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MIGRANT NETWORKS AND POLITICAL PARTICIPATION IN MOZAMBIQUE

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Abstract

This paper examines the hypothesis that migration might enhance the demand for political improvements both by migrants and migrant's networks. We use individual-level survey and behavioral data that were collected during the 2009 elections in Mozambique to show that the proportion of migrants in a village improves the demand for political accountability not only through migrants themselves but also their networks. Whereas the interest in politics is driven by the amount of migrants in the geographical network, the transmission of democratic ideas seems to be fostered by regular contact with migrant households. These results are robust when controlling for self-selection.

Keywords: Migration; Effects of Emigration in Origin Countries; Political Institutions

1. Introduction

The economic importance of international migration has been increasing steadily in the recent decades. It is not only that the number of labor migrants has increased massively, but also that the financial flows generated by these migrants have been rising rapidly, often surpassing the national budget resources of many developing countries. As a result, a new strand of economics literature has been growing and examining the positive effects of emigration on the economic development of origin countries.

The positive effects of emigration on economic development may happen as a result of a number of mechanisms. First, remittances may provide the financial

resources to overcome credit constraints in sending countries, as described by Edwards and Ureta (2003) and Yang (2008). Second, return migration may bring not only financial resources, but also human capital, which may promote entrepreneurship and economic growth, as in Mesnard and Ravallion (2006) and Batista, McIndoe-Calder, and Vicente (2013). Third, migrant networks foster increased Foreign Direct Investment (FDI) and international trade, as found by Javorcik et al (2011) and Rauch and Trindade (2002). Fourth, Beine, Docquier and Rapoport (2008) and Batista, Lacuesta, and Vicente (2012) empirically supported the hypothesis of a "brain gain" rather than a "brain drain", i.e. the possibility that emigration promotes capital accumulation.

One area that has deserved less attention is the relationship between migration and the quality of political institutions. The importance of good political institutions for economic development is by now well established, as influentially described by Acemoglu, Johnson and Robinson (2005). However, empirical evidence on the impact of emigration on the quality of political institutions in origin countries is scarce, and there are only a few recent contributions.

Spilimbergo (2009) conducted one of the first studies on the effects of migration on democratization by examining the impact of foreign education acquired in democratic countries on democracy in student origin countries. He showed that migration may promote democracy but left the question unanswered as to which specific mechanisms underlie this effect.

Docquier et al. (2011) present cross-country evidence of the positive impact of unskilled emigration from developing countries to OECD countries on the institutional quality of origin countries by using aggregate measures of democracy and economic freedom. They find significant institutional gains from the "brain drain" over the long

run after considering incentive effects on human capital formation, and attribute these effects to an increase of the home country population's exposure to democratic values and norms.

These earlier empirical contributions use aggregate macroeconomic data and explore cross-country variation. Hence, they cannot distinguish between supply and demand forces nor capture in detail the mechanisms underlying the effects they identify. On the contrary, Batista and Vicente (2011) use individual-level variation from a tailored household survey, and behavioral data for a single country. This allows them to discriminate between the impact of return and current migrants on individual-level political attitudes. While this approach represents an improvement over earlier work in the sense that it uses micro data to learn more about the impact of migration on the quality of political institutions, as well as pointing towards return migration as the driving force for these effects, it would be important to learn more precisely about how individual-level relationships with migrants affect the demand for political institutions. That is the main objective of this paper.

We focus on the hypothesis that international migration raises the level of information about political processes of voters in origin countries through a greater exposure to democratic values and norms. This increase in the information level will affect the beliefs of voters and therefore change their political attitudes and political participation. We assume that this effect will not only occur for return migrants, but also trigger peer effects - thus influencing the social network of current and return migrants, although these effects will be potentially different.

The diffusion effect of political values through social networks has been previously investigated by Fafchamps, Vaz and Vicente (2012), who showed that

increasing the political literacy of experiment participants not only influences targeted, but also untargeted individuals' electoral behavior - where "untargeted" individuals did not receive civic education during a randomized control trial.

To test our hypothesis that migration may improve information, and thereby political participation and the quality of political institutions, and whether this process happens via social networks, we estimate a heterogeneous reinforcement effect model. If an individual is connected to one or more migrants in some way this will be captured in our econometric model – the estimation model encompasses different ways through which individuals may be connected to migrants, i.e. different types of networks. The estimated network reinforcement effects are then tested by examining whether the effect on political participation is larger for more connected individuals.

Using detailed network and behavioral data from Mozambique, we are able to measure the effect of social and geographical networks of migrants – both return and current migrants – on the quality of political institutions in their home country. Our dataset contains information on the characteristics of migrants and home country residents, on the political attitudes and political participation of residents in the countries of origin of migrants, and detailed data on the existence of connections and relationships between migrants and residents. Differentiating between intensity levels of networks (i.e. differentiating between family ties, frequent chatting, and geographical proximity) and individual characteristics, we can include heterogeneous effects in our estimations, and study in detail individual-level effects.

Political outcomes of interest in this paper are measured by survey and behavioral responses concerning the interest in political processes, democratic preferences, and political participation. To evaluate in detail the different mechanisms

of migration and their channels, we use different measures of migration. First, we simply look at whether or not each respondent's household has at least one member with migration experience. Second, we examine the degree of connectedness between the respondent and migrants within the respondents' network. We differentiate between geographical networks, i.e. how many households with at least one migrant in the family exist in the respondent's village, family networks, i.e. the proportion of family members with migration experience within this network, and chatting networks, i.e. the proportion of migrant households the respondent household regularly chats with.

We estimate our model using ordinary least squares, controlling for individual and geographical effects. Nevertheless, we cannot exclude a self-selection bias if a respondent's migration decision is correlated with his political attitudes. If this were the case, then our explanatory variables would be correlated with the error term due to a simultaneity problem and our results will suffer from endogeneity. As the migration experience (the 'migration treatment') is not randomly assigned to survey respondents, we thus could not determine the direction of causality between migration and political attitudes. We address this potential endogeneity bias by using instrumental variables that exploit 'quasi-natural experiments' given by natural catastrophes.

Our results confirm the findings by Batista and Vicente (2011) that the proportion of migrants in a village is correlated with a behavioral measure of the demand for political accountability. By offering survey respondents the possibility to send a text message with suggestions for policy priorities during the president's mandate, we interpret the actual action of doing so as a measure of political participation. Our estimates suggest that this measure might be related to the significantly different democratic values of migrants, and to their increased interest in

political issues. We find that this not only holds for the respondents with migration experience themselves but also observe an indirect effect on individual survey respondents through their networks. Whereas the interest in political issues is mainly driven by the amount of migrants in the geographical network, the transmission of democratic ideas seems to be fostered if respondents are in regular, intense contact with migrant households – either through regular chatting or through family relations. These results are robust when using instrumental variables controlling for self-selection.

The remainder of the paper is organized as follows. Section 2 presents the country context under which the empirical part of this study was carried out. Section 3 presents a theoretical framework to model how migratory experiences of the individual or others in his network may influence his political attitudes. Next, Section 4 proposes an econometric model and estimation strategy for the effects of interest. Section 5 follows with an introduction to the dataset and its descriptive statistics. Finally, Section 6 presents the empirical results and Section 7 concludes.

2. Country Context: Mozambique

Mozambique is a country in Eastern Africa, considered to be one of the poorest countries in the world with a GDP per capita of only 1.020$PPP in 2012.[1] Despite its high growth rates of 4.791% on average between 1980 and 2012, Mozambique is still ranking on place 185 out of 187 countries in the Human Development Index.[2]

After its independence from Portugal in 1975, as a result of ten years of war, Mozambique was led by the independence movement FRELIMO (Frente de Libertação de Moçambique) under a single-party, socialist regime. Only two years after

[1] World Bank.
[2] Mozambique's HDI actually declined between 1980 and 2012 by -0.7% to 0.327, UNDP (2013).

independence had been negotiated, the country suffered a civil war led by RENAMO (Resistência Nacional Moçambicana), that was mainly supported by Apartheid South Africa and Rhodesia (now Zimbabwe). With the end of the cold war and apartheid collapsing, FRELIMO and RENAMO started first negotiations that resulted in a new constitution allowing for a multi-party system, and a peace treatment being signed in 1992.

3. Theoretical Framework

This paper focuses on changes in political attitudes and participation due to migration, depending on the specific characteristics of the relationship between migrants and their networks – be it through family relations, regular chatting or just the geographical proximity to somebody with migration experience. Following the traditional literature on electoral participation, the decision to participate in political processes can be formalized, as summarized by Dhillon and Peralta (2002), by modeling political participation as the outcome of an expected cost-benefit analysis. We assume that an individual *i* takes an action vector x_i (for example casting a vote, reading the newspaper, gathering information about political parties) to maximize its payoff function:

$$max_{x_i} E_{\Omega_i} U(G(x_i, x_{-i}), x_i) - cx_i \qquad (3.1)$$

where $G(x_i, x_{-i})$ is the outcome of the electoral process (that can be discounted by the perceived likelihood that one's vote will make a difference), x_{-i} is the combined action of all individuals other than *i,* Ω_i is the information set available to the individual, and cx_i is the cost of taking the action. The individual therefore maximizes its expected utility of taking a certain action given the individual's action and the action of

everybody else. The vector x_i is allowed to enter the utility function independently from the voting process G to reflect non-instrumental motivations. We can thereby include the possibility that some individuals might participate in political processes not because they actually behave according to their interest in politics but because of social pressure or conformity.

The solution of the maximization problem yields that the individual's expected payoff has to be at least as high as the cost of action so that he/she is indifferent between participating or not. In this dataset the cost can be reflected for example by the monetary cost of sending the text message but also by the time needed to get to the next village to obtain the necessary information about elections.

$$E_{\Omega_i}\left[\frac{\partial U}{\partial G}\frac{\partial G}{\partial x_i}+\frac{\partial U}{\partial x_i}\right]=c \qquad (3.2)$$

If migration changes the information set Ω_i available to the individual so that the voter has a better understanding of the the election process or values democratic processes more, then the left-hand term $E_{\Omega_i}\left[\frac{\partial U}{\partial G}\frac{\partial G}{\partial x_i}+\frac{\partial U}{\partial x_i}\right]$ will increase. Similarly, the left-hand term will increase if utility from non-instrumental motivations increases as a higher fraction of migrants (with higher democratic values) lives close to the individual. If the latter is the case, then there exists a diffusion effect for non-migrants (i.e. the political attitudes of the migrant are passed over to its peers) or a reinforcement effect for return migrants (i.e. the migrant's own experience is intensified if shared with other migrants in some way). As this paper focuses on network effects, individual diffusion effects (i.e. the mechanics how political ideas are passed over from one individual to another) are not analyzed in detail. Nevertheless, the network effects caused by current migrants reflect the idea of diffusion effects.

4. Estimation Strategy

To test our hypotheses, we build an econometric model based on the theoretical framework described in the previous section. The relationship between emigration and political attitudes is estimated for three different outcome variables that reflect the respondents' interest for politics, their democratic values, and their demand for political accountability. The voting behavior (or more generally political participation) can be estimated with the following latent variable model:

$$V_i = 1(V_i^* \geq 0) \qquad (4.1)$$

$$V_i^* = \alpha_i + \beta_i M_i + \gamma_i \frac{1}{N} \sum_{j \neq i} q_{ij} + \delta_i X_i + \varepsilon_i \qquad (4.2)$$

According to the model, the respondent will vote (or participate) if the net expected benefit from voting, V_i^*, is non-negative. The net expected benefit is influenced by the individual's migration experience, denoted by the dummy variable M_i, and the fraction of migrants in the respondent's network, $\frac{1}{N} \sum_{j \neq i} q_{ij}$, as well as by a vector of individual and geographical characteristics X_i. The form of the network variable depends on the specific network type under evaluation – either the geographical, the chatting or the kinship network. Variable q_{ij} indicates whether or not two respondents live in the same EA, regularly chat with each other, or have a family relationship, respectively, and if respondent *j* is a migrant (or stems from a household with a current migrant).

To further understand which determinants of political attitudes are influenced by a migrant's experiences, we are not only interested in the demand for political accountability but also in the respondent's interest for politics, and his/her democratic values. To estimate these effects we define y_i as a measure of political interest or

democratic values obtained through survey questions using Likert scales on different statements on democracy and interest in politics as described in detail in the next section. Following a similar estimation strategy as above we can estimate the model given below:

$$y_i = \alpha_i + \beta_i M_i + \gamma_i \frac{1}{N} \sum_{j \neq i} q_{ij} + \delta_i X_i + \varepsilon_i \qquad (4.3)$$

The degree of connectedness with migrants is given by the fraction of migrants connected with individual i over the total number of sampled neighbors. Coefficient γ_i then indicates how the degree of connectedness with migrants affects the outcome of political attitudes. Note that we differentiate between the total effect of migration and a more detailed definition of the respective networks. The first specification includes both current and return migrants. This implies that the effect of the fraction of migrants in a respondent's network consists of direct effects through return migrants and indirect effects through current migrants. In the second specification we differentiate between the network effects from households with current migrants, and the network effects of directly talking with return migrants. This differentiation allows us to explore secondary effects: the effect of a current migrant through a third person that lives not in the household of a respondent but is part of the respondent's network.

Our estimation model further includes a vector of individual and locality specific controls, X_i, including demographic controls such as age or schooling years as well as household specific characteristics as for example access to information schemes as radios, computers or TVs. At the locality level, we control for the turnout in the 2004 elections as these might indicate a higher level of political participation in general, independently from the fraction of migrants in a village. We also include province fixed effects in all our regressions.

We first estimate our model by using ordinary least squares as other models such as ordinal logit or probit, run as robustness checks, yielded the same results. As stated in the previous section, migration might be correlated with an individual's political attitudes if the decision to migrate directly depends on whether or not the individual is satisfied with the political situation in the country of origin. Even if we control for self-selection biases due to attained education as proposed in a wide range of literature on 'brain gain' effects, we still need to be concerned with selection biases due to potential simultaneity. In this instance, we cannot determine whether migration causes a change in political attitudes or rather the political attitudes lead a person to emigrate. This implies that our explanatory variable is correlated with the error term and that we face endogeneity problems. For this reason, we estimate our regressions with instrumental variables to tackle this issue. This strategy allows us to identify sources of variation that cannot possibly be determined by our outcome variable (political attitudes), nor be correlated with other variables affecting the outcome of interest. The instrumental variable is only correlated with our independent variable of interest, and thereby correlated with the dependent variable of interest only indirectly through the variable of interest.

5. Data and Descriptive Statistics

The household survey data used in this paper was collected in Mozambique from mid-September until mid-October around the 2009 elections by the CSAE at the University of Oxford. The four provinces covered by the survey are Cabo Delgado, Zambezia, Gaza and Maputo-Province. The survey's sampling framework was the 2004 electoral map of the country. Two-stage clustered representative sampling - first on

provinces, then on enumeration areas (EA) – was used. The data set contains a total of 161 EAs – including 1763 respondents, approximately 11 per enumeration area. The interviews targeted the household head or his/her spouse and were conditional on 'having access to a cell phone' to receive or send messages (this included having access to a neighbor's or family member's phone). This condition was necessary for our behavioral measure on the demand for political accountability as it required the ability to send a text message.

5.1 Descriptive Statistics

To reflect the importance and magnitude of migration in Mozambique, Table 1 illustrates the percentage of households with migrants in the data set. It shows that almost 33% of all households have at least one migrant. This increases to 53.49% for the Southern Provinces (Maputo and Gaza) and decreases to 11.71% in the Northern Provinces (Zambezia and Cabo Delgado). Around 16% of all households have at least one current migrant – this number is not representative for all current migrants living outside of Mozambique as the dataset does not provide any information on current migrants that left the country together with their whole families. The households with at least one return migrant make up for 23.03% of all households in the dataset.

5.2 Description of Variables of Interest

Our outcome variables are concerned with measuring the effect of migration and migrant's networks on political attitudes and behavior – looking in particular at variables such as interest in political issues, democratic values and political behavior, reflecting the demand for political accountability.

To measure an individual's interest in political issues we asked the respondent to indicate, on a Likert scale from 1 to 4, the level of interest in public matters concerning

politics and the government, with 1 having no interest at all and 4 being very interested. As the survey was conducted around the 2009 presidential, national and provincial elections, we are also able to differentiate between the interest for these elections separately. Nevertheless, as the results are consistent for all four questions we opt to only show the first outcome on the general interest in political issues. We furthermore asked for the preferences towards single- or multi-party systems by letting respondents agree or disagree with the statement that only one party should rule. A negative response (i.e. disagreement) therefore suggests a higher preference for more democratic systems. To obtain an actual behavioral measure we asked respondents to send a text message suggesting policy priorities for the president's mandate. Each message implied a small cost (for sending the message) therefore representing a costly action and allowing to interpret the sending of a message as an incentive compatible measure of demand for political accountability. We estimate these measures while controlling for a wide range of individual characteristics, as well as province controls as mentioned above.

The main interest of this paper is the effect of migrant's networks on political measures - rather than the effect of migration on an individual's political attitudes. Nevertheless, we control for the effect of migration itself and include in our estimations whether or not one of the respondent's household members has migration experience. The network variables are constructed in such a way that we can differentiate between the network effect according to the social proximity of two respondents. This means that we not only evaluate the overall fraction of migrants in an individual's geographical network (i.e. within the same EA) but also the fraction of migrants in an individuals chatting and kinship network. The chatting and kinship networks indicate how many

individuals with whom the respondent regularly chats with or has a family relation are migrants. Within the respective network we distinguish between current and return migrants, whereas the relation with a return migrant is a direct one and the relation with a current migrant an indirect one via the household head or its spouse. The degree of connectedness with migrants is then calculated according to this classification as the number of migrants the household is connected to over the respondent's whole network, i.e. all the respondents of the respective enumeration area.

6. Empirical Results

In this section, the main empirical results are summarized. We will first look at the OLS estimates for the underlying determinants such as interest and democratic values before we turn to the final results showing how emigration may affects the demand for political accountability.

6.1 Ordinary Least Squares Estimations

6.1.1 Interest in Matters of Public Concern

The survey question under examination in this sub-section targeted the level of interest of the respondent for public matters, especially concerning political issues affecting daily life. Respondents were asked to indicate on a scale from one to four if they have no interest at all or are very interested.

The results for the direct individual effect of emigration on a respondent's interest together with the effect of a larger fraction of migrants in his/her geographical network are presented in column (1) of Table 2. Controlling for individual and locality effects there seems to be a strongly significant correlation between respondent's

migration experience and their interest for politics, as well as between individuals with a higher proportion of migrants in their network and the dependent variable. The first of the explanatory variables shows that having a migrant in the household, positively correlates with the respondent's interest in public matters – thus that migrants are more interested in political processes than non-migrants. This result confirms our expectations of a positive relation between migration and political attitudes in the sense that migrants are more aware of political processes. Nevertheless, our second variable suggests that this relation is actually negative and even larger for respondents that live in villages with more migrants, especially if these migrants are return migrants.

This result could be caused by a self-selection problem due to the fact that individuals that are less happy with the political situation or less convinced that any kind of effort (such as showing interest in politics) will have an effect on actual political outcomes, could be more likely to emigrate.[3] If we consider the problematic political past of Mozambique, it seems reasonable that we find this kind of effect for return migrants as these are more likely to have suffered from political unrest at the time of migration. Another explanation could be that a higher fraction of migrants in the village implies better 'outside options' in the sense that future migrants can benefit from the networks abroad that have been established by former (now return) migrants. They therefore have less incentives to actually care about political issues going on in their home country. This problem will be tackled in the next section by estimating the model

[3] Indeed, emigration may hurt the quality of home country institutions if it is considered to be a 'safety valve'. In this instance, unhappy individuals leave their home countries and this mechanism undermines the demand for political accountability and decreases the capacity to supply political institutions of a better quality - if those leaving are also the ones more capable of providing these services.

with instrumental variables. Note that we do not observe significant results for neither the chatting nor the kinship network (presented in columns (3) – (6)), but that the individual direct effect is consistently significant and positive as suggested.

6.1.2 Democratic Values: Preference for Single-Party Systems

The following section discusses the relation between migration and the preference of single-party systems over multi-party systems. Survey respondents were asked to declare how much they agree (or disagree) with the statement that just one party should be able to rule. Therefore, the signs have to be read in reverse, i.e. a negative coefficient suggests a higher preference for multi-party systems. The results are illustrated in the following Table 3.

As above, we find ambiguous results for the impact of migration. Households with at least one migrant clearly prefer multi-party systems, thus preferring more democratic systems. However, the sign changes for respondents that live in villages with a higher proportion of migrants. This seems to be especially strong if the survey respondent regularly chats to more return migrants. This result is puzzling as we would expect a reinforcement effect to be of the same direction as the actual direct effect of migration. Especially, as our results suggest that the fraction of current migrants is positively correlated with the preferences for multi-party systems. These findings propose again that there might be a self-selection bias in such a way that causes people with a worse opinion about democracy to leave their home country that does not apply to current migrants anymore. We furthermore find that these effects are statistically significant for family relatives suggesting that political attitudes in terms of democratic values are passed on to non-migrants if the two individuals have a relationship that allows them to regularly talk to each other. That this effect for current migrants only

occurs in the kinship network seems reasonable as regular chatting with migrants via non-family members is more difficult and probably also less likely. Despite the ambiguous signs our results thus suggest that an individual's attitude toward democratic norms is influenced by migration and that this not only holds for the migrant himself but also for its peers.

6.1.3 Demand for Political Accountability

This last section evaluates whether the above effects actually result in a higher demand for political accountability as suggested before. Table 4 summarizes the results for a measure of behavior where respondents could send a text message with suggestions for policy priorities during the president's mandate. If the respondent did send a text message, we interpret it as a higher demand for better political institutions and a greater political participation.

Our results suggest that there is a positive relation between the fraction of current migrants in a respondents geographical and chatting network but that there is no direct effect of migration itself. Again, the fraction of return migrants seems to have a negative impact but we cannot exclude that this is not due to a selection bias.

6.2 Instrumental Variable Estimation

As described before, we might face a selection bias if individuals that are, for example, less interested in political issues opt to emigrate to another country more often than people with a higher interest. Especially for Mozambique the ongoing political instability, high corruption, and low level of democracy might affect people in their decision to leave the country. If this is the case, then our explanatory variable of interest is not exogenous anymore but might be correlated with the error term.

We therefore use instrumental variables to estimate the relationships stated above. As instruments we chose the exogenous variation given by the proximity to war centers during the independence and the civil war, as well as natural catastrophes such as storms, droughts or plagues affecting harvests or cattle that are often the livelihood of many families, as especially in rural areas there exist almost no income sources from salaried work. The dataset for the instrumental variables provides detailed data on catastrophes[4] in Mozambique on a district level, allowing for large variation between EAs.

Table 5 shows the results for a 2SLS estimation using the instruments discussed above - namely if there was a storm, drought or plague in the respondent's district after he/she turned 17, and the distance to war centers. The instruments behave well as they are strongly correlated with the regressors, and independent from the error term - which can be confirmed by their good performance in the weak identification test and the overidentification test using the Hansen J statistics. However, the instruments are not strong enough to show the combined effect, consisting of the individual direct effect and the network effect, as the different measures may be too correlated with each other to still provide the necessary correlation with each of the endogenous variables. Table 5 therefore illustrates the direct individual effect in column (1) and the respective network effects in column (2) to (4). We find that not only are our estimates significant and as expected positive for the direct migration effect but also that, using instrumental variables, we obtain significant positive results for our network variables as well.

Table 6 confirms these results for our measure of democratic values – the preference for multi-party systems. Even if instruments are performing slightly worse

[4] The data was obtained from the DesInventar database, a joint project of UNDP, UNISDR and LA RED.

compared to the above estimations in Table 5, we still find that our estimations are robust and now more consistent given that the selection bias has been circumvented. We find that using instrumental variables, our results confirm the hypothesis that migration increases the support for democratic ideas such as multi-party systems in all cases. The effect is found to be especially strong for the kinship network suggesting that personal relationships matter strongly for how those ideas will be passed on. This is consistent with our results from the OLS estimations supporting the ideas stated above that a close relationship, implying regular intense contact, with migrants is favorable for democratic ideas to be passed on.

Ultimately, Table 7 is summarizing the results for the instrumental variables estimation of our measure concerned with the demand for political accountability. We find our OLS results confirmed as the IV estimations suggest as well that there is a positive correlation between the fraction of migrants in an individual's network and his/her demand for political accountability. These results seem to confirm that political participation is increased if social pressure from peers is build through regular chatting with individuals that emigrated but also through the sheer presence of individuals with a higher demand for political accountability.

7. Concluding Remarks

This paper aimed at providing further insights on how, on an individual level, migration is correlated with political attitudes and participation. Despite a few existing studies conducting macroeconomic analysis on this relationship, it has been unclear what are the underlying mechanisms for a dispersion of democratic values and ideas. In this paper, we intended to answer a broad set of questions such as: Is it worth to send people abroad and then randomly bringing migrants back to their home countries? Should

scholarship schemes in developed countries support this? How much are peers affected by the migration experience of an individual? We seek to answer these questions by differentiating between different measures of political attitudes such as interest, opinions and actual participation.

Our results suggest that political ideas can be learned when people migrate to other countries and that the obtained values might be passed on to peers. Nevertheless, the actual outcome we are interested in – the increase in the demand for political accountability as an important factor of development and growth – only emerges if there is enough group pressure. Or, in other words, if political participation becomes a social norm and not only an idea learned abroad. The effects seem to be mainly driven by secondary effects from current migrants. Respondents that talk to more people with a current migrant in their household are more prone to show a higher demand for political accountability.

References

Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2005. "Institutions as a Fundamental Cause of Long-Run Growth." In *Handbook of Economic Growth,* ed. Aghion, Philippe, and Durlauff, Steven, Chapter 6. North-Holland.

Batista, Catia, Aitor Lacuesta, and Pedro Vicente. 2012. "Testing the "Brain Drain" Hypothesis: Micro Evidence from Cape Verde." *Journal of Development Economics*, Vol. 97 (1): pp. 32-45.

Batista, Catia, Tara McIndoe-Calder, and Pedro Vicente. 2012. "Return Migration and Entrepreneurship in Mozambique." *NOVAFRICA Working Paper*.

Beine, Michel, Frédéric Docquier, and Hillel Rapoport. 2008. "Brain Drain and Human Capital Formation in Developing Countries: Winners and Losers." *Economic Journal*, Royal Economic Society, Vol. 118 (528): pp. 631-652.

Dhillon, Amrita, and Susana Peralta. 2002. "Economic Theories of Voter Turnout." *Economic Journal*, 112, F332—F352.

Docquier, Frédéric, Elisabetta Lodigiani, Hillel Rapoport, and Maurice Schiff. 2011. "Emigration and Democracy." *IZA Discussion Paper No. 5496*.

Edwards, Alejandra, and Manuelita Ureta. 2003. "International Migration, Remittances and Schooling: Evidence from El Salvador." *Journal of Development Economics*, Vol. 75: pp. 429-461.

Fafchamps, Marcel, Ana Vaz, and Pedro Vicente. 2013. "Voting and Peer Effects: Experimenal Evidence from Mozambique." *NOVAFRICA Working Paper No. 3/2013.*

Javorcik, Beata S., Çağlar Özden, Mariana Spatareanu, and Cristina Neagu. 2011. "Migrant Networks and Foreign Direct Investment." *Journal of Development Economics*, Vol. 94: pp. 231-241.

Mesnard, Alice, and Martin Ravallion. 2006. "The Wealth Effect on New Business Startups in a Developing Economy." *Economica*, Vol. 73: pp. 367-392.

Rauch, James E., and Vitor Trindade. 2002. "Ethnic Chinese Networks in International Trade." *The Review of Economics and Statistics*, Vol. 84 (1): pp. 116-130.

Spilimbergo, Antonio. 2009. "Democracy and Foreign Education." *American Economic Review*, American Economic Association, Vol. 99 (1): pp. 528-43.

UNDP. 2013. "Human Development Report 2013: The Rise of the South." *United Nations Development Programme Publications*.

Yang, Dean. 2008. "International Migration, Remittances, and Household Income: Evidence from Migrants' Exchange Rate Stocks" *The Economic Journal*, Vol. 118: pp. 591-630.

Appendix

Table 1: *Household Characteristics: All Households (%).*

	All Provinces	Southern[1] Provinces	Northern[2] Provinces
	Migration Experience		
Households with at least one migrant	32.44	53.49	11.71
Households with at least one current migrant	15.77	29.37	2.36
Households with at least one return migrant	23.03	36.23	10.02

Source: Survey by Batista et al (2011)

[1]Southern Provinces: Maputo-Province & Gaza

[2]Northern Provinces: Zambezia & Cabo Delgado

Table 2: *OLS Regressions: Interest in Public Issues*

		Coefficients					
	Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Migrant Household	0.233***	0.229***	0.202***	0.201***	0.215***	0.215***
		(0.0626)	(0.0625)	(0.0629)	(0.0628)	(0.0628)	(0.0627)
Geo Network	Fraction of Migrants	-0.442***					
		(0.168)					
	Fraction of Return Migrants		-0.451**				
			(0.181)				
	Fraction of Current Migrants		-0.0676				
			(0.232)				
Chatting Network	Fraction of Migrants			0.371			
				(0.267)			
	Fraction of Return Migrants				0.115		
					(0.591)		
	Fraction of Current Mig. Hh				0.684		
					(0.422)		
Kinship Network	Fraction of Migrants					-0.0616	
						(0.369)	
	Fraction of Return Migrants						-0.373
							(0.915)
	Fraction of Current Mig. Hh						0.124
							(0.549)
	Observations	1560	1560	1560	1560	1560	1560
	Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
	Province Controls	Yes	Yes	Yes	Yes	Yes	Yes
	Turnout Control	Yes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses

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

Table 3: *OLS Regressions: Preference for Single Party Systems*

		Coefficients					
	Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Migrant Household	-0.257**	-0.249**	-0.246**	-0.258**	-0.222**	-0.231**
		(0.108)	(0.108)	(0.108)	(0.108)	(0.108)	(0.108)
Geo Network	Fraction of migrants	0.555*					
		(0.293)					
	Fraction of return migrants		0.291				
			(0.313)				
	Fraction of current migrants		0.603				
			(0.405)				
Chatting Network	Fraction of migrants			0.414			
				(0.479)			
	Fraction of return migrants				3.425***		
					(1.078)		
	Fraction of current mig Hh				-0.916		
					(-1.21)		
Kinship Network	Fraction of migrants					-0.545	
						(-0.82)	
	Fraction of return migrants						2.749*
							(1.65)
	Fraction of current mig Hh						-1.849*
							(-1.84)
	Observations	1456	1456	1456	1456	1456	1456
	Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
	Province Controls	Yes	Yes	Yes	Yes	Yes	Yes
	Turnout Control	Yes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses

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

Table 4: *OLS Regressions: Demand for Political Accountability*

		Coefficients					
	Variables	(1)	(2)	(3)	(4)	(5)	(6)
Geo Network	Migrant Household	-0.0311	-0.0313	-0.0415	-0.0411	-0.0380	-0.0366
		(0.0295)	(0.0292)	(0.0297)	(0.0296)	(0.0296)	(0.0295)
	Fraction of Migrants	-0.0971					
		(0.0789)					
	Fraction of Return Migrants		-0.278***				
			(0.0828)				
	Fraction of Current Migrants		0.270**				
			(0.105)				
Chatting Network	Fraction of Migrants			0.121			
				(0.113)			
	Fraction of Return Migrants				-0.197		
					(0.223)		
	Fraction of Current Mig. Hh				0.361**		
					(0.170)		
Kinship Network	Fraction of Migrants					0.0754	
						(0.150)	
	Fraction of Return Migrants						-0.227
							(0.340)
	Fraction of Current Mig. Hh						0.222
							(0.216)
	Observations	1048	1048	1048	1048	1048	1048
	Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
	Province Controls	Yes	Yes	Yes	Yes	Yes	Yes
	Turnout Control	Yes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses

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

Table 5: *IV Estimation: Interest in Public Issues*

	Coefficients			
Variables	(1)	(2)	(3)	(4)
Migrant Household	0.843***			
	(0.321)			
Migs in Geo Network		2.821***		
		(0.997)		
Migs in Chatting Network			4.647***	
			(1.537)	
Migs in Kinship Network				7.187***
				(2.437)
Individual Controls	Yes	Yes	Yes	Yes
Province Controls	Yes	Yes	Yes	Yes
Turnout Control	Yes	Yes	Yes	Yes
Instrumental Variables	Storm Birthyear&Plague	Birthyear&Drought Min Distance War	Birthyear&Drought Min Distance War	Birthyear&Drought Min Distance War
Observations	1560	1560	1560	1560
Weak Ident (K-P F)	25.255	22.197	42.081	38.569
Hansen J (P-value)	0.8835	0.7033	0.7986	0.7209

Standard errors in parentheses

* p<0.10, ** p<0.05, *** p<0.01

Table 6: *IV Estimation: Preference for Single-Party Systems*

	Coefficients			
Variables	(1)	(2)	(3)	(4)
Migrant Household	-5.108***			
	(0.760)			
Migs in Geo Network		-5.636***		
		(0.647)		
Migs in Chatting Network			-28.57***	
			(5.031)	
Migs in Kinship Network				-48.48***
				(9.108)
Individual Controls	Yes	Yes	Yes	Yes
Province Controls	Yes	Yes	Yes	Yes
Turnout Control	Yes	Yes	Yes	Yes
Instrumental Variables	Birthyear&Storm Birthyear&Plague	Birthyear&Storm Birthyear&Plague	Birthyear&Storm Birthyear&Plague	Birthyear&Storm Birthyear&Plague
Observations	1456	1456	1456	1456
Weak Ident (K-P F)	37.974	155.951	23.088	20.108
Hansen J (P-value)	0.9289	0.9697	0.3929	0.6382

Standard errors in parentheses
* p<0.10, ** p<0.05, *** p<0.01

Table 7: *IV Estimation: Demand for Political Accountability*

	Coefficient			
Variables	(1)	(2)	(3)	(4)
Migrant Household	0.301*			
	(0.159)			
Migs in Geo Network		0.455**		
		(0.226)		
Migs in Chatting Network			0.666*	
			(0.391)	
Migs in Kinship Network				1.068
				(0.678)
Individual Controls	Yes	Yes	Yes	Yes
Province Controls	Yes	Yes	Yes	Yes
Turnout Control	Yes	Yes	Yes	Yes
Instrumental Variables	Birthyear&Drought Birthyear&Plague	Birthyear&Drought Birthyear&Plague	Birthyear&Drought Birthyear&Plague	Birthyear&Drought Birthyear&Plague
Observations	1048	1048	1048	1048
Weak Ident (K-P F)	19.750	44.731	47.281	38.690
Hansen J (P-value)	0.6186	0.7756	0.2751	0.2117

Standard errors in parentheses
* p<0.10, ** p<0.05, *** p<0.01

A Work Project, presented as part of the requirements for the Award of a Masters Degree in Economics from the NOVA – School of Business and Economics

MIGRANT NETWORKS AND POLITICAL PARTICIPATION IN MOZAMBIQUE

Supplementary Appendix

Julia Seither
Student Number 576

A project carried out under the supervision of:

Prof. Cátia Batista

13th of December 2013

Part I
Tables

1 Descriptive Statistics

Table 1: *Summary Statistics, All Households*

Variables	Obs.	Mean	Std. Dev.	Min.	Max.
		Dependent Variables			
Favoring multi-party systems	1,586	3.56	1.80	1	5
Interest in public matters	1,708	2.89	1.09	1	4
Sending "open letter", %	1,147	17.52	38.03	0	100
		Explanatory Variable of Interest			
Migrant Households, %	1,763	32.44	46.83	0	100
Degree of connectedness within geographical proximity, %	1,763	33.26	26.89	0	100
Degree of connectedness within kinship network, %	1,763	2.75	8.13	0	70
Degree of connectedness within chatting network, %	1,763	4.59	10.96	0	70
		Household Head Characteristics			
Age, years	1,747	37.62	13.58	15	88
School duration, years	1,760	5.88	4.07	0	17
Gender, %	1,763	45.15	49.78	0	100
		Household Economic Characteristics			
HH expenditure, MZN per day	1,674	128.83	164.02	0	2,380.95
TV, PC or radio ownership, %	1,763	72.83	44.49	0	100
Frequency of religious activities	1,756	3.73	1.01	1	5

Source: Survey by Batista et al (2011)

2 OLS Outcome Tables

Table 2: *OLS Regressions: Interest in Public Issues*

		Coefficients					
	Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Migrant Household	0.233***	0.229***	0.202***	0.201***	0.215***	0.215***
		(0.0626)	(0.0625)	(0.0629)	(0.0628)	(0.0628)	(0.0627)
Geo Network	Fraction of Migrants	-0.442***					
		(0.168)					
	Fraction of Return Migrants		-0.451**				
			(0.181)				
	Fraction of Current Migrants		-0.0676				
			(0.232)				
Chatting Network	Fraction of Migrants			0.371			
				(0.267)			
	Fraction of Return Migrants				0.115		
					(0.591)		
	Fraction of Current Mig. Hh				0.684		
					(0.422)		
Kinship Network	Fraction of Migrants					-0.0616	
						(0.369)	
	Fraction of Return Migrants						-0.373
							(0.915)
	Fraction of Current Mig. Hh						0.124
							(0.549)
	Province Gaza	0.634***	0.620***	0.544***	0.537***	0.580***	0.576***
		(0.0893)	(0.0925)	(0.0896)	(0.0895)	(0.0898)	(0.0895)
	Province Zambezia	0.580***	0.613***	0.728***	0.731***	0.721***	0.723***
		(0.0957)	(0.0963)	(0.0793)	(0.0793)	(0.0792)	(0.0793)
	Province Cabo Delgado	0.752***	0.791***	0.903***	0.907***	0.897***	0.898***
		(0.0954)	(0.0961)	(0.0780)	(0.0782)	(0.0780)	(0.0780)
	Gender	-0.239	-0.235	-0.205	-0.206	-0.222	-0.221
		(0.236)	(0.237)	(0.237)	(0.237)	(0.237)	(0.237)
	Age	0.308***	0.308***	0.313***	0.314***	0.314***	0.313***
		(0.0544)	(0.0545)	(0.0545)	(0.0545)	(0.0545)	(0.0545)
	Age^2	0.0128	0.0122	0.0125	0.0126	0.0127	0.0127
		(0.00999)	(0.0100)	(0.0100)	(0.0100)	(0.0100)	(0.0100)
	Turnout 2004	-0.0000837	-0.0000768	-0.0000778	-0.0000785	-0.0000806	-0.0000813
		(0.000113)	(0.000113)	(0.000113)	(0.000113)	(0.000113)	(0.000113)
	Expenditure	0.0399***	0.0396***	0.0404***	0.0404***	0.0397***	0.0397***
		(0.00763)	(0.00763)	(0.00765)	(0.00765)	(0.00766)	(0.00766)
	Years of Schooling	-0.0000977	-0.0000967	-0.000116	-0.000118	-0.000116	-0.000116
		(0.000164)	(0.000164)	(0.000164)	(0.000164)	(0.000164)	(0.000164)
	Religious Activities	0.00185	0.00179	0.00475	0.00403	0.00737	0.00665
		(0.0261)	(0.0261)	(0.0261)	(0.0261)	(0.0261)	(0.0261)
	Access to Media	0.108*	0.113*	0.110*	0.113*	0.106*	0.108*
		(0.0613)	(0.0615)	(0.0615)	(0.0615)	(0.0614)	(0.0616)
	Constant	1.783***	1.750***	1.556***	1.553***	1.564***	1.564***
		(0.266)	(0.266)	(0.253)	(0.253)	(0.253)	(0.253)
	Observations	1560	1560	1560	1560	1560	1560

Standard errors in parentheses

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

Table 3: *OLS Regressions: Preference for Single Party Systems*

		Coefficients					
	Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Migrant Household	-0.257**	-0.249**	-0.246**	-0.258**	-0.222**	-0.231**
		(0.108)	(0.108)	(0.108)	(0.108)	(0.108)	(0.108)
Geo Network	Fraction of Migrants	0.555*					
		(0.293)					
	Fraction of Return Migrants		0.291				
			(0.313)				
	Fraction of Current Migrants		0.603				
			(0.405)				
Chatting Network	Fraction of Migrants			0.414			
				(0.479)			
	Fraction of Return Migrants				3.425***		
					(1.078)		
	Fraction of Current Mig. Hh				-0.916		
					(-1.21)		
Kinship Network	Fraction of Migrants					-0.545	
						(-0.82)	
	Fraction of Return Migrants						2.749*
							(1.65)
	Fraction of Current Mig. Hh						-1.849*
							(-1.84)
	Province Gaza	-0.625***	-0.653***	-0.586***	-0.551***	-0.517***	-0.504***
		(0.156)	(0.162)	(0.157)	(0.156)	(0.157)	(0.157)
	Province Zambezia	0.674***	0.671***	0.504***	0.491***	0.495***	0.483***
		(0.165)	(0.166)	(0.136)	(0.135)	(0.135)	(0.135)
	Province Cabo Delgado	-0.806***	-0.808***	-0.981***	-1.002***	-0.989***	-0.998***
		(0.162)	(0.164)	(0.132)	(0.132)	(0.132)	(0.132)
	Gender	0.149	0.141	0.142	0.111	0.103	0.108
		(0.407)	(0.407)	(0.408)	(0.406)	(0.408)	(0.407)
	Age	0.269***	0.269***	0.261***	0.255***	0.265***	0.265***
		(0.0932)	(0.0933)	(0.0932)	(0.0930)	(0.0933)	(0.0931)
	Age^2	-0.0217	-0.0215	-0.0217	-0.0216	-0.0211	-0.0225
		(0.0171)	(0.0171)	(0.0171)	(0.0171)	(0.0171)	(0.0171)
	Turnout 2004	0.000309	0.000308	0.000308	0.000305	0.000300	0.000317
		(0.000193)	(0.000193)	(0.000193)	(0.000192)	(0.000193)	(0.000193)
	Expenditure	0.0593***	0.0601***	0.0603***	0.0605***	0.0591***	0.0597***
		(0.0131)	(0.0131)	(0.0131)	(0.0131)	(0.0132)	(0.0131)
	Years of Schooling	0.000584**	0.000578**	0.000607**	0.000603**	0.000600**	0.000599**
		(0.000275)	(0.000275)	(0.000275)	(0.000274)	(0.000275)	(0.000274)
	Religious Activities	-0.0947**	-0.0963**	-0.104**	-0.105**	-0.0994**	-0.0967**
		(0.0448)	(0.0448)	(0.0449)	(0.0447)	(0.0448)	(0.0447)
	Access to Media	0.0588	0.0643	0.0628	0.0609	0.0537	0.0460
		(0.106)	(0.106)	(0.106)	(0.106)	(0.106)	(0.106)
	Constant	3.714***	3.731***	3.976***	3.997***	3.985***	4.006***
		(0.456)	(0.457)	(0.433)	(0.432)	(0.433)	(0.432)
	Observations	1456	1456	1456	1456	1456	1456

Standard errors in parentheses

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

Table 4: *OLS Regressions: Demand for Political Accountability*

		Coefficients					
	Variables	(1)	(2)	(3)	(4)	(5)	(6)
Geo Network	Migrant Household	-0.0311	-0.0313	-0.0415	-0.0411	-0.0380	-0.0366
		(0.0295)	(0.0292)	(0.0297)	(0.0296)	(0.0296)	(0.0295)
	Fraction of Migrants	-0.0971					
		(0.0789)					
	Fraction of Return Migrants		-0.278***				
			(0.0828)				
	Fraction of Current Migrants		0.270**				
			(0.105)				
Chatting Network	Fraction of Migrants			0.121			
				(0.113)			
	Fraction of Return Migrants				-0.197		
					(0.223)		
	Fraction of Current Mig. Hh				0.361**		
					(0.170)		
Kinship Network	Fraction of Migrants					0.0754	
						(0.150)	
	Fraction of Return Migrants						-0.227
							(0.340)
	Fraction of Current Mig. Hh						0.222
							(0.216)
	Province Gaza	0.118***	0.0957**	0.0891**	0.0799*	0.0977**	0.0958**
		(0.0415)	(0.0424)	(0.0429)	(0.0427)	(0.0429)	(0.0426)
	Province Zambezia	-0.0194	0.00529	0.0160	0.0195	0.0130	0.0153
		(0.0450)	(0.0448)	(0.0367)	(0.0367)	(0.0366)	(0.0367)
	Province Cabo Delgado	-0.0164	0.0116	0.0202	0.0259	0.0178	0.0193
		(0.0449)	(0.0447)	(0.0357)	(0.0358)	(0.0356)	(0.0357)
	Gender	-0.0441	-0.0508	-0.0273	-0.0225	-0.0318	-0.0347
		(0.106)	(0.106)	(0.107)	(0.106)	(0.107)	(0.107)
	Age	-0.000455	0.000150	0.000243	0.00203	0.000129	0.0000695
		(0.0251)	(0.0249)	(0.0251)	(0.0250)	(0.0251)	(0.0251)
	Age^2	0.0124***	0.0113**	0.0123***	0.0123***	0.0123***	0.0124***
		(0.00454)	(0.00452)	(0.00455)	(0.00454)	(0.00456)	(0.00455)
	Turnout 2004	-0.000149***	-0.000136***	-0.000147***	-0.000148***	-0.000147***	-0.000150***
		(0.0000508)	(0.0000506)	(0.0000508)	(0.0000508)	(0.0000510)	(0.0000509)
	Expenditure	0.00758**	0.00768**	0.00787**	0.00785**	0.00774**	0.00765**
		(0.00351)	(0.00349)	(0.00352)	(0.00352)	(0.00353)	(0.00352)
	Years of Schooling	0.0000821	0.0000762	0.0000799	0.0000804	0.0000817	0.0000811
		(0.0000822)	(0.0000817)	(0.0000822)	(0.0000821)	(0.0000823)	(0.0000822)
	Religious Activities	0.0263**	0.0250**	0.0262**	0.0253**	0.0271**	0.0262**
		(0.0120)	(0.0119)	(0.0120)	(0.0120)	(0.0119)	(0.0120)
	Access to Media	0.00331	0.0144	0.00479	0.00685	0.00346	0.00532
		(0.0279)	(0.0278)	(0.0279)	(0.0279)	(0.0279)	(0.0280)
	Constant	-0.167	-0.167	-0.222*	-0.225*	-0.218*	-0.218*
		(0.123)	(0.122)	(0.116)	(0.116)	(0.116)	(0.116)
	Observations	1048	1048	1048	1048	1048	1048

Standard errors in parentheses

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

3 Instrumental Variable Outcome Tables

Table 5: *IV Estimation: Interest in Public Issues*

	Coefficients			
Variables	(1)	(2)	(3)	(4)
Migrant Household	0.843***			
	(0.321)			
Migs in Geo Network		2.821***		
		(0.997)		
Migs in Chatting Network			4.647***	
			(1.537)	
Migs in Kinship Network				7.187***
				(2.437)
Province	0.389***	0.650***	0.333***	0.317***
	(0.0492)	(0.133)	(0.0302)	(0.0278)
Gender	0.288***	0.408***	0.329***	0.294***
	(0.0580)	(0.0685)	(0.0583)	(0.0618)
Age	0.0140	0.0159	0.0124	0.00568
	(0.0101)	(0.0112)	(0.0107)	(0.0107)
Age^2	-0.000100	-0.000107	-0.0000732	-0.00000524
	(0.000114)	(0.000124)	(0.000120)	(0.000119)
Turnout 2004	0.0477	-0.464	-0.159	-0.148
	(0.221)	(0.356)	(0.270)	(0.280)
Expenditure	-0.000239	-0.000359*	-0.000171	-0.0000937
	(0.000167)	(0.000206)	(0.000189)	(0.000194)
Years of Schooling	0.0370***	0.0318***	0.0442***	0.0480***
	(0.00758)	(0.00852)	(0.00842)	(0.00916)
Religious Activities	0.0166	0.0649*	-0.0150	-0.00422
	(0.0287)	(0.0385)	(0.0300)	(0.0309)
Access to Media	0.0780	0.0869	0.153**	0.131*
	(0.0657)	(0.0726)	(0.0698)	(0.0718)
Constant	0.836**	-0.475	1.138***	1.305***
	(0.334)	(0.715)	(0.294)	(0.286)
Instrumental Variables	Storm Birthyear&Plague	Birthyear&Drought Min Distance War	Birthyear&Drought Min Distance War	Birthyear&Drought Min Distance War
Observations	1560	1560	1560	1560
Weak Ident (K-P F)	25.255	22.197	42.081	38.569
Hansen J (P-value)	0.8835	0.7033	0.7986	0.7209

Standard errors in parentheses

* p<0.10, ** p<0.05, *** p<0.01

Table 6: *IV Estimation: Preference for Single-Party Systems*

	Coefficients			
Variables	(1)	(2)	(3)	(4)
Migrant Household	-5.108***			
	(0.760)			
Migs in Geo Network		-5.636***		
		(0.647)		
Migs in Chatting Network			-28.57***	
			(5.031)	
Migs in Kinship Network				-48.48***
				(9.108)
Province	-0.868***	-0.924***	-0.547***	-0.459***
	(0.121)	(0.0989)	(0.0883)	(0.0799)
Gender	0.548***	0.209*	0.390**	0.639***
	(0.145)	(0.108)	(0.173)	(0.207)
Age	-0.0364	-0.0293	-0.0372	0.0104
	(0.0282)	(0.0196)	(0.0324)	(0.0347)
Age^2	0.000494	0.000368*	0.000464	-0.0000442
	(0.000326)	(0.000221)	(0.000368)	(0.000394)
Turnout 2004	1.640***	1.715***	2.648***	3.002***
	(0.569)	(0.439)	(0.821)	(0.981)
Expenditure	0.00165***	0.00102***	0.00118*	0.000711
	(0.000467)	(0.000335)	(0.000631)	(0.000679)
Years of Schooling	0.00982	0.0400***	-0.0220	-0.0561**
	(0.0190)	(0.0138)	(0.0222)	(0.0254)
Religious Activities	-0.175**	-0.170***	0.0627	-0.00170
	(0.0744)	(0.0549)	(0.0870)	(0.103)
Access to Media	0.281	0.0219	-0.354	-0.203
	(0.171)	(0.123)	(0.222)	(0.252)
Constant	7.307***	7.647***	5.617***	4.479***
	(0.856)	(0.683)	(0.881)	(0.877)
Instrumental Variables	Birthyear&Storm	Birthyear&Storm	Birthyear&Storm	Birthyear&Storm
	Birthyear&Plague	Birthyear&Plague	Birthyear&Plague	Birthyear&Plague
Observations	1456	1456	1456	1456
Weak Ident (K-P F)	37.974	155.951	23.088	20.108
Hansen J (P-value)	0.9289	0.9697	0.3929	0.6382

Standard errors in parentheses

* p<0.10, ** p<0.05, *** p<0.01

Table 7: *IV Estimation: Demand for Political Accountability*

	Coefficient			
Variables	(1)	(2)	(3)	(4)
Migrant Household	0.301*			
	(0.159)			
Migs in Geo Network		0.455**		
		(0.226)		
Migs in Chatting Network			0.666*	
			(0.391)	
Migs in Kinship Network				1.068
				(0.678)
Province	0.0486**	0.0708**	0.0210*	0.0181
	(0.0237)	(0.0322)	(0.0125)	(0.0118)
Gender	-0.0134	0.0122	-0.00353	-0.0109
	(0.0269)	(0.0265)	(0.0251)	(0.0256)
Age	0.0137***	0.0131***	0.0119***	0.0105***
	(0.00429)	(0.00409)	(0.00394)	(0.00401)
Age^2	-0.000166***	-0.000155***	-0.000144***	-0.000130***
	(0.0000452)	(0.0000417)	(0.0000404)	(0.0000413)
Turnout 2004	0.00636	-0.0211	0.00885	0.00619
	(0.115)	(0.117)	(0.113)	(0.116)
Expenditure	-0.00000329	0.0000445	0.0000564	0.0000747
	(0.000104)	(0.0000896)	(0.0000917)	(0.0000908)
Years of Schooling	0.00826**	0.00695**	0.00923**	0.0102**
	(0.00375)	(0.00353)	(0.00388)	(0.00428)
Religious Activities	0.0323***	0.0352***	0.0227**	0.0250**
	(0.0118)	(0.0117)	(0.0108)	(0.0108)
Access to Media	-0.00355	0.00231	0.0103	0.00473
	(0.0284)	(0.0276)	(0.0278)	(0.0275)
Constant	-0.458***	-0.567***	-0.295***	-0.262**
	(0.157)	(0.194)	(0.110)	(0.108)
Instrumental Variables	Birthyear&Drought	Birthyear&Drought	Birthyear&Drought	Birthyear&Drought
	Birthyear&Plague	Birthyear&Plague	Birthyear&Plague	Birthyear&Plague
Observations	1048	1048	1048	1048
Weak Ident (K-P F)	19.750	44.731	47.281	38.690
Hansen J (P-value)	0.6186	0.7756	0.2751	0.2117

Standard errors in parentheses

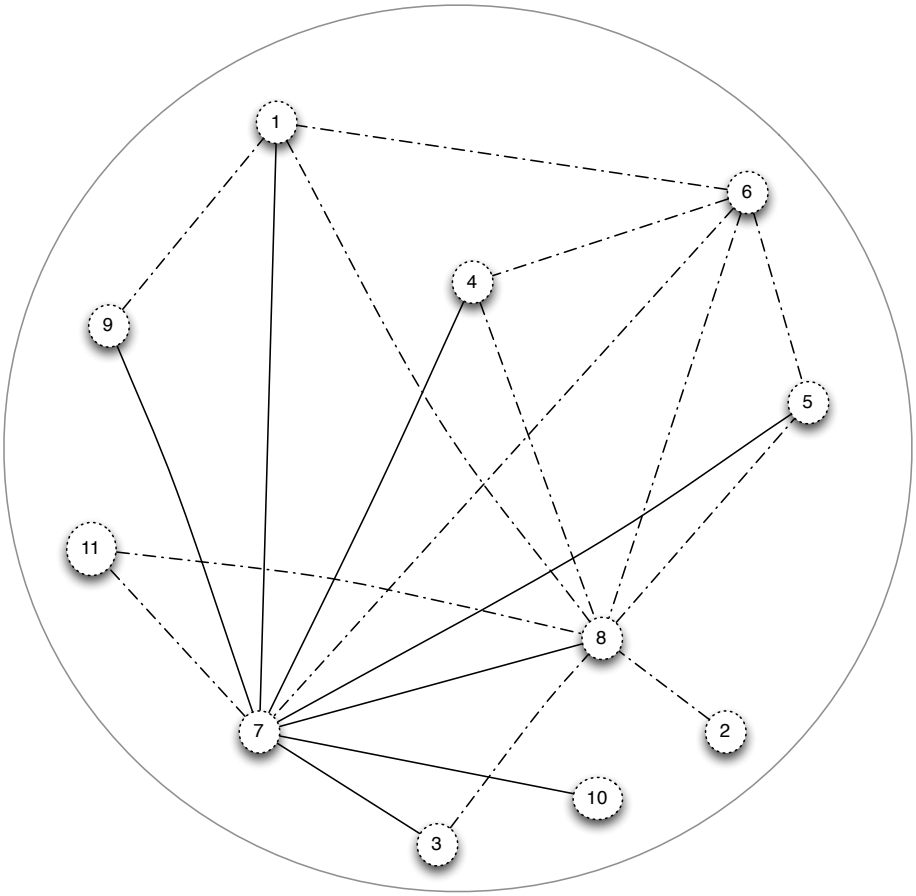
* p<0.10, ** p<0.05, *** p<0.01

Part II
Figures

Figure 1: *Political Map of Mozambique*

Source: UN Cartographic Section

Figure 2: *Example of Network Relations for one EA*



Kinship Relation: —
Chatting Relation: – · –
Source: Author's Illustration