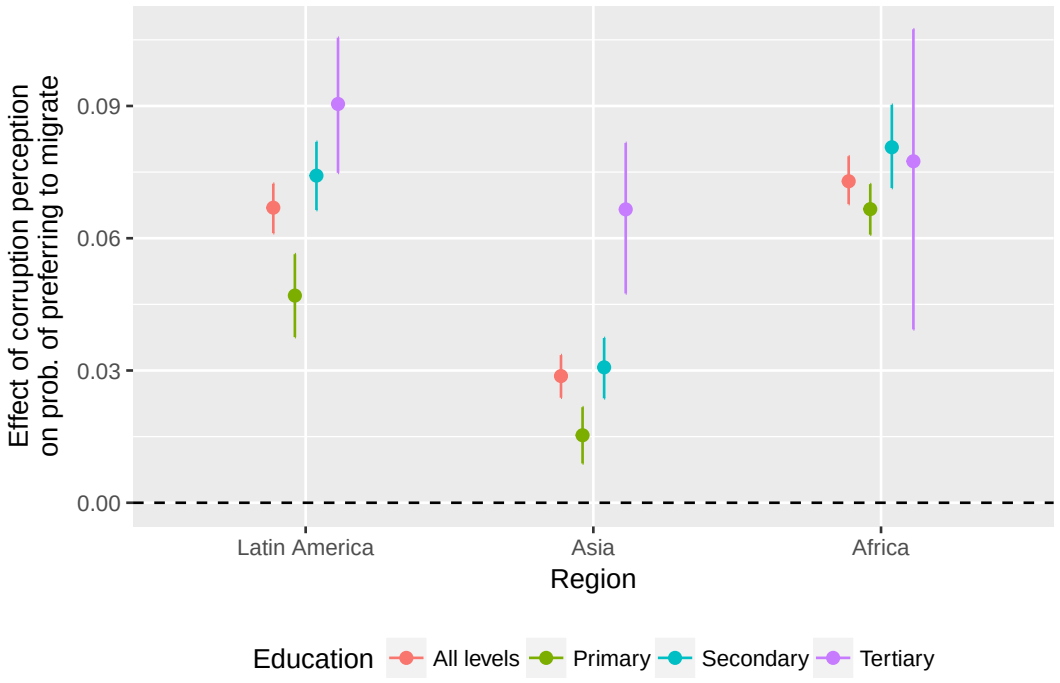

Figure 3: Regional differences in the interactive effect of corruption perception and education. Quantities are analogous to those displayed in Figure 2. Error bars are 95 percent credible intervals generated through 1000 draws of new coefficients simulated from the posterior.

.05 level from the population at large and from those with primary education, but it is indistinguishable from those with secondary education.

The predicted probabilities by educational attainment in Asia are exactly in line with the relationship predicted by Hypothesis 2, and all three increases are significantly different from each other at the .05 level. Furthermore, the gap between those with primary education versus those with tertiary education is largest in Asia compared to the other regions under study. Notably, however, these increases in predicted probabilities are the lowest across of all three regions, suggesting that while corruption perception still has a significant impact on preferring to migrate in Asia, it is even more salient elsewhere. Finally, Hypothesis 2 does not appear to be supported for Africa. The increases in predicted probability for the population at large and by educational subgroup are all substantively important and statistically significantly different from zero at the .05 level, but they are indistinguishable from each other. Overall, these results suggest that the effect of corruption perception cuts

across a number of prominent regions for international migration, with some slightly different regional patterns in terms of effect magnitude and interaction with educational attainment.

4.4 Pathways

What evidence is there to suggest that personal corruption perception affects a potential migrant's prospective cost-benefit analysis? To test this piece of my theoretical argument, I harness the rich micro-level data in the GWP to demonstrate how perception of corruption influences individuals' life outlook. The GWP asks all respondents to complete the following exercise, providing a measure of prospective life evaluation: "Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top represents the best possible life...and the bottom of the ladder represents the worst possible life...Just your best guess, on which step do you think you will stand in the future, say about five years from now?" The result is a 0-10 score measuring individual-level life outlook. To test my argument that perceiving high corruption affects an individual's prospective cost benefit analysis, I run a linear regression with life evaluation score as the outcome and personal corruption perception as an independent variable of interest. In addition to several socioeconomic and demographic controls, I include an interaction between personal corruption perception and education, in line with my argument and statistical models.

Table 3 displays the results of this regression. Corruption perception is negatively associated with prospective life outlook: believing that corruption is widespread, as opposed to believing that it is not widespread, is associated with a 0.17 point lower future life evaluation score, on average, after controlling for the included relevant factors. But this effect grows larger for those with higher educational attainment. For those with a secondary education, believing that corruption is widespread is associated with a .21 decrease in future life evaluation score on average. Most importantly, among those with a tertiary education, believing corruption to be widespread results in a .35 average reduction in this score. These results are statistically significantly different from zero, and from each other, at the .05 level.

Table 3: Corruption perception and life outlook

	Dependent variable:
	Life outlook score (0-10)
Corruption widespread	-0.171^{*}
	(0.011)
Female	0.094^{*}
	(0.006)
Age	-0.028^{*}
	(0.0002)
Income	0.00001^{*}
	(0.00000)
Secondary education	0.619^{*}
	(0.015)
Tertiary education	1.148^{*}
	(0.027)
Employed	0.225^{*}
	(0.012)
Satisfied w/ community	0.641^{*}
	(0.007)
Propensity to migrate	0.363^{*}
	(0.008)
Corruption X Sec. ed.	-0.036^{*}
	(0.017)
Corruption X Tert. ed.	-0.181^{*}
	(0.030)
Constant	6.612^{*}
	(0.017)
Observations	571,222
Note:	Standard errors in parenthesis. $*p < .05$

In summary, it does appear that corruption perception affects how individuals prospectively evaluate their life outlook, and corruption perception grows in importance for those who hold significant human capital.

5 Discussion

What insights do these findings offer for international migration scholars, as well as for policymakers in both migrant-sending and -receiving countries? First, the statistical results lend support to both of the hypotheses I present here. Individuals who perceive corruption to be widespread are more likely to express a preference to migrate than those who believe that corruption is not a major problem in their country. Highly educated people in particular are strongly affected by personal corruption perception, as its effect grows when people hold a college degree or more. In addition, it appears that potential migrants incorporate their perception of corruption into a prospective analysis of their life outlook, in line with how I characterize the cost-benefit analysis of migrating or remaining at home. Overall, the empirical results suggest that personal corruption perception is indeed a push factor for migration in the developing world, especially for those who hold human capital.

Looking across major regions of emigration, the same patterns that I find in the aggregated data generally hold, with some divergence from the predictions of the hypotheses. Most significantly, Hypothesis 2 is not supported by the available data for Africa: while perception of corruption is still substantively important in Africa, the effect is not larger for those who are highly educated. In fact, the estimated effect is largest (though not significantly so) for those who hold secondary, rather than tertiary, education in Africa. What might explain this divergence? Perhaps the interactive relationship between corruption perception and educational attainment depends on level of economic development. As Dustmann and Okatenko (2014) note, average GDP per capita in Africa is far lower than in Asia and Latin America. While corruption perception is in general a push factor for emigration

regardless of region, perhaps its interactive relationship with education is only "activated" when a country has reached a sufficient level of economic development. Additional empirical analysis is needed to explain this important regional difference, and how it might matter for the character of emigration flows from certain countries.

How do my results compare to limited existing findings on corruption and international migration? My empirical setup differs sharply from the existing studies I discuss above: the individual is the unit of analysis and the focus is on perceived corruption by those individuals rather than other sources. Furthermore, the dependent variable is not emigration rates, but rather migration preferences. As a result, my findings are not strictly comparable to the existing literature. However, there are some similarities in the substantive findings. In line with Poprawe (2015) and Cooray and Schneider (2016), I find an effect of corruption on international migration unconditional on educational attainment. Continuing in line with Cooray and Schneider as well as Dimant et al. (2013), the effect of corruption is strongest for those with higher levels of education.

Where my argument and analysis diverge considerably is on the explanation for *how* corruption perception can influence international migration. The key point is that migrants prospectively incorporate their perception of corruption into a cost-benefit analysis, comparing the expected future returns of remaining home with those of moving. In this manner, corruption perception can have an influence on a potential migrant's decision independent of previously identified migration drivers. I find evidence that this is plausible, showing that perceiving high corruption is associated with a diminished life outlook in the developing world. Importantly, corruption perception most strongly diminishes the life outlook of those who are highly educated. Although certainly not conclusive, this analysis aligns with the notion that potential migrants are prospective and that those who hold human capital are particularly attuned to how corruption might diminish the future returns to staying home.

Finally, these findings hold implications for policymakers in both migrant-sending and -receiving countries. High levels of perceived corruption might result in a significant loss

of citizens for developing countries, including a potential exodus of those who hold human capital. The loss of the educated class is highly relevant to policymakers in developing countries, who must manage the consequences of "brain drain" that might result. There is a significant debate about the consequences of brain drain. While some argue that the loss of human capital results in declining economic growth, others argue the exact opposite: in some cases, the loss of educated individuals can lead to improved economic outcomes, or a so-called "brain gain." More nuanced research suggests that the effect depends on existing levels of human capital and emigration: countries with few educated people and low emigration rates stand to benefit from brain drain.[7] The results I present here have obvious implications for countries that stand to lose from declining stocks of human capital: reform institutions and introduce public policy programs that aim to reduce corruption in government. Such reform, if it led to a reduction in "actual" corruption on the ground, could then change the perceptions of rational potential migrants, therefore mitigating pressures for emigration and allowing countries to retain valuable human capital.

On the flip side, countries that are primarily migrant destinations can also learn from the results presented here. Countries like the United States and members of the European Union often grant financial resources to other countries with the goal of deterring and managing migrant flows during crises. For instance, the US has granted financial resources and military capability to Mexico to protect its own southern border in an attempt to stem the tide of migrants from Central America (Isacson et al. 2015; Arriola Vega 2017). Similarly, the European Union has formed financial agreements with Turkey to manage flows of refugees and asylum-seekers from the Middle East and North Africa (Collett 2016). My findings suggest that a potentially effective and far more proactive approach would be to grant financial assistance to developing countries for programs that reduce corruption. Such a strategy would be a means to intervene on migrant inflows far before migration crises develop, like the one that currently exists in Central America's Northern Triangle. If this

[7]For a survey of this debate, see Beine et al. 2001; Hemmi 2005; Stark 2004; and Beine et al. 2008.

external financial assistance is successful at reducing corruption in migrant-sending countries, my argument implies that perception of corruption would concurrently fall, reducing the probability that people from those countries desire to exit. In other words, these findings suggest potential avenues for cooperation between migrant-sending and -receiving countries that could result in mutually beneficial outcomes.

6 Conclusion

The argument and empirical analysis I present here indicate that perception of corruption is a meaningful driver of international migration. Because potential migrants are prospective decision makers, they understand that persistent corruption decreases the expected returns of remaining at home versus migrating. Corruption perception is especially salient for highly skilled individuals, who know that they hold attractive exit options as a result of the global competition for human capital. A micro-level analysis using a globally representative survey of the developing world grants support to the argument, and preliminary analysis of how individuals develop their life outlook suggests that potential migrants incorporate their perception of corruption in a prospective fashion. The results indicate that scholars and policymakers should pay close attention to corruption when studying the movement of individuals across national borders.

The results also suggest several avenues for future research, two of which I discuss here. Most broadly, studies of international migration should consider migrants as prospective, rather than retrospective, decision makers. Of course, much work already considers potential migrants to be partially prospective when evaluating the benefits of moving to another country. But this neglects the possibility that individuals are prospective about the conditions in their home country as well. Do migrants, for example, consider the wage differential between their current occupation and what they expect to earn abroad if they migrate? Or do they consider the differential between what they expect to earn *in the future at home*

versus what they expect to earn abroad? Thinking about the entire decision to leave *or to stay* as prospective could generate more useful insights about the dynamics of international migration. The analysis I present here is just one potential example.

Second, we know little about how political institutions, both formal and informal, in developing countries might create or alleviate emigration pressures. There is an emerging literature on how autocratic governments might use migration as a "safety valve" to promote regime durability under certain conditions (e.g. Miller and Peters 2018), and existing research suggests that local public goods provision is an important determinant of migration (Dustmann and Okatenko 2014). But there remains much to explore. For instance, do societies marked by ethnic rivalry and political competition experience greater out-migration of minority groups? Does greater female representation, as determined by gender quotas or otherwise, at the local and national levels reshape the characteristics of the emigrating population? While I have no expectations as to what the answers to these questions might be, there remains much room to investigate if and how political institutions in migrant-sending countries affect the decision-making calculus of potential migrants.

APPENDIX A: Country coverage

Afghanistan, Albania, Algeria, Angola, Argentina, Armenia, Azerbaijan, Bangladesh, Belarus, Belize, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Republic, Chad, Chile, Colombia, Comoros, Congo, Costa Rica, Croatia, Cyprus, Democratic Republic of the Congo, Djibouti, Dominican Republic, Ecuador, Egypt, El Salvador, Ethiopia, Gabon, Georgia, Ghana, Guatemala, Guinea, Haiti, Honduras, India, Indonesia, Iran, Iraq, Israel, Ivory Coast, Jamaica, Jordan, Kazakhstan, Kenya, Kosovo, Kyrgyzstan, Laos, Lebanon, Lesotho, Liberia, Libya, Lithuania, Macedonia, Madagascar, Malawi, Malaysia, Mali, Malta, Mauritania, Mauritius, Mexico, Mongolia, Montenegro, Morocco, Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Palestine, Panama, Paraguay, Peru, Philippines, Moldova, Romania, Russia, Rwanda, Senegal, Serbia, Sierra Leone, Somalia, South Africa, South Sudan, Sri Lanka, Suriname, Swaziland, Syria, Taiwan, Tanzania, Tajikistan, Thailand, Togo, Trinidad and Tobago, Tunisia, Uganda, Ukraine, Uruguay, Uzbekistan, Venezuela, Vietnam, Yemen, Zambia, Zimbabwe.

APPENDIX B: Summary statistics for all countries

Country	Prefer to migrate (%)	Corruption widespread (%)	Female (%)	Mean age	Tertiary ed. (%)	Mean income ($)	Unemp. rate (%)	Satisfied w/ community (%)	Family abroad (%)	Move from home (%)
Afghanistan	25.9	88.2	50	33	4.2	7,302	11.2	75.6	22.3	29.7
Albania	48	85.7	55.1	42	20.2	14,120	10.8	64.5	59.7	15.9
Argentina	14.2	84.6	61	45	4.8	18,539	5.2	81.8	26.8	6
Armenia	37.9	91.7	60	45	21.6	7,136	13	56.9	45.5	12.9
Azerbaijan	18.1	73	51	39	16.9	15,875	8.9	78.3	22.6	6.8
Burundi	18.1	75.8	49.9	34	0.1	1,679	7	53.3	9.5	31.8
Benin	28.3	81.2	48.2	34	1.9	3,129	5.6	56.9	29.7	50.7
Burkina Faso	30.9	78.1	43.7	33	1.3	3,625	7.8	64.5	46.3	16.1
Bangladesh	25.1	75.2	51.5	37	3.2	5,776	4.6	89	28.9	7.6
Bulgaria	19.7	95.3	60	52	20.5	12,863	6.6	77.8	33.8	16.5
Bosnia	29.3	94.8	55.7	45	12.9	12,981	4.6	67.8	47.1	10.6
Belarus	21.5	68.7	59.4	44	27.2	18,332	2.5	84.7	32.1	3.7
Bolivia	25.7	78.2	57	38	10.3	9,475	4.7	83.5	57.2	20.5
Brazil	13.7	72.8	60.1	43	6	12,589	5.7	75	14.4	9.3
Botswana	17.9	79.3	57.4	36	10.8	8,714	19	62.5	34.8	17.8
Chile	22.7	71.2	58.3	46	13.7	16,095	4.8	81.1	32.6	9.8
Cameroon	35.8	91.4	49.1	32	1.7	5,009	6.5	61.8	38.1	14.7
Congo	38.2	80.2	47.6	36	3	5,403	10.5	60.5	44.7	62.9
Colombia	27.9	84.2	64.2	42	13.2	11,252	9.4	83.1	46	12.1
Comoros	38.6	79	57.5	36	3.6	5,808	5.8	75.4	52.8	69.8
Costa Rica	20.5	81.7	53.5	40	13.1	12,920	7.3	83.9	43.5	14.7
Cyprus	26.3	78.5	49.8	44	30.9	38,716	6.8	85.5	66.6	14.1
D.R. Congo	48.7	86.3	44.5	32	16.6	4,663	9.4	52.1	44.1	51.4
Dom. Rep.	49.8	74.3	58.6	41	15.4	8,855	12.4	75.5	65.9	10.7
Ecuador	18.3	73.2	61.2	41	8.9	9,827	8	82.2	42	13.1
Egypt	19.1	86.5	47.6	38	12.8	6,977	4.5	72.2	23.1	21.5
Georgia	16.9	50.1	56.2	47	31	6,837	12.1	75.2	31.1	6.8
Ghana	47.2	87.4	49.9	34	6.1	4,245	10.9	59.6	35.5	16.6
Guatemala	28.2	82.2	53.7	36	6.5	6,550	9.4	87.3	42.4	13
Honduras	43.9	87	53	36	5	6,020	10.6	83.4	48.9	22.1
Croatia	18.6	91.1	56.7	44	15.9	22,031	6.1	75.3	35.7	5.3
Haiti	55.3	78.6	50.7	36	4.7	4,014	22.1	44.9	45.3	30.5
Indonesia	3	96.1	56	38	3.6	5,159	2.9	88.3	9.6	10.6
India	7	85	44.9	36	11.2	6,379	4.4	80.8	10.4	16.8
Iran	20.3	81.2	49	36	23.5	16,885	11.5	73	22	10.3

Country	Prefer to migrate (%)	Corruption widespread (%)	Female (%)	Mean age	Tertiary ed. (%)	Mean income ($)	Unemp. rate (%)	Satisfied w/ community (%)	Family abroad (%)	Move from home (%)
Iraq	23.3	82.4	46.3	35	13.6	17,782	12.5	64.3	26	23.2
Israel	16.1	87.9	52.3	41	29.3	32,239	4.1	81.1	35.3	9.1
Ivory Coast	31.6	72.1	41.2	34	2.4	5,243	9.5	51.7	35.7	52.1
Jordan	27	68.6	50.5	35	16.3	19,457	5.4	76.4	35.4	22.2
Kazakhstan	15	82	59.1	41	27.3	12,271	3.9	82.4	34.7	6.8
Kenya	27.4	90.7	51.2	32	3.9	4,800	8.8	63.7	25.3	9.2
Kyrgyzstan	18	92.8	60.9	41	18	7,763	3.4	84.4	41.8	7.7
Cambodia	27.6	84.4	63.3	39	2.7	8,150	2.3	89.2	15.8	5.2
Laos	9.8	51.5	57	37	9.2	7,765	3.5	95.7	22.1	5.8
Lebanon	27.9	92.6	52	38	20.9	32,248	4	76.1	46.3	26.2
Liberia	58.6	86.2	50.1	33	3.9	1,561	10.7	54.4	40.2	33.3
Sri Lanka	15.8	78.9	60.1	42	3.1	6,175	4.7	88.6	25.3	10.8
Lithuania	23.7	96.5	54.8	47	34.1	16,687	5.7	86.9	41.6	12.8
Moldova	34.6	94	56.8	43	17.5	7,472	5.8	74.5	55.1	11.6
Madagascar	11.5	84.7	53.3	37	0.6	2,480	2.7	75.9	14.1	29.3
Mexico	18.2	75.9	51.5	40	10.9	7,225	4.7	78.8	37.2	14.1
Macedonia	33.8	83.8	51.8	45	17.9	13,282	9.6	70.1	51.6	17.5
Mali	19.5	84.8	45.7	35	1.9	4,779	6.6	59.5	34.4	44
Malta	19	59.1	57.9	48	20.7	35,669	3.1	85.2	56	8.2
Montenegro	22	71	52.4	42	12.7	16,910	4.5	70.2	45.2	19
Mongolia	21.8	93.4	56.6	39	22.9	12,058	7.3	77.5	29.9	10.2
Mozambique	22.6	77	50.4	31	1.2	7,977	10.8	80.9	36.6	8.3
Mauritania	25.1	76.4	45.3	34	6	14,205	10.2	63.8	45.4	41.7
Malawi	35	80.9	58.3	33	1.3	2,816	7.8	74.7	29.7	30.3
Malaysia	10.1	81.8	51.6	37	21.6	29,011	3.1	84.6	16.6	10.9
Niger	18.1	68.4	44.7	33	0.6	4,366	6.1	75.3	43.2	39.8
Nigeria	48.8	92.9	44.4	33	2.8	5,521	7.8	59.7	26.3	20.2
Nicaragua	32	73.7	52.8	36	13.3	6,239	7.9	85.7	53.6	14.7
Nepal	15.1	86.8	57.7	37	4	6,166	4.6	86.5	44.4	6.8
Pakistan	12.3	85.8	50.1	34	5.9	7,762	4.2	81	20.4	12.9
Panama	14.7	86.3	53	40	16.1	12,489	5.2	84.6	34.1	9.8
Peru	33.9	90.4	56.9	40	10.2	9,354	5.9	73.6	41.6	11.8
Philippines	17.2	81.1	57.1	40	14.2	7,072	5.8	86.5	50.8	20.5
Paraguay	14.5	85.5	58.2	42	12.1	10,470	5.7	87.5	57.4	13.1
Palestine	22.6	77.9	53.6	35	14.8	11,127	9.2	71.9	35.9	35.3
Romania	22.1	94.9	58.4	52	13.1	11,888	4.1	81.8	41.6	9.7
Russia	14.2	93.6	62.9	44	29.4	22,006	2.8	77.9	18.9	2

Country	Prefer to migrate (%)	Corruption widespread (%)	Female (%)	Mean age	Tertiary ed. (%)	Mean income ($)	Unemp. rate (%)	Satisfied w/ community (%)	Family abroad (%)	Move from home (%)
Rwanda	12.5	14.6	50.3	35	0.1	3,524	8.7	71.6	23.1	26
Senegal	38.9	80.6	47.4	34	2.1	8,114	10.2	57.2	50.3	53.9
Sierra Leone	62.1	84.3	50	35	3.7	1,355	10	59.8	29	29
El Salvador	42.1	76.6	52.8	38	7.4	6,279	8.8	82.6	40.2	3.6
Somalia	25.4	53.5	55.1	32	5.9	0	13	83.3	51.5	56.1
Serbia	24.9	90.8	54.6	47	14.4	13,112	3.5	67.1	35.5	9.1
Syria	40.5	69.1	47.2	34	7.6	18,387	5.6	54.1	24.7	35.3
Chad	23.5	91.8	42.6	31	2.4	5,458	7.1	62.6	32.6	38.2
Togo	42.7	84.2	46.1	34	1.7	2,157	7.9	45.3	28.4	63.8
Thailand	3.4	91.7	65	43	9.7	16,209	2.4	92.1	14.4	22.1
Tajikistan	10	64.9	59.7	37	13.2	6,083	6.1	87.7	31.5	13.7
Tunisia	26.3	79.4	49.2	38	8.6	11,929	10.3	70	33.4	42.7
Taiwan	21.8	83.2	53.2	43	36.8	65,915	1.1	83	28.1	8.5
Tanzania	21.2	86.7	50	34	1.2	3,609	5.8	61.1	16.4	13.3
Uganda	37.4	90.4	48.6	32	0.7	4,080	7.3	62.2	25.6	8.2
Ukraine	24.8	94.1	60.9	45	35.9	14,952	3.4	78	26.6	4.7
Uruguay	14.2	50.6	60.9	49	9.3	14,853	6.4	81	43.4	9.5
Uzbekistan	4.8	55.5	62.9	39	11.5	14,586	3.1	92.6	17.6	6.2
Venezuela	16.3	77.3	60.7	42	11.5	12,880	8	79.8	22.3	11.9
Vietnam	12.5	75.5	54.5	42	11.7	9,080	1.9	85.5	11.6	5.9
Kosovo	33.3	91	48.2	38	12.4	15,970	12.2	71.6	52.1	16.1
Yemen	25.3	87.1	49.9	34	7.1	7,498	9.5	68.3	24.2	24
South Africa	16.4	87.2	53.7	36	10.2	14,229	22.6	59.1	17.7	17.6
Zambia	29.2	86.9	51.6	31	9.9	7,144	11.6	57.2	26.9	15.2
Zimbabwe	32.9	85.3	53.6	34	6.1	6,717	10.5	61.1	47	24.4

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