Do Migrants Improve Governance at Home? Evidence from a Voting Experiment*

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Abstract

Can international migration promote better institutions at home by raising the demand for political accountability? In order to examine this question, we designed a behavioral measure of the population's desire for better governance. A postcard was distributed to households with the pledge that, if enough postcards were mailed back, results from a survey module on perceived corruption would be made public in the national media. Using data from a tailored household survey, we examine the determinants of our behavioral measure of demand for political accountability (i.e. of undertaking the costly action of mailing the postcard), and isolate the positive effect of international emigration using locality level variation. The estimated effects are robust to the use of instrumental variables, including both past migration and macro shocks in the migrant destination countries. We find that the estimated effects can be mainly attributed to those who emigrated to countries with better governance, especially return migrants.

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Recent research has examined the important role international migration may have for the development of origin countries. The positive effects for economic growth of international remittances, return migrants, diaspora effects promoting foreign investment and international trade, and even of emigration of the most educated have by now been rather well documented.[1] An important area that has not deserved the same share of attention is the role of international migration in the improvement of institutions, which can be crucial to economic development, as surveyed by Acemoglu et al. (2005).

The traditional perspective regards emigration as a "safety valve" or "outside option" that allows individuals unhappy with political institutions to leave their home country.[2] Emigration could therefore be detrimental to the quality of the domestic political system (a form of "brain drain") by undermining the *demand* for political accountability, and also by hurting the capacity to *supply* better quality home institutions if those who leave are also those most capable of providing these services.

One can however argue that emigration may promote improved political institutions in several ways: current emigrants may create strong diaspora effects whereby they influence political change (via supply, i.e. by influencing local authorities, or via demand, for instance through intensified contact of the domestic population with better institutions abroad); if return emigrants benefited from an enriching experience abroad, these effects can also translate into improvements in the quality of the domestic political institutions

[1] Evidence of the positive effects of remittances is provided, among others, by Edwards and Ureta (2003) for El Salvador, and Yang (2008) for the Philippines. Dustmann and Kirchkamp (2003), Mesnard and Ravallion (2006) and Batista et al. (2010b) examine the role of return migration. Gould (1994), Rauch and Trindade (2002), Kugler and Rapoport (2007), Iranzo and Peri (2009) and Javorcik et al. (2011) evaluate the relationship between migrant networks, trade and FDI. The possibility of a 'brain gain' as opposed to traditional 'brain drain' claims is empirically supported by Beine et al. (2008) and Batista et al. (2010a).

[2] Hirschman (1970) proposed the "exit" vs. "voice" dichotomy, according to which citizens unhappy with the domestic situation either choose to emigrate (exit) or to protest and contribute to political change (voice). In this setting emigration may be understood as a "safety valve", which releases protest intensity in the home political system and therefore reduces demand for political improvements.

(via supply, by direct participation in the political system, or via demand, by bringing increased awareness and demand for political accountability).

Theoretically, therefore, emigration might impact political institutions differently depending on the specific context in which it happens. This empirical question is very much unanswered in the current literature. In this paper we will test the hypothesis that international migration experiences promote better institutions at home by raising the *demand* for political accountability.

In order to examine this research question, we needed to capture the population's demand for political accountability. For this purpose, we designed and implemented a simple voting experiment that provides us with a behavioral measure of the demand for better governance at home. Following a survey of perceived corruption in public services, respondents were asked to mail a pre-stamped postcard if they wanted the (anonymous) results of this survey to be made publicly available in the media. This was to happen if at least 50% of the survey respondents would mail the postcard back. Note that this voting experiment is not a randomized control trial, but only a simple way to elicit a behavioral measure of demand for political accountability. It is likely superior to more standard self-reported measures from survey data as these latter may suffer from "conformity bias", meaning that survey respondents may desire to conform to the perceived anti-corruption message of the survey. This is indeed a hypothesis that we cannot reject using the empirical evidence obtained in this paper, and hence we take our behavioral measure of the demand for better institutions as a methodological contribution of our paper.

Using tailored data from our purposely designed and conducted household survey in Cape Verde, we examine the determinants of voting behavior in our experiment, and isolate the positive effect of international emigration on the demand for political accountability. For this purpose, we consider a simple political economy framework, taking voting behavior

as the outcome of an expected cost-benefit analysis. In this setting, we need to control for potentially varying voting costs (such as the distance to the post, or the easiness and frequency of posting mail) and for alternative characteristics affecting varying perceived voting benefits (such as confidence in surveyors, income or family structure). These variables are provided to us by our detailed survey, customized to examine this research question. Overall, we find that international emigration seems to positively impact the demand for improved political accountability. The effect is especially sizable for the case of migrants to countries with better governance, and, as one could expect, it also seems stronger for return migrants relative to current migrants.

Related empirical evidence on the impact of emigration on the quality of political institutions in origin countries is scarce, but there are a few recent contributions. Docquier et al. (2010) present cross-country evidence showing that over the period 1975-2000 unskilled emigration seems to have positively impacted institutional quality in origin countries (namely on measures of democracy and economic freedom), although the effect of skilled emigration is ambiguous in the short run. The simulations they perform point, however, and very interestingly to significant institutional gains from "brain drain" in the long run, after taking into account incentive effects of the brain drain on human capital formation. Li and McHale (2009) provide a detailed description of possible mechanisms through which skilled emigration could affect political and economic institutions at home, and present cross-country evidence consistent with the view that over 1990-2006 there may indeed be such a positive effect on political institutions (particularly on political accountability), but not on economic institutions. Spilimbergo (2009) offers related evidence on the effect of foreign-educated students in promoting democracy in their home countries. He uses evidence from 1960 to show that foreign education seems to promote democracy in home countries when it is acquired in democratic countries.

These empirical contributions are consistent with our results, but they cannot distinguish between supply and demand forces, nor capture the mechanisms underlying the identified effects because they use aggregate data and explore cross-country variation. Our paper uses tailored household survey data for a single country, which allows focusing more specifically on the impact of emigration on the demand for improved political accountability, while aiming at also discriminating between the impact of return and current migrants. This approach is made possible because we propose an original behavioral measure of the desire for improved governance, which allows us to rely on within country level variation, instead of the traditional cross-country source of variation. Our reliance on data for a single country may however raise external validity concerns and, in that sense, we believe that the contributions made by these different lines of work are, albeit necessarily distinct, very much complementary and fruitful to be pursued.

In the remainder of the paper, we begin by presenting an overview of our country of interest, Cape Verde, as our results should be understood in the setting where the postcard experiment was conducted. In section 3, we then turn to presenting our experimental design, while describing the theoretical framework supporting our empirical strategy. Section 4 presents the tailored household survey used in our empirical work, including the main descriptive statistics. These data are then used to perform the empirical analysis with results presented and discussed in section 5. Section 6 presents concluding remarks.

I. Cape Verde: a short introduction to the country

Cape Verde is a nine-island country off the coast of West Africa with 441,000 inhabitants, according to the latest INE (2002) census. Its population is concentrated particularly in the capital island of Santiago, but is overall very homogeneous in religious and ethnic terms, particularly relative to sub-Saharan standards: the index of religious fractionalization as

computed by Alesina et al. (2003) is 7.66% [3] (corresponding to 96% of the population being Roman Catholic); whereas the ethnolinguistic fractionalization index takes the value 41.74% (comparable to countries such as Spain or New Zealand, and in contrast with the top fractionalization observed in 20 sub-Saharan countries where the index takes a value of more than 80%).

In terms of institutional history, the country was a Portuguese colony until 1975, when it became independent and a socialist regime was put in place - a common trend in Lusophone Africa at this time. The first free elections only occurred in 1991, but a stable democracy has been in place thereafter. In addition, the country benefits from very good governance, particularly for sub-Saharan African standards: Cape Verde ranks 47th out of 180 countries in Transparency International's Corruption Perceptions Index for 2008, only (slightly) behind Botswana and Mauritius; the country was awarded the Best Control of Corruption in Sub-Saharan Africa in 2005, again after Botswana, by the World Bank.

In terms of economic performance, the country is currently ranked by the World Bank as a "Lower Middle-Income" economy, and had a GDP per capita of 5900 PPP-Adjusted Dollars in 2003, according to Heston et al. (2006). Its economic growth performance clearly exceeded the Sub-Saharan African average for GDP per capita growth over 1980-2004 of 0.6%, again according to Heston et al. (2006). Indeed, Cape Verde was the third fastest country in terms of per capita growth out of the 45 sub-Saharan countries in Heston et al. (2006), after Equatorial Guinea (11% average annual growth rate) and Botswana (5%), both these countries being rich in natural resources and with exports accounting for a large fraction of their GDP (47% and 55%, respectively). Cape Verde stands out growing at an average annual rate of 4.4% (4.1% over 1981-1990, 5.8% over 1991-2000) but with exports accounting for only 20% of its GDP and no natural resource

[3] This index is computed as one minus the Herfindahl index of group shares, and expresses the probability that two randomly selected individuals from a population belong to different groups.

abundance - rather the opposite, as droughts and famines were recurrent characteristics of the country's history.

Indeed, droughts and famines were closely related to the massive emigration phenomenon that characterizes this country. According to estimates from Batista et al. (2010), based on adjusted data for the stock of immigrants in most destination countries, there are around 100,000 Cape Verdean current emigrants, or about 23% of the population. An additional striking feature of Cape Verdean emigration is the magnitude of "brain drain": according to Docquier and Marfouk (2006), 67.5% of the educated labor force of Cape Verde lives abroad. This is arguably the largest such number in the African continent, although these results have been qualified by Batista et al. (2010) as depending particularly on the definition of educational attainment. Finally, the magnitude of international remittances received in Cape Verde is impressive: international remittances account for 16% of GDP over 1987-2003 (World Bank, 2006), according to official numbers, likely underestimated, as they do not include informal channels (neither legal nor illegal). This magnitude is also especially important given its large relative scale compared to aid and foreign direct investment inflows – international remittances have always surpassed FDI and have been close to the level of foreign aid, particularly since 2000.

Finally, Cape Verde is classified by the House of Freedom as "among the freest media environments in Africa". Reporters Without Borders ranks Cape Verde 44 (out of 175 countries in the world) in terms of press freedom, close to France, Spain and Argentina. Quoting from the House of Freedom website: *"Many media outlets are state operated, although there are a growing number of private publications and broadcast outlets. The law requires broadcasters to obtain operating licenses, and government approval is needed to establish new newspapers and other publications. However, there were no reports that the government denied or revoked licenses for political reasons in 2007, and*

two new private newspapers were launched in September. Six independent radio stations broadcast regularly in Cape Verde, and there are two foreign-owned television stations in addition to the state-owned radio and television stations. The government does not generally restrict access to the media that it controls, although opposition candidates reported difficulty in accessing airtime on the state broadcasters before the February 2006 presidential election. Self-censorship is widespread among journalists, however, and has been one of the largest obstacles to the creation of a truly free press. Geographic barriers and harsh terrain in a country made up of several islands also constitute impediments to the distribution of newspapers and other media products, including the internet, which was accessed by just over 8 percent of the population in 2007. However, there were no reports that the government restricted internet access or monitored e-mail messages, and foreign broadcasts are uncensored."

II. Experimental design and empirical strategy

Postcard experiment: creating a behavioral measure of demand for better governance

This paper examines the hypothesis that international emigration may contribute to promote the demand for better governance at home. To empirically evaluate this hypothesis, an experiment was conducted such that individual respondents to a survey on perceived corruption in public services were offered the opportunity to (anonymously) make the results of this survey publicly available in the national media for political accountability purposes.[4]

[4] Postcards were anonymous in the sense that respondents "did not have to write their names anywhere in the postcard". This is the message that the interviewers were instructed to convey to the survey respondents. However, each postcard had a 6-digit number that we were able to match to each interviewed household. In this way we knew the household and respondent characteristics for each received postcard.

In order to have the survey results publicized in the media, survey respondents were invited to participate in a "special referendum" immediately after they finished responding to the corruption questionnaire. They were offered the opportunity to vote for political accountability by taking the incentive-compatible voting action of mailing a pre-paid postcard. The postcard read "*I wish that the conclusions of the survey on the quality of national public services (health, education, justice,…), conducted by the University of Oxford (UK) in the first months of 2006 to 1000 households in the islands of Santiago, São Vicente, Santo Antão, and Fogo, are made public in the Cape Verdean media*." The written message was accompanied by interviewers saying to each respondent: "*it is very important that you put the postcard in the mail if you want that Cape-Verdeans are able to require higher quality in the public services of CV*." [5]

The results on perceived corruption in public services were to be made public if 50% or more of the postcards were received back. To add credibility to the survey organizers' dissemination obligations, a 'Media Contract'[6] was emphasized by a wide series of news and interviews broadcasted or published in the national television, radio and newspapers while the survey was being conducted in the country.[7]

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[5] Note that survey respondents were subject to an average 60-minute interview asking very specific and explicit questions about the need to bribe public officials or know and be able to influence them in order to be provided public services. The reason why the postcard euphemistically refers to "the quality of public services" instead of the buzzword "corruption" is that we would like to minimize behavior correlated with corruption-related public opinion, and hence elicit a more accurate behavioral measure of the demand for political accountability.

[6] The expression "Media Contract" refers to an agreement between the survey fieldworkers and the survey respondents that, provided enough postcards are mailed back, the results of the survey would be made public in the national media.

[7] In particular, these were the news pieces broadcasted and published:

- National Television Station - RTC - news broadcasted in the main prime-time news at 8pm (24/01/06);
- Radio Nova - interview broadcasted in news (24/01/06);
- National Radio – interview broadcasted in the news (24/01/06);
- Radio Comercial - news based on press note (24/01/06);
- Newspaper Expresso das Ilhas - news based on press note and Radio Nova interview (25/01/06);
- Newspaper A Semana, based on an interview (26/01/06).

For additional details and evidence, see http://www.csae.ox.ac.uk/resprogs/corruption/cv/cv.htm.

Note that this voting experiment is not a randomized control trial, but only a simple way to elicit a behavioral measure of demand for political accountability. Using a behavioral measure is likely superior to more standard self-reported measures from survey data as these latter may suffer from "conformity bias", meaning that survey respondents are more likely to conform to what they believe are the interviewers' expectations on anti-corruption attitude. This hypothesis cannot be rejected from the empirical evidence we obtain in this paper, as discussed in section IV.

Theoretical framework

In order to test whether international emigration increases the desire for political accountability at home, one needs to begin by setting a framework to understand the determinants of voting in our postcard experiment.

Political economy theories of turnout and voting potentially relevant for our purposes are in large number, as surveyed by Merlo (2006). Following the traditional literature on electoral participation, we model voter turnout as the outcome of an expected cost-benefit analysis.[8]

Since the postcard distributed to the survey respondents was pre-stamped, the cost of voting in our experiment has to do with the opportunity cost of mailing the postcard. This cost potentially depends on how familiar the individual is with posting mail, and how practical it is for the individual to post mail – individuals who are not used to posting mail or for whom it is harder to post mail will likely face higher costs; the same applying to individuals with higher labor income.

[8] Downs (1957) first provided a 'calculus of voting' framework, which was later formalized by Tullock (1967) and Riker and Ordeshook (1968). Note that because of the simple nature of our voting experiment (i.e. a simple decision of whether to vote or not), we can abstract from strategic voting considerations and safely assume sincere voting behavior.

The expected benefit of mailing the postcard has to do with a desire for political accountability and this is the main focus of our analysis. However, the literature emphasizes that we should note the *expected* nature of an individual's benefit calculation. Crucially, survey respondents who are more confident about the trustworthiness and independence of the foreign institution sponsoring the survey (as well as about the reliability of the Cape Verdean postal system) will likely attribute a higher probability to the public dissemination of the results on perceived corruption.

The perceived benefit is finally a function of other variables directly affecting the desire for political accountability. We are most interested in the effect of international emigration, but we will need to take into account factors like gender, age, education, wealth, or family ties (see, for instance, Alesina and Giuliano, 2009).

Empirical strategy

The voting decision of an individual respondent to our survey can be summarized by the following latent variable model:

$$V_i = 1\,(V_i^* \geq 0)$$

$$V_i^* = \alpha_0 + \alpha_1 M_l + \alpha_2{}' X_i + \varepsilon_i$$

According to this model, the decision to vote (and therefore the demand for better political accountability) made by an individual *i* is given by $V_i = 1$. This voting decision will occur whenever the (unobserved) expected *net* benefit from voting, V_i^*, is positive.

The expected net benefit from voting first depends on the local proportion of migrants, M_l, with impact α_1 on voting behaviour, which will turn out to be our main estimate of interest.[9] Our main explanatory variable is computed according to the following formula:

Proportion of international migrants within the spatial area of residence of the household

$$= \frac{\textit{Number of migrants in the locality}}{\textit{Number of residents in the locality}}$$

Note that the definition of "migrants" includes both current and return migrants. This implies that the effect of the local proportion of migrants on an individual's demand for good governance includes both direct and indirect effects. In a locality there will be effects arising directly from the presence of return migrants, but also indirect effects due to the influence return migrants exert on their peers (think, for instance, of neighbor families with no migrants who become more sensitive to the issue of governance after talking to a return migrant neighbor who lived in the US for some years). An additional source of indirect migrant impact on the demand for accountability by local residents is the influence of current migrants who keep in touch with family and friends. In this way, this "proportion of migrants within the spatial area of residence of the household" can be understood as a proxy for the frequency of meetings with migrants a resident in this locality (who is not necessarily a migrant and does not necessarily have a migrant at home) can have. Recall that even though our results intuitively point to the importance of return migrants, this framework is sufficiently wide to encompass the impact on the locality of origin of current migrants – though their contacts with family and friends, for instance.

[9] Note that the concept of locality is that of a census area in Cape Verde, which would roughly correspond to a small neighborhood where one would expect social interaction to occur.

Second, our empirical specification includes a vector of individual, household and locality characteristics X_i determining costs and benefits of mailing the voting postcard. This vector includes individual demographics (e.g. age as a determinant of the easiness to mail the postcard, but also of the demand for accountability), and individual controls for how familiar someone is with posting mail, and how practical this is for her. In addition, there is an individual indicator of confidence in the foreign institution sponsoring the survey and experiment. At the household level, vector X_i includes variables such as family structure and asset ownership, which are likely determinants of an individual's subjective valuation of the benefit of improved governance. At the locality level, we control for the average expenditure per capita, as well as for the fraction of local residents working in agriculture, construction and retail trade, which may again influence the perceived benefit of better governance. All regressions also include island fixed effects.

We estimate this empirical model using probit regressions. The source of variation that allows us to identify our main coefficient of interest, α_1, is variation of migration behavior across different localities, after controlling for a number of individual, household and local level characteristics.

We should emphasize that, unlike family level variation, using locality-level variation mitigates self-selection concerns based on unobservable characteristics: unobserved ability (which may increase both migration and demand for good governance) can be correlated across family members but not likely at the locality level. Indeed, using locality-level variation should allow us to average out unobserved heterogeneity at least to some extent and hence avoid the most evident endogeneity problems. Moreover, the fact that Cape Verde is a small very homogeneous country as described in section 2, rules out the most obvious (potentially omitted) factors that could simultaneously promote migration and accountability demand at the locality-level.

III. Data description: tailored household survey

Household Survey Design and Conduction

Our empirical work is based upon a household survey on migration and the quality of public services purposely designed to answer our research questions. The survey was conducted in Cape Verde from December 2005 to March 2006 by the authors, who were affiliated to the University of Oxford.

The survey questionnaire was submitted to a representative sample of 1066 resident households (997 complete interviews) in 5% of the 561 census areas of Cape Verde. This sample provided information on both resident non-migrants and return migrants, and also on a large sample of current emigrants. The questionnaire included two modules: one on perceived quality/corruption of public services; and the other on migration characteristics (including full migration histories) of the household. The interviewed household representative (someone aged at least 30 years old) was asked to specify socio-demographic characteristics of all members of the household, including children who already lived elsewhere. Moreover, he was asked to characterize all migration spells within the household, including who emigrated, where and when. Finally, there were some questions regarding the economic situation of the household such as living standards, income or whether any member of the family received remittances in the previous year. The English translation for the full questionnaire is available at

http://www.csae.ox.ac.uk/resprogs/corruption/cv/questcveng.pdf.

The tailored data collection consisted of survey (face-to-face) interviews conducted by teams of local interviewers and the authors, who recruited and trained the local teams making sure that each interviewer had at least a total of 18 hours of training in groups of

2-3 individuals. Training included lectures on the content/objectives of the survey; answering the questionnaire; and piloting (at least once per interviewer).

The sampling process was such that sampled census areas were chosen randomly weighting by the number of households, and households within a census area were chosen randomly using standard techniques (nth house, with second visits tried in the same day). The eligibility condition for a household to be interviewed was family residence in the country anytime in 1985-2006. The requirement condition for a respondent within a household to be interviewed was to be aged at least 30 years old.

There are two imperfections to the random sampling of households in the survey. One is differences in attempted interviews in the different census areas, and the other is non-responses. We use weighted data to account for these problems, although differences to unweighted data are negligible. Data collected from non-respondents on their gender, approximate age, approximate schooling, and approximate income are used for this purpose.

Note that the data we collected on individual income are limited in the sense that they were not provided by about half of the survey respondents. This implies that our regressions will be run with 452 observations at most throughout the paper.[10]

Additional details on the fieldwork and survey can be found at

http://www.csae.ox.ac.uk/resprogs/corruption/cv/cv.htm.

[10] We conducted an attrition analysis to evaluate the impact of the missing observations on our baseline econometric results (with and without controls) using multiple imputation methods. We found that simply comparing the effect of local migration on voting behaviour when we take out the observations that do not contain income information has a sizable impact on the magnitude and significance of the estimated results. However, when we use multiple imputation methods to recover the missing information, the magnitude of estimated coefficients falls but the statistical significance is kept. This suggests that the missing income observations can possible influence the magnitude of estimated effects which would presumably be smaller if income were available for all respondents in the sample, but that the positive sign and statistical significance of our estimates remains in all possible specifications. Note moreover that results are fairly stable (if anything improving as one increases the number of imputations) regardless of the number of imputations performed.

Descriptive Statistics

We now briefly characterize the information from our household survey. The results in Table 1 show that, relative to residents in Cape Verde, current emigrants tend to be slightly disproportionately males and in their prime-working years (21-50 years old). They are also more likely to have post-secondary education. Return migrants are strongly disproportionately males (both in comparison with residents and current migrants) and are mostly aged over 50 years old. They tend to be less educated than current migrants, but still overperform residents in terms of the likelihood of a post-secondary education.

The figures for migration flows in the period 2000-2005 coming out of our survey are relatively close to the percentages found in the last INE (2002) census for the period 1995-2000, both for migrant outflows and returns. These numbers are about 4% of residents for the annual outflows of emigrants; and 20% of emigrants for the return flows of emigrants.

Another interesting fact about Cape Verdean migration coming out of our survey is that Portugal and the USA account for respectively about 55% and 20% of the total emigration flows, figures similar to those coming out of the INE (2002) census. Most other destinations are European countries (France with 12%, Netherlands and Luxemburg with 2% each) and Brazil (with 3%).

Finally, we should note that in the end only 43% of the postcards were returned to us.

IV. Empirical results

In this section, we summarize the main empirical results in this paper. In particular, we present, interpret and discuss the robustness of our estimates of a 'demand for political accountability gain' arising from international emigration.

Baseline results

The baseline estimation of the probability of a given survey respondent mailing the postcard she was given is presented in column (1) of Table 2. Without controlling for any other covariates (except for urban locality and island fixed effects), there seems to be a striking statistically significant difference between the postcard voting probability of localities with more and less migrants relative to residents (+0.94pp in the probability of voting for each additional 1pp in the local fraction of emigrants, including both current and return migrants). Controlling for a number of individual and household level relevant covariates, the observed voting differences are basically kept, as is shown in columns (2-4) in Table 2. The signs of all significant coefficients are as expected and do not vary as additional controls are included. Because there could be a concern about the potential for omitted variable bias, in column (5) of Table 2, we add a number of locality-level controls, such as the average private consumption expenditure per capita in the locality or the occupational structure of the locality. Despite the inclusion of all these controls, the magnitude and significance of the estimated effect remains basically the same. We also worry that international migration may be proxying for important local financial characteristics, which raises the question of whether international remittances may also matter as determinants of the desire for better governance. It does not seem the case since the results in column (6) show that including the local proportion of households receiving international remittances has an economic and statistically insignificant impact and almost does not affect the estimated coefficients and significances of the other posting determinants included in the regression.

Our baseline estimates are therefore presented in column (5) of Table 2. An interesting estimated effect is that of a strong negative income/wealth effect on the demand for more accountability. Having annual labor income with a negative estimated coefficient would be

difficult to interpret directly as a negative income effect as this could simply be proxying the opportunity cost (time value) of mailing the postcard. However, this effect also shows strongly for asset ownership: wealthier people seem to value less the benefits of political accountability, which is consistent with the findings of Minier (2001) that democracy is not a normal good. At the local level, though, the results consistently point to the average expenditure per capita as positively influencing postcard mailing behavior.

Baseline robustness checks

We next proceed to evaluate the robustness of our estimate effects. Given the existing evidence on "brain gain", namely as found by Batista et al. (2010), we start by addressing the question of whether local education affects the way local international migration generates a desire for political accountability. As is shown in columns (1) - (3) of Table 3, controlling for local educational attainment (namely intermediate secondary and secondary schooling) basically does not change the sign, magnitude and statistical significance of the impact of local migration on the demand for political accountability. Post-secondary education, however, increases the size of the migration effects, even though the positive coefficient on post-secondary education is not significant at conventional levels.

A potential concern with our estimated effects is that the probability of mailing a postcard may depend on the actual experience and perception of corruption by survey respondents. This is investigated in columns (4) - (5) of Table 3. Indeed, we find it to be the case: those who perceive more corruption in the health and education sectors (the sectors with which most respondents had contact with) are significantly more likely to mail the postcard. The impact of perceived corruption somewhat affects the magnitude and significance of the impact of international emigration, but it does so in a way that is not systematically upward or downwards. Overall, the sign, order of magnitude and broad statistical significance of the effect of international migration are kept throughout the different specifications. This effect

points to an intuitive, crucial role of perceived corruption in creating incentives for improved demand for accountability.

Another important issue regarding the validity of our exercise has to do with properly controlling for the cost of mailing the postcard and the trustworthiness when doing so. Columns (6) - (9) of Table 3 show that the sign, significance and magnitude of the different estimated coefficients on local international emigration do not seem to be strongly affected by the choice of these controls. In fact, none of these controls ever becomes statistically significant in our estimated specifications. This is consistent with the idea that, although incentive-compatible, the costs of mailing the voting postcard are of small importance for our purposes.

Finally, the last column in Table 3 shows what happens when all alternative controls are used simultaneously in a single regression. The main coefficient of interest keeps a magnitude similar to the magnitudes estimated when using other important controls, and keeps significant at the 5% level despite the loss of observations implied by using all controls simultaneously.

Mechanics 1: migrant destination

Having established the relevance of local migration in determining voting behavior in our experimental setting, it is reasonable to wonder about the mechanisms underlying this result. How is local migration affecting behavior? One dimension of interest in answering this question is to look at the destination of the local migrants and examine how it affects the results. We consider the two main migrant destinations from Cape Verde: Portugal and the United States. A first comparison of the effects of local migrants to Portugal and the US is displayed in columns (1) - (2) of Table 4. With and without controls, the results are striking in that only emigrants to the US seem to have a sizable and significant impact on

the desire for better governance. The effects of local migrants to Portugal are not statistically significant.

Mechanics 2: current vs. return migrants

Further in this line of investigation, we can distinguish between the effects of current and return migrants by country of destination: as is displayed in columns (1) – (2) of Table 5, there are overall striking results showing that the magnitude and significance of effects are much higher for return than for current migrants, regardless of their country of destination. This is an intuitive result, as the actual presence of individuals with migrant experience is more likely to induce effects in their community of residence after their return than while they are still away. Note also that the effects of both return and current migrants to the United States are positive (although insignificant for the case of current migrants), whereas the effect of migrants returning from Portugal is actually negative.

Robustness checks: self-selection

How can we best ensure that the estimated local migration effects are truly causing the demand for accountability? One might conjecture that selection (for instance, on observable characteristics such as education) may be driving our findings. To examine this possibility, we estimated the differences in means between localities with and without strong migration to Portugal (meaning that these locations have a number of migrants destined to Portugal that is equal to at least 5% of the resident population), and we did the same with migration to the United States. Our results are displayed in Table 6.

The picture that comes out of our analysis is that households in areas prone to migration to Portugal are usually less well off than in areas prone to migration to the United States, although these seem to possess above mean assets that potentially allow them to overcome the financial costs of an international move. We also find that migrants to Portugal tend to

originate in areas where agriculture and construction (as opposed to services, such as retail trade) are dominant, the opposite being true for migrants to the United States. Most importantly, the educational profile in areas with strong migration to Portugal is the opposite of areas with strong migration to the United States: it is evident from Table 6 that the most educated migrants have the US as their destination instead of Portugal, which makes sense given the higher costs involved (financial, but also in terms of language or distance, for instance). Note finally that there is a slightly higher perception of corruption in the health sector in the areas with strong migration to Portugal.

Given this profile, it is very much desirable that we control for local educational attainment in our regressions evaluating the impact of migration per destination country. This is done in columns (3) – (5) of Table 4 and in columns (3) – (5) of Table 5. The effects of education are not visible at the aggregate, when the impact of all migrants to different destinations is considered as shown in Table 4. Indeed, it is only when we break our analysis down into current and return migrants that the impact becomes apparent. In this case, displayed in Table 5, the most striking dimension of selectivity in migration is also the one impacting our results the most: tertiary education. After controlling for tertiary education, the impact of return migration from Portugal becomes significantly negative – this can perhaps be related to the fact that there was no higher education supply in Cape Verde until 1995 and that Portugal was the usual destination to obtain a tertiary degree. Apart from this strong impact on the coefficient from return migration from Portugal, the estimated results are not very sensitive to this or the other dimensions among which migrants seem to select themselves when choosing a migration destination.

This result indicates that self-selection is not likely to underlie the impact of migration on the demand for political accountability. Indeed, it is more likely that migrant assimilation of the accountability norms in the country of destination is a better explanation for this

impact.[11] Notice, for instance, the latest Transparency International (2009) cross-country governance ranking: the United States are placed 19th in the world, whereas Portugal is ranked 35th and Cape Verde 46th. This evidence can be interpreted as the experience of emigrants to the US being more conducive to promoting demand for better governance than that of emigrants to Portugal. Also, in relation to the identified negative impact of return migrants from Portugal, one should bear in mind that the baseline destinations against which migrants to the US and Portugal are being compared are mostly European, such as France and the Netherlands, which rank closer to the US in terms of governance.

Robustness check: potential endogeneity and instrumental variable estimation

Even though we obtain supportive evidence that observable self-selection does not seem to explain our estimated results, there may still be endogeneity concerns related to potential unobserved heterogeneity and locality level omitted variables. For this reason, we now re-estimate the baseline regressions in the paper using instrumental variables.

We use two sets of instrumental variables: first, we compute 5-year lagged local migrant stocks based on the full individual migration history available for all household members in our survey; second, we use external sources of destination (unemployment rates, nominal GDP per capita, and GDP growth rates in the US and Portugal) in the ten years before the survey was made; these variables are aggregated using a weighted sum in which the weight is the 5-year lagged local migrant stock to each destination relative to the (5-year lagged) overall stock of migrants to that specific destination in each of the ten years being used – this weight can be understood as a (5-year lagged) proxy for migration networks in the relevant destination country, which combined with macro information from the destination

[11] This is consistent with the findings of Fidrmuc and Doyle (2004) and Spilimbergo (2009), which also provide evidence supportive of migrant assimilation effects in the destination country. Fidrmuc and Doyle (2004) focus on Czech and Polish migrants and also find that self-selection (in terms of both political attitudes and economic characteristics) is not likely to explain migrants' political attitudes. Spilimbergo (2009) describes how the political attitudes of migrants differ depending on the political characteristics of the destination countries.

country should constitute an exogenous source of variation for migration, allowing us to identify our coefficients of interest. Note that the weighting procedure guarantees that there is enough variation to identify our effects of interest at the *locality level*. The second set of instruments also allows us to test for over-identification in all the three estimated specifications, as well as provides us with a set of stronger instruments – note that lagged instrument strength could be a problem for certain regressions, namely as displayed in column (7) of Table 7.

After checking that the instruments we use seem strong and exogenous in all possible specifications in Table 7, it is also reassuring to observe that the estimates we obtain are not substantially different from the estimates obtained using probit methods. This finding points to the small importance of any endogeneity concerns at the local level, after controlling for all relevant covariates.

Robustness check: Alternative measures of the demand for accountability

One additional potential concern with our analysis is that our postcard experiment may not be exactly measuring a desire for political accountability. In order to strengthen our argument that it is the case, we use a survey variable that asks the respondent very directly whether he or she agrees or disagrees (in a 1-7 scale) with the statement: "*As a common citizen of Cape Verde, I believe I should require competence in the public services (health centers, schools, courts, police) that are aimed at my needs*."

This is a direct survey question about the self-reported own demand for accountability of the public services, which we can use to verify whether the determinants of postcard voting behavior are similar. This analysis is shown in column (9) of Table 2 and in columns (8) – (9) of Tables 4 and 5. The results are reassuring in the sense that the sign and significance of the main estimated coefficients are kept when using this self-reported measure of demand

for better governance - except for column (9) of Table 2, which has a p-value of only 12.6%. Indeed, in Table 4, we see that the impact of migration to the US is also strongly positive and significant, whereas that of migration to Portugal is statistically insignificant. Looking at Table 5 in order to detail by current and return migration status, the same feature is still prevalent: return migration from the US is a powerful positive determinant of the demand for accountability, whereas current migration and return migration to Portugal are not statistically significant.

Overall, the most salient feature of using self-reported survey data instead of our postcard behavioral measure is that the magnitude of the estimated effects is clearly much larger using survey data, which could be related to a 'conformity bias' caused by survey respondents desire to conform to the perceived anti-corruption message of the survey.

Mechanics 3: Direct and social effects of local migration

In summary, the evidence we gathered points to international emigration to countries with good governance (and in particular to the presence of return migrants) as promoting the demand for political accountability in origin countries.

We should emphasize that our focus is on the impact of locality-level migration. The variable we use, the "proportion of migrants within the spatial area of residence of the household" can be understood as a proxy for the frequency of meetings with migrants someone can have (someone who is not necessarily a migrant and does not necessarily have a migrant at home). The higher this proportion, the more likely it will be to interact with migrants and become more open to demanding accountability.

Note that the effects of local migration include both direct and indirect effects. Return migrants, for instance, should have a direct impact through themselves, but also an indirect impact because of the social interaction that is likely to occur at the locality

(think, for instance, of neighbor families with no migrants who become more sensitive to the issue of governance after talking to a neighbor who lived in the US for some years). Current migrants can also contribute to indirect effects through communication with their network of friends and family back home, which may make those in the home country more sensitive and open to demand political accountability.

The empirical question we leave unanswered is then about the different magnitude of the direct and indirect effects identified at the local level. If additional data on migrant networks became available, this could be an important way forward in the literature.

V. Concluding remarks

This paper aims at contributing to the understanding of a largely unmeasured but extremely important potential effect of international emigration: the impact of migration on institutional quality, a determinant of economic growth.

Our findings point to an overall positive impact of international emigration on the demand for improved political accountability in the country of origin we study. In particular, our results emphasize the importance of the destination country of migrants: effects are stronger for migrants to countries with better governance. Our work also indicates a stronger impact of return migrants actually back to the origin country, relative to current emigrants which can only indirectly influence their networks in the home country.

We naturally recognize that international emigration likely affects the supply side of domestic political institutions as well, a part of the lively ongoing “brain drain” vs. “brain gain” debate. Effects could presumably be negative if there is positive selection in current emigration flows or could be positive in presence of skilled return migrants. This is a very interesting empirical question that we leave for future research.

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Tables

Table 1: Characteristics of Cape Verdean individuals depending on migrant status.

	Non-Migrants	Current Migrants	Return Migrants
Sample Size			
	4997	907	241
Gender			
Male	47.95%	51.99%	64.46%
Age			
0-10 years	21.39%	0.35%	2.42%
11-20 years	28.63%	11.19%	4.85%
21-30 years	12.91%	33.92%	5.45%
31-40 years	13.05%	25.00%	17.58%
41-50 years	10.14%	20.45%	15.76%
51-60 years	4.44%	8.04%	11.52%
61-70 years	4.24%	0.87%	18.79%
71-80 years	3.80%	0.17%	20.61%
81-90 years	1.19%	0.00%	3.03%
>91 years	0.02%	0.00%	0.00%
Education (males aged 15-64)			
No Education	3.72%	3.6%	5.2%
Pre-school	1.54%	0.7%	0.0%
Alphabetized	11.35%	8.2%	14.3%
Primary	59.69%	62.4%	50.7%
Intermediate Secondary	18.79%	9.9%	19.5%
Secondary	1.12%	0.4%	3.9%
Post-Secondary	3.78%	14.9%	6.5%

Source: Own survey.

Table 2: Probability of mailing voting postcard in columns (1)-(6). Probability of self-reported own demand for accountability in column (7), scaled 1-7. Marginal effects of probit estimates in columns (1)-(6). Ordered probit estimates in column (7).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Proportion of international migrants (relative to residents) in locality	0.9419	0.9446	1.0103	1.0724	1.1034	1.0886	2.0218
	(0.3465)***	(0.3512)***	(0.3623)***	(0.3510)***	(0.3859)***	(0.3677)***	(1.3204)
Trust in Oxford University		0.0077	0.0211	0.0228	0.0334	0.0348	0.0365
		(0.0232)	(0.0231)	(0.0226)	(0.0238)	(0.0237)	(0.0665)
Habit of posting		0.0045	0.0083	0.0100	0.0089	0.0092	-0.0152
		(0.0132)	(0.0127)	(0.0127)	(0.0137)	(0.0138)	(0.0267)
Male			-0.0863	-0.0928	-0.0751	-0.0751	0.1954
			(0.0485)*	(0.0467)**	(0.0485)	(0.0485)	(0.1179)*
Age			0.0207	0.0161	0.0131	0.0140	-0.0602
			(0.0134)	(0.0143)	(0.0143)	(0.0142)	(0.0304)**
Age^2			-0.0002	-0.0002	-0.0001	-0.0001	0.0004
			(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0003)
Individual labor income			-0.0002	-0.0002	-0.0003	-0.0003	0.0001
			(0.0001)**	(0.0001)**	(0.0001)**	(0.0001)**	(0.0003)
Number of children				0.0205	0.0212	0.0215	0.0189
				(0.0120)*	(0.0120)*	(0.0121)*	(0.0296)
Household asset ownership				-0.1401	-0.1242	-0.1244	-0.0016
				(0.0626)**	(0.0651)*	(0.0647)*	(0.1569)
Average private consumption expenditure per capita in locality					0.9789	0.6916	-0.9512
					(0.6637)	(0.7866)	(1.8530)
Fraction of residents working in agriculture in locality					-0.8688	-1.2906	-0.1134
					(0.5572)	(0.9234)	(2.1112)
Fraction of residents working in construction in locality					-0.5909	-0.7994	-6.8096
					(1.1277)	(1.1626)	(2.5307)***
Fraction of residents working in retail trade in locality					1.2200	0.9100	4.2588
					(1.6264)	(1.7060)	(3.3857)
Fraction of households receiving international remittances in locality						0.9963	
						(1.3944)	
Observations	452	452	452	452	452	452	451

Urban locality dummy and island fixed effects included in all regressions.
Robust standard errors in parentheses, clustered at locality level.
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 3: Probability of mailing postcard. Marginal effects of probit regressions.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Proportion of international migrants (relative to residents) in locality	1.1091	1.0818	1.3132	0.9140	1.1349	0.9889	1.0639	0.9920	0.9012	1.0104
	(0.3863)***	(0.4054)***	(0.3708)***	(0.4334)**	(0.4159)***	(0.4066)**	(0.3813)***	(0.3680)***	(0.3780)**	(0.4157)**
Ratio of residents completing relative to residents not completing 9 years of schooling in locality	-0.0471									0.5362
	(0.2704)									(0.3314)
Ratio of residents completing relative to residents not completing 12 years of schooling in locality		-0.3184								-2.0897
		(0.4014)								(0.7537)***
Ratio of residents completing relative to residents not completing 15 years of schooling in locality			1.8460							6.1358
			(1.1037)*							(1.9907)***
Perceived corruption in health sector				0.0381						0.0150
				(0.0147)***						(0.0182)
Perceived corruption in education sector					0.0382					0.0364
					(0.0154)**					(0.0191)*
Confidence in postal system						-0.0144				-0.0061
						(0.0263)				(0.0288)
Waits to walk by postbox							-0.0366			-0.0195
							(0.1955)			(0.2044)
Gives (taxi) driver to post							0.1933			0.0552
							(0.1696)			(0.2303)
Gives to family member to post							0.0884			-0.0237
							(0.1390)			(0.1515)
Gives to mailman							0.3767			
							(0.2607)			
Goes to postbox on purpose							0.0945			0.0180
							(0.1167)			(0.1287)
Time distance to postbox								-0.0078		-0.0128
								(0.0149)		(0.0219)
Comfort in posting mail									0.0119	0.0358
									(0.0130)	(0.0251)
Observations	452	452	452	426	400	435	451	443	445	363

All regressions include same controls as baseline regression in column (5) of Table 2.
Robust standard errors in parentheses, clustered at locality level.
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 4: Probability of mailing voting postcard in columns (1)-(7). Probability of self-reported own demand for accountability in columns (8)-(9), scaled 1-7. Marginal effects of probit estimates in columns (1)-(7). Ordered probit estimates in columns (8)-(9).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Proportion of international migrants to Portugal (relative to residents) in locality	1.1210 (1.0271)	0.5435 (1.1214)	0.6185 (1.3669)	0.7998 (1.1458)	0.6865 (1.0633)	0.1818 (1.2 26)	0.2358 (1.2 29)	-3.0466 (2 .3 58 8)	-0.3748 (2 .4 08 1)
Proportion of international migrants to USA (relative to residents) in locality	2.7384 (0.8777)***	2.6239 (1.0761)**	2.6069 (1.0271)**	2.5595 (1.1184)**	2.6833 (0.9900)***	2.3141 (1.1519)**	3.1322 (1.1275)***	11.0254 (2.1924)***	12.6180 (1.6359)***
Ratio of residents completing relative to residents not completing 9 years of schooling in locality			-0.0343 (0.3374)						
Ratio of residents completing relative to residents not completing 12 years of schooling in locality				-0.3994 (0.3812)					
Ratio of residents completing relative to residents not completing 15 years of schooling in locality					1.1284 (1.0349)				
Perceived corruption in health sector						0.0372 (0.0148)**			
Perceived corruption in education sector							0.0390 (0.0157)**		
Controls Included	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Observations	452	452	452	452	452	426	400	451	451

All regressions include same controls as baseline regression in column (5) of Table 2.
Robust standard errors in parentheses, clustered at locality level.
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 5: Probability of mailing voting postcard in columns (1)-(7). Probability of self-reported own demand for accountability in columns (8)-(9), scaled 1-7. Marginal effects of probit estimates in columns (1)-(7). Ordered probit estimates in columns (8)-(9).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Proportion of current international migrants to Portugal (relative to residents) in locality	2.0057	0.9979	0.8934	0.9949	1.8130	0.7794	0.9772	-4.2651	-2.0208
	(1.1713)*	(1.3858)	(1.4444)	(1.3717)	(1.4379)	(1.5497)	(1.5515)	(3.2703)	(2.9193)
Proportion of current international migrants to USA (relative to residents) in locality	0.9286	0.0938	0.4789	0.0001	0.8021	-1.2650	0.9654	4.5386	6.9932
	(2.1526)	(3.0738)	(3.0037)	(3.1214)	(2.8120)	(3.8085)	(3.3864)	(7.2504)	(7.0402)
Proportion of international return migrants to Portugal (relative to residents) in locality	-4.8152	-4.9271	-6.0974	-4.0434	-6.6494	-7.0375	-5.8158	-4.4922	0.9119
	(2.4159)**	(2.8707)*	(3.6964)*	(3.3599)	(2.4733)***	(3.5251)**	(3.4314)*	(12.3565)	(12.8589)
Proportion of international return migrants to USA (relative to residents) in locality	4.5445	5.0953	4.7343	5.1888	4.2942	5.7620	5.0397	19.7322	19.8166
	(2.5979)*	(2.3956)**	(2.4130)**	(2.4798)**	(2.3635)*	(2.7759)**	(2.5711)**	(6.9132)***	(7.1887)***
Ratio of residents completing relative to residents not completing 9 years of schooling in locality			0.1610						
			(0.3662)						
Ratio of residents completing relative to residents not completing 12 years of schooling in locality				-0.2466					
				(0.3932)					
Ratio of residents completing relative to residents not completing 15 years of schooling in locality					2.0197				
					(0.8948)**				
Perceived corruption in health sector						0.0375			
						(0.0153)**			
Perceived corruption in education sector							0.0370		
							(0.0162)**		
Controls Included	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Observations	452	452	452	452	452	426	400	451	451

All regressions include same controls as baseline regression in column (5) of Table 2.
Robust standard errors in parentheses, clustered at locality level.
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 6: Descriptive statistics for survey respondents in areas with strong migration to Portugal and in areas with strong migration to the United States.

	Strong migration to Portugal	Strong migration to United States
Male	-0.0001	0.0726
	(0.0500)	(0.0732)
Age	1.18987	0.8926
	(1.4803)	(2.0500)
Individual labor income	-82.8924	19.6443
	(26.9850)***	(41.7703)
Number of children	0.1787	-0.3183
	(0.2490)	(0.2903)
Household asset ownership	0.1252	-0.0280
	(0.0317)***	(0.0564)
Trust in Oxford University	0.2551	-0.1278
	(0.1089)**	(0.1679)
Habit of posting	-0.3219	-0.2356
	(0.1967)	(0.2681)
Average private consumption expenditure per capita in locality	0.0077	0.0316
	(0.0058)	(0.0112)***
Fraction of residents working in agriculture in locality	0.0322	0.0017
	(0.0043)***	(0.0047)
Fraction of residents working in construction in locality	0.0227	-0.0181
	(0.0029)***	(0.0026)***
Fraction of residents working in retail trade in locality	-0.0057	-0.0119
	(0.0024)**	(0.0021)***
Fraction of households receiving international remittances in locality	0.0028	0.0279
	(0.0020)	(0.0044)***
Ratio of residents completing relative to residents not completing 9 years of schooling in locality	-0.0239	0.0886
	(0.0229)	(0.0479)*
Ratio of residents completing relative to residents not completing 12 years of schooling in locality	-0.0265	0.0448
	(0.0110)**	(0.0200)**
Ratio of residents completing relative to residents not completing 15 years of schooling in locality	-0.0097	0.0172
	(0.0031)***	(0.0058)***
Perceived corruption in health sector	0.4074	-0.1839
	(0.2149)*	(0.2659)
Perceived corruption in education sector	-0.0358	-0.3119
	(0.1845)	(0.2377)

Strong migration to a certain destination is defined as migrants to that destination representing at least 5% of the resident population. Table shows mean difference relative to areas where migration to the same destination is not strong. Robust standard errors in parentheses, clustered at locality level.
* significant at 10%; ** significant at 5%; *** significant at 1%

Table 7: Probability of mailing voting postcard in columns (1)-(2), (4)-(5) and (7)-(8). Probability of self-reported own demand for accountability in columns (3), (6) and (9). Instrumental variable estimates.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Proportion of international migrants (relative to residents) in locality	1.0298	1.4380	1.8467						
	(0.3895)***	(0.3472)***	(1.0169)*						
Proportion of international migrants to Portugal (relative to residents) in locality				-1.0262	-0.4735	-0.3474			
				(1.8587)	(1.5247)	(2.8333)			
Proportion of international migrants to USA (relative to residents) in locality				2.7575	3.3261	7.7153			
				(0.9659)***	(0.9731)***	(1.5838)***			
Proportion of current international migrants to Portugal (relative to residents) in locality							1.2976	1.6291	0.7949
							(9.0557)	(1.4478)	(2.4863)
Proportion of current international migrants to USA (relative to residents) in locality							3.3171	-0.6921	4.4871
							(5.6915)	(5.8877)	(6.7337)
Proportion of international return migrants to Portugal (relative to residents) in locality							-2.7566	-4.8785	-0.8931
							(11.2768)	(3.6941)	(8.3697)
Proportion of international return migrants to USA (relative to residents) in locality							1.9758	4.9559	9.6918
							(3.6264)	(3.2493)	(4.8695)**
Instrument Set	A	B	B	A	B	B	A	B	B
F-Statistics on Excluded Instruments in First Stage Regressions	394.1	28.1	28.2	9.5; 124.2	9.2; 52.3	9.2; 52.4	2.1; 11.2; 129.5; 378.1	13.9; 11.5; 180.7; 1156.5	13.9; 11.6; 178.2; 1169.1
Over-identification test - P-value	NA	0.18	0.42	NA	0.33	0.76	NA	0.15	0.38
Controls Included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	452	452	451	452	452	451	452	452	451

Instrument set A includes 5-year lagged regressors of interest. Instrument set B uses macroeconomic variables at destination weighted by 5-year lagged local migration stock size indicators, as described in main text. Controls in all specifications are the same as in baseline regression - column (5) of Table 2.
Robust standard errors in parentheses, clustered at locality level.
* significant at 10%; ** significant at 5%; *** significant at 1%