UNITED NATIONS UNIVERSITY
UNU-WIDER

WIDER Working Paper 2016/78

Discriminatory attitudes and indigenous language promotion

Challenges and solutions

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June 2016

United Nations University World Institute for Development Economics Research
wider.unu.edu

Abstract: In this paper, we analyse which channels influence individual preferences concerning the choice of the official language in Zambia. We develop a theoretical framework, which is tested using data on elicited beliefs about the effects of changes in Zambia's language policy on schooling outcomes, income, and social cohesion. In general, support for the use of local languages in education and government administration is low. We find that the perceived ease of learning in a local language compared to English, and economic expectations in terms of effects on income are important determinants of the preference for the use of a local language as official language. Individuals in fear of discrimination or disadvantages arising from the use of indigenous language are less likely to prefer these as official languages. However, while we do not find a systematic bias caused by the (lack of) information about other countries' language policies, we do find that general knowledge of language policies is remarkably low. Our reading of the evidence is that individuals conflate knowledge with the medium of knowledge, and therefore prefer English as an official language despite its relative distance to their own language(s).

Keywords: language policy, Zambia, discrimination, beliefs, education policy, minorities, fractionalization, local languages

Acknowledgements: We would like to thank the participants of the Development lunch seminar at Goethe University Frankfurt, David Laitin, and the discussant Subha Mani, and other participants at the UNU-WIDER workshop in Helsinki for their valuable feedback. A special thank you goes to Kenneth Mwantalasha for helping coordinate the data collection, as well as to Ania Garcia Marin and Emmy Lindstam for assistance with the data collection and entry. We acknowledge support from UNU-WIDER and Christopher Rauh acknowledges support from INET Institute Cambridge.

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This study has been prepared within the UNU-WIDER project on 'Discrimination and Affirmative Action: What have we learnt so far?', which is part of a larger research project on 'Disadvantaged Groups and Social Mobility'.

Information and requests: publications@wider.unu.edu

ISSN 1798-7237 ISBN 978-92-9256-121-5

Typescript prepared by the authors and Liisa Roponen.

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The Institute is funded through income from an endowment fund with additional contributions to its work programme from Denmark, Finland, Sweden, and the United Kingdom.

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I. Introduction

All countries in Sub-Saharan Africa with a colonial past are characterized by the use of the former colonial language as the official language of the country. Official language refers to the primary language used in education, to conduct government business and administration including the functioning of higher courts, and the principal language of business and commerce in the country. The primacy of the former colonial languages in formal domains is highlighted by the fact that no country in Sub-Saharan Africa provides secondary schooling or higher education in a local language. In fact, with the exception of Tanzania and Ethiopia, no country even offers the entire span of primary schooling in a local language (Albaugh, 2014).

Language is the medium through which individuals communicate, acquire human capital, and work with others. It is the means through which societies transmit culture and institutions, as well as import new ideas and technology. The choice of official language has important implications for which individuals/groups are empowered or disenfranchised in society (Weinstein, 1982). Today all nations which are classified as upper middle or high income by the World Bank rely on the use of languages spoken widely on a day-to-day basis in communities, and belonging to a majority linguistic group in the country, to act as official. The negative impact of language on education attainment and student learning, health, and economic development in Sub-Saharan Africa has been highlighted primarily by linguists and educationalists (Alexander, 1999; Bamgbose, 1976, 1991; Brock-Utne, 2002; Djité, 2008; Mazrui, 2000; Wolff, 2000), though credible quantitative evidence on the effects of choosing a non-indigenous language on human capital formation and socioeconomic development remains scarce.

In recent years there has been a growing interest in trying to understand the impact of using non-native languages as an official language in general, and as a medium of instruction in schools in particular, on socioeconomic development. Laitin and Ramachandran (2016) show that choosing a language which is very distant from the ones spoken locally, and to which day-to-day exposure is low, has economically important negative impacts on human capital, health, productivity, and income. Exploring the role of language of schooling, recent quantitative evidence from Cameroon (Laitin et al., 2015), Ethiopia (Ramachandran, 2015), and South Africa (Eriksson, 2014; Taylor and von Fintel, 2016) show that provision of schooling in a local language has positive effects on test scores, literacy, wages, and occupational outcomes. In the case of developed countries, most of the evidence comes from bilingual educational initiatives in the United States. A large body of evidence shows that childrens'

reading proficiency in their native language is a strong predictor of their ultimate English reading performance (August and Shanahan, 2008; Garcia, 2000; Reese et al., 2000); though recent randomized or matched longitudinal studies find no positive or negative benefits of provision of mother tongue instruction.[1] In the context of OECD countries and the United Kingdom, Dustmann et al. (2010) and Dustmann et al. (2012) highlight language as the single most important factor in explaining differences between immigrant and native children's schooling outcomes. Bleakley and Chin (2004) based on the "critical period hypothesis" of language acquisition (Lenneberg et al., 1967) show that children arriving after the age of nine to the United States, have lower English proficiency, and in turn lower wages in adulthood, thus demonstrating the importance of exposure to the language of schooling in early ages.

The potentially important barriers to learning and socioeconomic advancement that the choice of a non-native language imposes on the majority of the population would be expected to generate opposition to the use of the colonial language as the principal language of education and government. However, surprisingly most evidence from Sub-Saharan Africa shows that not only minority language groups but also majority language groups are in favor of retaining the former colonial language, and display negative or discriminatory attitudes towards installing indigenous languages to act as official (Rannut et al., 1994).

We provide a theoretical framework that highlights the role of five factors that influence the language policy preferences of individuals: (i) the perceptions on the cost of obtaining human capital in local languages as compared to the colonial language, (ii) the perceived returns to education in the colonial versus the local languages, (iii) the role of ethnic and class cleavages, (iv) identity and the importance of nation building, and finally (v) the information that individuals base their decisions upon. Our theory predicts that individuals who believe that cost of obtaining education is not strongly affected by the language of instruction, or that labor market returns to education in indigenous languages are low, that use of colonial languages tends to not necessarily favor elites, and that most economically successful nations today use world languages as their official language are more likely to reveal a preference for the use of a colonial language to act as official.

The framework tries to explicitly outline the role of discrimination in affecting language policy preferences. We explore whether *negative* or *discriminatory* attitudes towards indigenous languages affect preferences about language policy through two channels. First, we investigate whether the beliefs that local languages are not suitable vehicles for science, and second, only in the colonial languages can knowledge be classified as useful, make a prefer-

[1]Refer to Slavin et al. (2011) and the references contained in it for more details.

ence for the colonial language more likely. Besides the taste for discrimination, the fear of facing discrimination in society might also be an important driver of language preferences. The fear that a group whose language is chosen discriminates against other groups could be an important reason why individuals in multilingual societies might exhibit a preference for the colonial language, which arguably constitutes a language that is neutral and distributes advantages and disadvantages equally across groups.

The theoretically outlined mechanisms are tested using elicited beliefs about the effects of a change in language policy collected in August 2015 from a rural and an urban site in Zambia. The data confirm the findings of earlier studies regarding preference for language use in official domains. 71% of the sample specify only English as their preferred official language, whereas a mere 19% report a preference for only a local language as the official language.[2] A large proportion of the population exhibits institutionalized negative attitudes towards local languages, with 40% agreeing with the statement that countries require English, French, or Portuguese as the language of education and government to be economically successful. Similarly, nearly 35 and 30% of the sample agree with the statement that English is the language of the intelligent people and English is the only language in which knowledge is useful. These negative attitudes might be due to misinformation as hinted by the fact that 58 and 31% of the sample believe that Sweden and South Korea, respectively, employ English or French as the language of education and government. The fear of discrimination against the group whose language is not chosen is found to be a significant negative correlate of having a preference for a local language, and reduces the probability of wanting a local language to act as official by 18.5 percentage points.

Surprisingly, only 28% of the sample report that a child would find it easier to learn Math in a local language as compared to in English, and this increases to 42% when the local language is the mother tongue of the child. We find very strong effects on language policy preferences of the believed ease of learning in the local languages versus in English in schools. Reporting that learning Math in a local language would be easier is seen to increase support for the use of a local language by almost 20 percentage points, after controlling for a wide set of covariates.

Expected labor market returns to education obtained in English versus the local languages explain more than 20% of the variation in language policy preferences, highlighting the relevance of the economic channel.[3] Other factors seen to affect preference for the use of local

[2]The remaining 10% prefer the use of both English and local language(s).

[3]The survey methodology builds on Attanasio (2009), Delavande et al. (2011), and Delavande (2014) concerning the elicitation of beliefs in developing countries.

language are (i) individuals who believe that using local languages would reduce the gap between the rich and poor in society are 30 percentage points more likely of reporting that they would like an indigenous language to act as official, though only 21% of the sample thinks so; (ii) individuals who believe that choosing a group's language is likely to disadvantage other groups are 15 percentage points less likely to support the use of local languages, with 81% of the sample believing so.

We do not find social identities to play an important role in determining preferences regarding official language choice, which is indicated by the fact that 51% of the sample report African as their primary identity rather than Zambian or their ethnic group. In contrast to the prevalent view that use of a colonial language assists in nation building, we find that individuals who do not belong to the majority ethnic group in the country identify less with an ethnic identity, when they are able to speak the language of the majority group rather than when they are able to speak English. This suggests that the use of a familiar language might foster inter-ethnic communication and trust, and might be the more important route to national integration (Buzasi, 2013). Finally, the situation is further complicated by the fact that those preferring the status quo in terms of language policy are much less likely to favor a democratic approach, such as voting, to the question of which language should be the official language.

Our work complements the existing literature which has provided evidence on several factors underlying this revealed preference for colonial languages: Using data primarily from Nigeria, Adegbija (1994) provides an overview of language attitudes in Sub-Saharan Africa, and shows that individuals believe that colonial languages are more suitable for use in the formal domain. Skattum (2008) discusses the phenomenon of *diglossia*, i.e. the difference in prestige and usage between French and local languages in the context of the former French colonies. French is considered to be "high" language or the language of prestige and suitable for use as the language of education, government and business. On the other hand, local languages are considered to be the "low" languages and more suitable for informal daily functions such as for interacting with friends and family. As Skattum (2008)[pg. 174] observes "This functional difference both stems and is reflected in people's attitudes, and to a large extent explains why ordinary people as well as government officials harbor negative attitudes towards their own languages - be it languages of education or written languages in general." In the context of Zimbabwe Chiwome et al. (1992) and Mparutsa et al. (1992) show that students display a strong preference for the continued use of English as the medium of instruction, with a lot of students stressing the importance of English for international communication. Similarly, looking at the roles of Swahili and English in urban Kenya, Mukhwana (2014) finds

that the respondents clearly reject Swahili as a means to achieving social mobility, though not its role as the language of social interaction. Our paper, however, goes further than the existing literature by being the first paper, at least to our knowledge, to provide a systematic framework of the factors affecting the preference for official language, and test the same using empirical evidence on elicited beliefs. The presented findings shed light on the need for future research to understand the relation between these beliefs and the actual effect of language policy choices on learning outcomes and in affecting inequality between ethnic groups and classes. The overwhelming support for the use of colonial languages may be based on incorrect assumptions or beliefs regarding the effects of the language of instruction.

II. The theoretical framework

Understanding the determinants of language preferences among citizenry is crucial to shed light on the reasons underlying the continued use of the former colonial languages as the principal language of education, government, and public administration in Sub-Saharan Africa. This section provides a schematic framework to highlight the role of five factors - (i) the perceptions on the relative efficiency or cost of obtaining human capital in the colonial versus the local languages, (ii) perceptions associated with the value and the labor market returns on knowledge in the colonial vs. the local languages, (iii) relative status concerns between ethnic groups versus importance of class cleavages, (iv) identity and nation building, and (v) the information that individuals possess regarding the choice of official languages in other countries. We provide a narrative theoretical underpinning for why each of the factors is an important determinant of language preferences, and in the next section turn to testing the theoretical propositions outlined here.

A. The role of perceptions on the relative efficiency or cost of obtaining human capital in the colonial versus the local languages

Cognitive theories suggest that the use of a non-native language, especially in the formative years, may have a negative effect on educational outcomes (Cummins, 2000; Noormohamadi, 2008; Vygotsky, 1978, 1986). A small group of educationalists and pedagogues (Alidou et al., 2006), in the context of Sub-Saharan Africa, have highlighted the continued use of non-indigenous languages as key factor underlying the observed educational failures in this part of the world. A nascent but growing body of empirical studies also provides evidence that the use of a non-native language has negative implications for student learning and attainment

(Dustmann et al., 2010; Eriksson, 2014; Laitin et al., 2015; Ramachandran, 2015; Taylor and von Fintel, 2016).

The importance of the relative efficiency of learning in colonial versus indigenous languages thus should be an important input into the design of any language policy. However, objective evidence on the effects of choice of medium of instruction on human capital formation apart, the perceptions of people on the relative efficiency or cost imposed by learning in a non-indigenous language is going to be a crucial factor in determining individuals' preferences regarding the choice of language to be used in schools. If individuals perceive that using a non-indigenous language - due to its structural difference from the local languages and limited day-to-day exposure - imposes a large cost on human capital formation, they will have a greater propensity to prefer the use of local languages in schooling.

The choice between using an indigenous or a colonial language is further complicated by the fact that there are several competing indigenous languages that could be employed in schools. It thus becomes crucial to differentiate between how individuals think about the efficiency of learning in their own language as compared to the colonial language, as well as the relative efficiency of learning in an indigenous language belonging to another group versus the colonial language. The individual might believe that learning in their own language imposes the lowest cost, followed by learning in the colonial language, and rate learning in another group's language as being the most onerous.

B. The role of perceptions associated with the value and the labor market returns on knowledge in the colonial vs the local languages

The first factor highlights the role of costs involved in obtaining knowledge depending on the medium of instruction that is employed in educational institutions. The second important factor governing people's preferences over language policy choices is the relative returns on knowledge obtained in various languages. Individuals might believe that knowledge of the official language, which is a world language, is necessary to be able to function in the globalized economy of today. They might believe that using only local languages would isolate their country, make it harder to trade with other countries or lead to fewer foreign companies wanting to locate there. They might also exhibit a preference for the official colonial language as they believe that economic success is crucially contingent on the knowledge of the same. At the very extreme, they might associate the medium of knowledge with knowledge itself. Due to the long history of the interdependence between being able to speak the colonial language and socioeconomic advancement, individuals might mistakenly believe that knowledge of the

colonial language is more important than knowledge in mathematics or the sciences for labor market success.

The other important factor determining reported preferences over language choices is the framing of questions (Laitin, 1994). When parents are asked whether they prefer the colonial or an indigenous language as the medium of instructions in schools, most tend to be in favor of the colonial language. This however could be a testament to the fact that individuals believe that changes in language policy are only going to occur at the lower levels of schooling. Since independence, all initiatives in Sub-Saharan Africa to promote local languages as a medium of instruction in schools have been restricted to using local languages for the first few years of schooling (Albaugh, 2014). The above has implied that access to higher educations, jobs in the government administration, or other private sector jobs are exclusively available in the official colonial language. Therefore, even if people perceive that learning in a non-native language imposes high costs on human capital formation they might still exhibit a preference for using the colonial language as success in the labor market requires knowledge of the same. In trying to determine the factors underlying preferences over language policy, it is important to distinguish between the effect on perceived returns on the labor market of three distinct scenarios - (i) when schooling, jobs, and public administration are in the official colonial language (ii) when schooling is in a local language, but jobs and public administration continue to function using the former colonial language (iii) when schooling, jobs, and public administration, are all available in a local language.

C. Relative status concerns between ethnic groups and the importance of class cleavages

One of the common refrains for not installing indigenous languages as official languages is the problem of "plenty." Sub-Saharan African countries are characterized by some of the highest levels of linguistic diversity in the world. In Zambia, for instance, the great majority of the population speaks one of the four main local languages, namely Bemba, Nyanja, Tonga, or Lozi, but in total there exist 73 local languages (or dialects). Choosing an official language in this context has not meant deciding between retaining the colonial language or installing the indigenous language, but having to decide between the colonial language and one of the many indigenous languages. The problem of having to choose between several of the competing local languages has meant that countries often tend to remain with the status-quo

- the colonial language.[4] One of the important arguments put forth in favor of retaining the colonial language has been that it distributes advantages and disadvantages equally across ethnic groups. Thus, individuals may prefer use of the colonial language to ensure that the relative standing of groups in society remains unaffected.

Choosing a particular group's language could also result in the speakers of other languages facing discrimination in finding jobs or wages, which would be a concern beyond its monetary costs to those affected. The official use of one local language could undermine the customs and traditions of others. In light of these concerns, individuals might prefer to retain a *neutral* language even at the cost of foregoing economic benefits, which could be a crucial aspect underlying the revealed language policy preferences.

Class cleavages in society are also important to account for in any attempt to understand the language preferences of individuals. Economic elites in post-colonial states are characterized by the possession of "language capital." In other words, elites face a strictly lower cost of obtaining human capital than non-elites, and due to this have been able to consolidate and perpetuate their dominant position in society (Tollefson and Tsui, 2003). At the extreme, use of non-indigenous languages has meant social, political, and economic disenfranchisement of the majority of the population at the expense of a tiny minority. The perceptions of the citizens on the importance of inequality in society and whether they believe that using the colonial language benefits the elite and is harmful for the majority of the population could play an important role in shaping language policy preferences. Also, whether they perceive competition between the different ethnic groups or the gap between the rich and poor as the more pressing problem facing society is likely to influence their strength of preference for one language regime over the other.

D. Identity and nation building

Nation and identity building has been one of the key challenges that Sub-Saharan Africa has had to face since independence. The current territorial boundaries of the nation states of Sub-Saharan Africa were created as a result of the Berlin Conference of 1884, where the European powers partitioned the entire continent into distinct spheres of influence (Asiwaju, 1985). After independence, the integrity of the territorial units created during the colonial era has been maintained and preserved (Young, 1983). This in turn has meant that distinct ethnic groups were either arbitrarily clubbed together or were partitioned across the current

[4]See Laitin and Ramachandran (2015) for a theoretical framework and empirical evidence on how increasing linguistic diversity results in increasing the probability of retaining the colonial language.

boundaries of various nation states. Michalopoulos and Papaioannou (2016) provide evidence that conflicts are more likely, and last longer, where groups are split by borders; moreover, individuals from partitioned groups have lower access to public goods and education. The inorganic manner in which these nation states arose implied there were no common languages or cultural symbols to appeal to that would create a sentiment of nationalism among the population. In light of this, one of the important rationales for choosing colonial languages has been to provide a unifying language that can help in the process of building a national consciousness. Therefore, it is important to understand how individuals' perceptions of their own identity - whether they consider themselves primarily as member of their ethnic group, the country, or Pan-African - shape their language policy preferences. Furthermore, it is vital to take into account not only their own identity, but also their attitudes towards other ethnic identities captured by their levels of trust in other ethnic groups. Finally, individuals might view having multiple official languages as detrimental to nation building, irrespective of their identity.

E. The role of information

People's preferences are influenced by the information they possess. It is important to understand what individuals know and believe about the experience of other countries - developed and developing - in the realm of language policy to discern how information affects preferences. The fact that all Sub-Saharan African countries have retained the colonial languages to act as their official language and that most visitors or tourists to these parts of the world communicate in their former colonial language might have led to the misconception that all economically successful nations today employ these world languages as the principal language of education and government. The conception that all successful nations rely on the use of the colonial languages might be an important factor concerning the strong preference for the colonial language found by previous surveys on language attitudes. Hence, understanding the role of information (or rather misinformation) is crucial in the design of a language policy that would not only be welfare maximizing for society, but also politically feasible to implement.

III. Data, linguistic profile, and the language situation in Zambia

The data used to test the theoretical propositions outlined in Section II were collected from a rural and an urban site in Zambia, namely around Mpumba in the Muchinga province and Lusaka (the capital). Zambia is a landlocked country located in Southern Africa. It shares its

borders with the Democratic Republic of Congo in the north, with Botswana, Mozambique, Namibia and Zimbabwe in the south, with Tanzania to the north-east, Malawi to the east, and with Angola to the west. It became independent from British rule in 1964 and has a population of around 13 million. It has a per capita income of $1721 measured in current US$ and around 64.4% of the population lives below the $1.90 a day poverty line measured in 2011 international prices (World Bank Group, 2012). We first provide some background information on the languages and language use in Zambia, and then describe the sites from which the data were collected.

A. Languages and language use in Zambia

The principal languages in Zambia are all Bantu languages and come from the Niger-Congo language family. The Bantu speaking people settled in different parts of Zambia during the Bantu expansion from the regions of Cameroon and Nigeria starting around the 12th century AD. The colonial legacy meant that English became the official language in 1964, and is the only language so identified in the 1991 constitution. English is the dominant language of education, business, administration, and government; schooling in local languages is typically available up until the first few grades of primary schooling, and secondary and tertiary schooling is available exclusively in English (Albaugh, 2014).

The question of how many indigenous languages are spoken in Zambia is not an easy question to answer, with estimates ranging from 20 to 80 languages, as it is notoriously difficult to distinguish between what is classified as a language opposed to a dialect (Marten and Kula, 2008). The 1991 constitution, however, designated seven indigenous languages as national languages, namely, Bemba, Nyanja, Tonga, Lozi, Kaonde, Luvale, and Lunda. These seven languages are the more important languages for wider communication in the country, and the first four account for the large majority of the first and second-language speakers. Recognition as national languages meant that these language along with English are supposed to be used in the early years of primary schooling, though in practice this still remains restricted. Efforts have been made by the government to create a common orthography and publish some key government documents in these seven languages. Table 1, in turn, shows the proportion of people estimated to use the seven national languages, and the official language, as their first and second language, respectively. Table 1 shows that Bemba, Nyanja, Tonga and English are spoken by more than 10% of the population as their first or second language. Bemba is the most widely spoken language with 50.3% of the population reporting that they use the language as a first or a second language. English in turn is spoken by 1.7% of the population as their first language, and by 26.3% of the population as a second language. This number

Table 1—: Language by number of speakers

Language	Use as a first language (%)	Use as a second language (%)
Bemba	30.1	20.2
Nyanja	10.7	19.5
Tonga	10.6	4.4
Lozi	5.7	5.2
Lunda	2.2	1.3
Kaonde	2.0	1.8
Luvale	1.7	1.9
English	1.7	26.3

Source: Zambia - 2000 Census of Population and Housing

is comparable to the estimate of 20.5% provided by Albaugh (2014). It is important to note that these are self-reported language repertoires and provide no information on the actual level of fluency that the individuals possess. Data from the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) however raise the concern that the self-reported ability to speak English might be overestimated. The data from Zambia on 6th Grade students show that only 20% of students reach the minimum and only 5% the desirable reading level.

Figure 1 shows the spatial distribution of the seven national languages of the country. Each language has a specific regional base, where it is predominantly employed. Bemba is the main language of the Northern Province, Luapula, Muchinga and the Copperbelt, and, to a lesser extent, of the Central Provinces too. Nyanja is the main language of the Eastern Province, as well as of the province of Lusaka where Bemba and English are also widely used. The regional base of Tonga lies in the Southern Province, whereas Lozi is spoken mainly in the Western Province. Lunda, Luvale, and Kaonde are spoken in the North-Western Province which does not have a single dominant language.

B. Data collection

Data were collected in August 2015 in two sites in Zambia, i.e. in Lusaka and Mbumpa. The two sites were chosen to have a rural and an urban representation of the Zambian population. All enumerators were in command of English as well the prevalent local language(s).

The data representing the urban population were collected from the national capital,

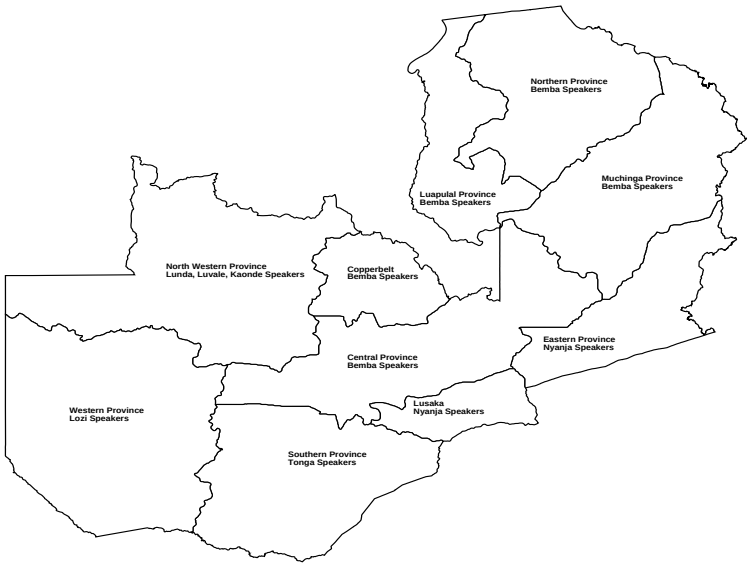

Figure 1. : The geographical distribution of the main languages of Zambia.

Note: Authors' construction

Lusaka. The capital is the largest city of Zambia with a population of around 2 million. The sampling frame was created by identifying nine representative neighborhoods from which data were collected.[5] We oversampled more educated individuals as we wanted to obtain the preferences of elites who often have undue influence on policy in such settings, and have an important stake in preserving the status-quo due to their language capital. While elites tend to be fluent in English, Nyanja is the dominant local language amongst non-elite residents in Lusaka. The urban sample consists of 109 respondents with females comprising 47% of the sample.

The data representing the rural population were collected from the Mpumba and surrounding villages, located in the Mpika district, in the newly created Muchinga Province. Mpumba is a remote village located off the highway connecting Lusaka with Tanzania. Most of the villages are without electricity, reliant on the village fountain as a source of water, and are populated with subsistence farmers with low education and limited knowledge of English. The Mpika district according to the 2000 Zambian census had a population of 146,196 peo-

[5]The nine neighborhoods include: Chelston (medium income area with low population density), Kabwata (middle income area with medium population density), Kalikalinga and Kamanga (low income areas with high population density), Kaunda square (medium income area with high population density), Mutendere (low income areas with high population density), Northmead, Rhodes Park and Shilenje (high income areas with medium population density).

ple. The individuals interviewed were randomly selected households in the village. The rural sample consists of 93 individuals with females comprising 48% of the sample.

C. Key characteristics of the sample

Table 2 shows the descriptive statistics of the urban and the rural sample. The mean age of the respondents is 36 years. Of the rural respondents 15% and of the urban respondents 48% have completed secondary schooling. Furthermore, 10% of the rural sample and 27% of

Table 2—: Descriptive statistics of sample

	Rural	Urban	Total	[SD]
Observations	93	109	202	
Age	40.78	31.47	35.82	[12.17]
Female	.48	.47	.48	[.5]
Completed primary	.77	.94	.87	[.34]
Completed secondary	.15	.48	.33	[.47]
University graduate	.1	.27	.19	[.39]
Fair/good English	.72	.91	.82	[.38]
Employed	.3	.43	.37	[.48]
Married	.71	.5	.6	.49
Number of children	4.63	1.83	3.15	[2.75]
Income	943.33	1985.57	1483.96	[1429.72]

Source: Authors' calculations.

the urban sample are graduates. The individuals in our sample are more educated than the average individual in the country. For instance, Central Statistical Office (CSO) [Zambia], Ministry of Health (MOH) [Zambia], and ICF International (2007) shows that 44 and 6% of the males aged between 18 and 36 have completed secondary schooling and higher education, respectively, in Zambia. As mentioned before, the reason for oversampling more educated individuals was to have a representation of the language preferences of elites, who might have undue influence on charting the course of language choices in society. Around 60% of our sample are married and 37% of the individuals are employed, which corresponds to the low levels of employment encountered in most of Zambia.

Table A1 in the Appendix shows the ethnic distribution and the distribution of the languages spoken at home. The village of Mpumba lies in the Bemba speaking Muchinga Province, thus not surprisingly Bemba speakers comprise 82% of the rural sample. 67% of the individuals report using Bemba at home, comparable to 52% reported in the 2000 census.

Nyanja speakers comprise 6.5 and 22% of the rural and urban sample, respectively, and 41% of individuals report using Nyanja at home. Tonga is used by 14% of individuals at home and ethnic Tonga comprise around 9% of the sample. Finally, about 5% of the sample comprises of Lozi speakers, with 4% reporting as using Lozi at home. As for the official language English, 4.3% of the rural respondents and 47% of the urban respondents report using English at home, with the overall average being 27.4%. This number is again comparable to the 28% who report speaking English as a first or second language in the 2000 census.

The proportion who report to have good knowledge of English is 47.5%, whereas 34 and 18% report having fair and poor skills, respectively. This implies that around 80% of the population believe they have fair or good knowledge of the English language. Unfortunately, we were not able to conduct proficiency tests of their English skills to be able to obtain an objective measure which could be contrasted with the self-reported assessment. This remains an important task for the future as the proportion of people who report having good or fair English skills is more than four times the number of Grade 6 children reaching the minimum reading level and leads us to suspect that people tend to overestimate their command and ability to function effectively in the English language.

IV. Results

A. An overview of language preferences in society and the role of discrimination

Table 3 summarizes the language policy preferences of the individuals in our sample. 71.4% of the individuals report wanting only English as the official language of education and government in the country. In contrast, only 19.3% of the sample express a preference for using a local language exclusively as the language of education and government. On the other hand, 28.6% of the individuals express a preference for the use of both local language/s and English as the language of education and government. The role of world languages in determining economic success seems to be an important factor in individuals calculus of language preference, with a whole 40% of the sample agreeing that a country needs to use English, French or Portuguese in order for it to be economically successful. The question of whether language policy needs to be re-thought is answered in the affirmative by 32%. Out of the individuals who agree that government should rethink language policy, 55% agree this is because the current policy does not promote Zambian language and culture, 53% agree that using English negatively affects self-esteem, and finally 49% want government to re-visit current language policy as it is difficult to obtain human capital using English as the medium of instruction. It is interesting to note that out of the individuals resident in rural areas who believe that

Table 3—: Language policy preferences of sample

	Rural	Urban	Total
Language preference:			
Want local language(s) as official language	.19	.361	.286
Want only local language(s) as official language	.143	.231	.193
Want English as official language	.774	.761	.767
Want only English as official language	.81	.639	.714
Beliefs about usage of local languages as official language:			
A country needs to use Eng., Fr. or Port. to be econ. successful	.495	.32	.403
Groups whose lang. not chosen face discrimination	.774	.736	.754
Disadvantage groups whose language not chosen	.8	.832	.817
Weaken national identity	.75	.758	.754
Perception of cleavages in society:			
Gap between rich and poor is a problem	.924	.908	.915
Competition between ethnic group is a problem	.843	.854	.849
Ethnic competition bigger problem than gap rich vs poor	.207	.33	.274
Preferences about addressing policy:			
Government should let people vote on language policy	.581	.223	.393
Government should rethink language policy	.409	.242	.321
If agree that government should rethink language policy:			
Current policy doesn't promote Zambian culture and languages	.443	.913	.559
Difficult to learn in English	.411	.739	.49
Dependence on colonial language negatively affects self-esteem	.479	.696	.531

Source: Authors' calculations.

government should rethink language policy only 41% report learning costs in English as an important factor, whereas this increases to 74% for individuals living in urban areas. Finally, 58% of the rural sample believes that allowing people to vote on language policy is a feasible mechanism to aggregate and determine official language choice in society, whereas this number is only 22% for the urban sample.

One of the important objectives is to understand how discrimination might affect attitudes towards language policy. Discrimination can work through various channels but here we concentrate on two particular avenues: (i) negative or discriminatory attitudes towards indigenous languages among native speakers and (ii) fear of discrimination in society due to another groups' language being installed as official. The fact that 50% of the rural, and 32% of the urban sample in Table 3 indicate that using a world language is essential in order for a country to be economically successful already suggests that people think that indigenous

languages might not be suitable for usage in formal domains. Eliciting beliefs about English speakers further corroborates these negative views held by people regarding indigenous languages.

Table 4 shows nearly 50% of the sample report as believing that English speakers are more

Table 4—: Beliefs about discrimination

	Rural	Urban	Total
What would happen to groups whose language is not chosen			
Disadvantaged	.8	.832	.817
Discrimination on job market	.774	.736	.754
Beliefs about English speakers			
English speakers are more intelligent	.674	.324	.485
Why are they more intelligent?			
Language of intelligent	.746	.531	.68
English is only language in which knowledge is useful	.6	.594	.598

Source: Authors' calculations.

intelligent than speakers of local languages. When those who agree that English speakers are more intelligent are asked why, 68% of the respondents state that this is because English is the language of the intelligent people. Similarly, 75 and 53% of the rural and urban respondents, respectively, agree with the statement that English is the only language in which knowledge is useful. Thus, the evidence seems to support the fact that a majority associate the knowledge of English with advancement and intelligence. As Prah (2006, pg. 18) notes in the context of South Africa: "It is unfortunate that most parents still believe that speaking eloquent English necessarily means you are intelligent." The fact that in our sample 33% of the individuals have finished secondary schooling, and 80% primary schooling, and still believe that use of a colonial language is essential for economic success suggests that in Sub-Saharan Africa, where more than 40% of the population remains illiterate and around 56% of the population has no schooling (Barro and Lee, 2014), an important source of institutionalized negative attitudes towards local languages is that people associate knowledge as being inseparable from the medium of knowledge.

The fear of discrimination by others might also be an important reason for the preference exhibited for the use of the colonial language as the language of commerce, education and government. People might believe that choosing any one group's language would result in the

other ethnic groups being marginalized or facing discrimination in society. Consistent with this reasoning, in Table 4 we find that nearly 82% of the sample concurs with the statement that a group whose language is not chosen will be disadvantaged in society. Moreover, 75% believe that this disadvantage will be manifested through discrimination on the job market. Thus, negative attitudes regarding the suitability of local languages to act as the language of education and government, as well as the fear that choosing any one local language to act as official will result in discrimination against other groups seem to be important factors in determining individual preferences.

B. Language policy preferences and individual characteristics

In the theoretical section, we discussed the main factors influencing preferences for a local language we intend to analyze. However, before dedicating our attention to these specified channels, we regress a range of variables related to preferences concerning language policy on personal characteristics. Our four dependent variables in Table 5 are whether an individual has a preference for (i) the use of local language(s) in government and education, (ii) the use of only local language(s), (iii) whether people should be allowed to vote on language policy, and (iv) whether the government should rethink language policy.

Using linear probability models, we find that gender, income, education, and self-assessed English skills are not significantly related to language-choice preferences. For all four outcomes the probability is u-shaped in age, whereas this relationship is only significant for the actual language preferences in the first two columns. The results suggest that at age 45 the preference for a local language is at its minimum. Given that we only have cross-sectional data without a panel dimension, we cannot gain any insights on whether this trajectory is actually related to age or whether it reflects a cohort effect, which could be driven, for instance, by different experiences in childhood.

The results suggest that ethnic Bembas, the majority language group, are significantly less likely to support the use of local languages in education and government. While respondents residing in Lusaka do not seem to have differing preferences for local languages (once we control for covariates), they are much less supportive of the idea of letting people vote on language policy or of urging the government to rethink language policy. Finally, the dilemma of language policy choice becomes apparent in the fourth and sixth columns. Here we can see that those that have a preference for the use of local language(s) in education and government are also 25.9 percentage points more likely to support the idea of allowing people to vote on this topic, and 30.1 percentage points more likely to agree that the government should rethink language policy. Hence, those in support of local languages are also much more supportive of

Table 5—: Analyzing the effect of personal characteristics on language policy preferences

Dependent variables related to language policy (specified in column header)						
	(A local)	(Only local)	(Vote)	(Vote)	(Rethink)	(Rethink)
Age	-0.044***	-0.044***	-0.020	-0.013	-0.012	0.002
	(0.016)	(0.014)	(0.017)	(0.017)	(0.017)	(0.017)
Age^2 / 1000	0.496***	0.496***	0.198	0.112	0.131	-0.024
	(0.176)	(0.158)	(0.186)	(0.191)	(0.191)	(0.193)
Female	0.071	0.049	0.066	0.034	-0.004	-0.025
	(0.067)	(0.060)	(0.071)	(0.071)	(0.072)	(0.071)
Urban	0.094	-0.026	-0.327***	-0.402***	-0.226**	-0.238**
	(0.092)	(0.082)	(0.092)	(0.096)	(0.095)	(0.097)
Earnings	-0.004	-0.026	-0.015	-0.007	0.029	0.027
	(0.034)	(0.031)	(0.037)	(0.037)	(0.037)	(0.037)
Employed	-0.009	0.060	-0.073	-0.039	-0.152*	-0.132
	(0.082)	(0.074)	(0.088)	(0.087)	(0.090)	(0.087)
Completed secondary	-0.051	0.007	0.052	0.061	0.083	0.092
	(0.090)	(0.081)	(0.098)	(0.096)	(0.101)	(0.097)
Fair/good English	-0.023	0.019	-0.132	-0.145	-0.021	-0.039
	(0.090)	(0.081)	(0.097)	(0.095)	(0.101)	(0.098)
Ethnic Bemba	-0.145*	-0.177**	0.055	0.044	0.057	0.086
	(0.083)	(0.074)	(0.086)	(0.088)	(0.089)	(0.088)
Preference for local language(s)				0.259***		0.301***
				(0.083)		(0.085)
Constant	1.188***	1.158***	1.085***	0.924**	0.659*	0.297
	(0.355)	(0.319)	(0.377)	(0.390)	(0.393)	(0.399)
Observations	175	175	177	169	169	162
R^2	0.118	0.117	0.185	0.237	0.086	0.151

Notes: *, ** and *** significant at 10, 5, and 1 % significance level, respectively. Standard errors are in parentheses. "A local" is a dummy taking the value 1 if the respondent has a preference for local language(s) (but potentially for English as well), "Only local" takes the value 1 if the respondent has a preference for local language(s) only, "Vote" takes the value 1 if the respondent agrees or strongly agrees that the government should allow the people to vote on language policy, and "Rethink" takes the value 1 if the respondent agrees or strongly agrees that the should rethink language policy.

addressing the issue and finding a democratic solution, which provides a key insight into the policy gridlock.

C. Testing the hypothesis

In the following, we test the channels specified in the theoretical framework separately.[6] As a dependent variable we use a dummy indicating whether the respondent mentioned at least one local language when asked "What language(s) do you think should be the official

[6]In Table A2 in the Appendix we include most of the main explanatory variables in a joint model and find the results to hold.

language(s) of education and government in Zambia?".[7] All estimations are carried out with Ordinary Least Squares, wherefore the coefficients are interpretable as percentage-points increases related to a one unit increase in the independent variable.[8]

Efficiency of obtaining human capital in the colonial vs local languages

We expect beliefs about the difficulty or ease with which children learn (in) English and local languages to influence people's preferences. In order to capture the believed ease of learning in a given language, we asked respondents to project how many children out of 7 without previous knowledge of English would finish secondary schooling under two different scenarios: (i) if education were provided in English or (ii) if education were provided in a local language. The survey was designed so that for half of the respondents the language spoken at home coincides with the local language at school, and for the other half, home and local language of education differ. For some of the regressions we split the sample, which is indicated by the scenario language being the "Same" or "Diff.", respectively. This is meant to capture the differential costs of learning a local language close to one's mother tongue, versus learning (in) English. For the subset of the sample for whom the local languages at home and in education differed, we elicited an additional measure of ease of learning by asking how many hours per week it would take to learn English as well as the other local language.

For the given sample, we do not find the expected number of children that would finish secondary schooling to be significantly related to the language preference, which can be seen in columns (1) and (2) of Table 6. We do find, in accordance with our hypothesis, the expected hours it would take to learn English to be significantly positively related and the expected hours it would take a local language other than one's own to be negatively related to preference for a local language. This means that respondents believing that English is more difficult to learn and local languages are easier to learn are more likely to support the idea of using local languages in education and government.

Besides these indirect methods of eliciting the relative ease/difficulty of learning in English vs local languages, we also asked respondents directly whether they believe it to be easier to learn other subjects in a local language. Surprisingly, as noted before, only 28% of the sample believe that is easier to learn Math in a local language as compared to English; whereas when

[7]Note that this means that respondents potentially mentioned English in addition. The results for whether the respondent mentioned exclusively local language(s) are very similar.

[8]Using logit or probit models provided qualitatively identical results. Due to the ease of interpreting coefficients, we chose to present estimations of linear probability models.

Table 6—: Ease of learning in different languages and language policy preferences

Dependent variable: Preference for a local language					
Scenario language:	Same	Diff.			Full
	(1)	(2)	(3)	(4)	(5)
Children finishing secondary (English)	-0.023	0.035		0.041	-0.030
	(0.027)	(0.042)		(0.043)	(0.025)
Children finishing secondary (Local)	-0.024	0.002		-0.007	0.021
	(0.031)	(0.037)		(0.037)	(0.031)
Hours it takes to learn English			0.081	0.098*	
			(0.049)	(0.050)	
Hours it takes to learn local language			-0.076	-0.093*	
			(0.047)	(0.048)	
Same lang. x Children secondary (Local)					-0.024
					(0.042)
Same language scenario					-0.005
					(0.221)
Observations	88	85	85	84	173
R^2	0.427	0.242	0.250	0.278	0.166

Notes: *, ** and *** significant at 10, 5, and 1 % significance level, respectively. Standard errors are in parentheses. All regressions include a constant, age, age squared, gender dummy, urban dummy, earnings, employment dummy, dummy for completion of secondary education, fair or good English skills dummy, an ethnic Bemba dummy, and dummies for whether the local language in the scenario was Bemba or Nyanja.

asked more specifically about learning in the mother tongue, respondents reporting that learning in English would be easier is equal to the proportion who report learning in the mother tongue would be easier. This perception of costs imposed by different language seems to be at odds with both evidence on how effectively children learn in distant languages (refer to references in Section I), as well with the actual ability of the people to function in English.

Column (1) of Table 7 shows that individuals who believe that learning Math in a local language is easier are a whole 17 percentage points more likely to report preference for a local language to act as official, after controlling for an extensive set of covariates. Column (2) and (3) additionally include a dummy which takes the value 1 if individuals think Math and Science skills are more important in determining earnings and Math and Science skills are more important for obtaining good jobs, respectively, as compared to English skills; the dummies are seen to be statistically insignificant in columns (2) and (3), respectively. Column (4) includes all three dummies and the coefficient on the dummy that learning Math in a local language is easier remains positive and significant, and implies a 20 percentage point increase

Table 7—: Efficiency of learning different languages and language policy preferences

Dependent variable: Preference for a local language					
	(1)	(2)	(3)	(4)	(5)
Easier to learn in local language	0.169**	0.187**	0.187**	0.208**	0.284*
	(0.082)	(0.085)	(0.083)	(0.086)	(0.150)
Maths skills pay more		-0.075		-0.091	
		(0.072)		(0.072)	
Math more important for jobs			0.022	0.040	
			(0.071)	(0.073)	
Easier to learn in local language x same language					-0.161
					(0.175)
Same language scenario	-0.236***	-0.245***	-0.245***	-0.263***	-0.200**
	(0.077)	(0.080)	(0.080)	(0.084)	(0.086)
Observations	162	157	158	153	162
R^2	0.175	0.187	0.188	0.204	0.180

Notes: *, ** and *** significant at 10, 5, and 1 % significance level, respectively. Standard errors are in parentheses. All regressions include a constant, age, age squared, gender dummy, urban dummy, earnings, employment dummy, dummy for completion of secondary education, fair or good English skills dummy, and an ethnic Bemba dummy.

in the support for the use of a local language as official.

Value and labor market returns in colonial vs local languages

Surely not only the ease of learning (in) English versus local languages is of importance, but also the impact on people's salaries. Therefore, we asked respondents the expected future monthly earnings given the following three language scenarios.

1) If education were provided in English and government administration and jobs were in English.

2) If education were provided in a local language and government administration and jobs were in local language.

3) If education were provided in a local language and government administration and jobs were in English.

As can be seen in column (1) and (2) of Table 8, indeed we find that the expected earnings in English are negatively related, while for the case of provision of education in the local language a child speaks at home, expected earnings are positively related to the expressed preference for local languages. When including only the two payoffs, i.e. from the English scenario and when the local and home language coincide, an astonishing 20.44% of the variation in language preference is accounted for. This means that beliefs about changes in earnings

Table 8—: Expected earnings and language policy preferences

Dependent variable: Preference for a local language					
Scenario language:	Same		Diff.		Full
	(1)	(2)	(3)	(4)	(5)
Believed earnings English	-0.083***	-0.072**	-0.093*	-0.098*	-0.109***
	(0.029)	(0.029)	(0.051)	(0.053)	(0.028)
Believed earnings local language	0.105***	0.119***	0.043	0.045	0.048
	(0.035)	(0.034)	(0.054)	(0.055)	(0.044)
Believed earn. local lang. only educ.		-0.085**		0.020	
		(0.038)		(0.058)	
Same language scenario					-0.322*
					(0.169)
Same lang. sce. x Believed earn. local lang.					0.083
					(0.059)
Observations	89	88	86	86	175
R^2	0.509	0.548	0.260	0.261	0.259

Notes: *, ** and *** significant at 10, 5, and 1 % significance level, respectively. Standard errors are in parentheses. All regressions include a constant, age, age squared, gender dummy, urban dummy, earnings, employment dummy, dummy for completion of secondary education, fair or good English skills dummy, an ethnic Bemba dummy, and dummies for whether the local language in the scenario was Bemba or Nyanja.

alone account for more than one-fifth of the variation in preferences for the use of local languages. The expected earnings are reported in units of 1000 Kwacha (approx. 100 US$). Therefore, an increase in expected monthly earnings of 1000 Kwacha from local language provision is associated with a 10.5% increase in the likelihood of having a preference for the usage of local languages in education and government. In column (2), we add the expected earnings when education is provided in the local language, whereas government jobs and administration remain in English. This coefficient is significant and negative, hinting to the idea that respondents attach a lot of importance to government jobs and administration.

In column (3) and (4) home and language of education differ from each other in the local language scenario. Again we find expected earnings in the English scenario to be significantly negatively related to preferring the usage of local languages in education and government. For the local language scenarios we find positive but insignificant relations. In column (5) we use the entire sample, add a dummy for the case in which home and local language of instruction coincide, and interact this dummy with expected earnings. The interaction is insignificant with a p-value of 0.16, but positive and of considerable magnitude.

Competition between ethnic groups and class cleavages

Table 9—: Winners and losers of language policy and language policy preferences

Dependent variable: Preference for a local language			
	(1)	(2)	(3)
Local language would reduce gap bewtween rich and poor	0.282***		0.284***
	(0.080)		(0.080)
Disadvantage for groups whose language not chosen		-0.160*	-0.136
		(0.087)	(0.085)
Observations	173	171	169
R^2	0.199	0.160	0.219

Notes: *, ** and *** significant at 10, 5, and 1 % significance level, respectively. Standard errors are in parentheses. All regressions include a constant, age, age squared, gender dummy, urban dummy, earnings, employment dummy, dummy for completion of secondary education, fair or good English skills dummy, whether the home and language of instruction coincided in the scenarios, and an ethnic Bemba dummy.

Sub-Saharan Africa is a conflict-ridden part of the world. Zambia is among the few countries that has been fortunate enough not to suffer any large scale violence since independence in 1964. In many bordering countries, civil war have been influenced by ethnic cleavages (e.g. the Democratic Republic of Congo) or as show grounds of the Cold War (e.g. Angola, Mozambique). Therefore, we investigate whether concerns about class cleavages or competition between ethnic groups can explain preferences about the use of local language(s). Column (1) of Table 9 shows that those who believe that the use of local languages in education and government administration would reduce the gap between rich and poor are 28 percentage points more likely to be in favor of their use. Column (2) shows that individuals who believe that choosing any one ethnic groups language would disadvantage other ethnic groups are significantly less likely to support the use of local languages; we thus observe that both class and ethnic cleavages seem to be relevant in determining preferences over the choice of the official language. Column (3) includes both the indicators capturing class and ethnic cleavages, respectively. The coefficient on the dummy capturing the role of local language on reducing class inequalities continues to be significant and predicts support for the use of local languages, whereas the dummy on the importance of use of local languages in affecting ethnic inequality again is of the correct sign, and sizeable in magnitude though turns insignificant at conventional levels ($p = 0.11$).

Table 10—: Identity and language policy preferences

Dependent variable: Preference for a local language						
	(1)	(2)	(3)	(4)	(5)	(6)
African	-0.079			-0.003	-0.017	
	(0.158)			(0.183)	(0.187)	
Zambian		0.219		0.321	0.371	
		(0.440)		(0.483)	(0.494)	
Linguistic group			-0.106	-0.094	-0.088	
			(0.105)	(0.112)	(0.113)	
Primarily African					-0.032	
					(0.077)	
Primarily linguistic group					-0.024	
					(0.104)	
Weaken national identity						-0.132*
						(0.079)
Observations	175	174	174	173	170	161
R^2	0.120	0.116	0.126	0.123	0.125	0.148

Notes: *, ** and *** significant at 10, 5, and 1 % significance level, respectively. Standard errors are in parentheses. All regressions include a constant, age, age squared, gender dummy, urban dummy, earnings, employment dummy, dummy for completion of secondary education, fair or good English skills dummy, whether the home and language of instruction coincided in the scenarios, and an ethnic Bemba dummy.

Identity and nation building

In relation to the competition between ethnic groups, a concern about a unifying identity could be an important determinant of the preferred language for education and government administration. While we saw in Table A1 that despite 88% expressing a feeling of belonging to their linguistic group, only 15% see their linguistic group as their primary identity, in contrast to 51% and 30% identifying themselves primarily as Africans and Zambians, respectively.[9] When regressing the preference for a local language on expressed identity dummies while controlling for personal characteristics, we find no statistically significant relationships. Based on the results in Table 10, we conclude that social identities do not seem to be important drivers of language preferences.

A common argument for the use of a former colonial language is that it simplifies nation building and acts as a uniting language. Column (6) of Table 10 shows that concerns about local languages weakening the national identity are significantly negatively related to preferring the switch to local languages. This said, it is important to understand whether nation

[9]The 4th round Afrobarometer data are based on a nationally representative sample and exhibit a very similar picture, with only 12.75% of the Zambian sample identifying themselves primarily with their ethnic group.

Table 11—: Correlates of ethnic identity

Dependent variable: Primarily ethnic identity			
	(1)	(2)	(3)
Speaks English	-0.051		-0.047
	(0.031)		(0.031)
Speaks Bemba		-0.065***	-0.064***
		(0.023)	(0.023)
Observations	877	877	877
R^2	0.025	0.030	0.033

Notes: *, ** and *** significant at 10, 5, and 1 % significance level, respectively. Standard errors are in parentheses. All regressions include a constant, age, age squared, gender dummy, and education dummies for primary, secondary, and post-secondary-education.
Datasource: Afrobarometer round 4.

building depends on being able to speak a common or colonial language. To get some insight into this question, we employ the Afrobarometer round 4 data, which provide information on the language repertoire of individuals. 36% of individuals from ethnic groups other than Bemba report speaking English, whereas 50% report being able to speak Bemba.[10] We explore whether speaking English makes individuals identify themselves less in ethnic terms, and also explore the effect of speaking Bemba on ethnic identification, and for comparability restrict the sample to individuals who are not from the Bemba ethnic group. The results in Table 11 show that people who report speaking English are 5 percentage points less likely to identify themselves primarily in ethnic terms though the coefficient is statistically insignificant. On the other hand, speaking Bemba, the language of the largest ethnic group in the country, significantly reduces the likelihood of identifying oneself primarily through one's ethnic identity by 6 percentage points. These results hint at the fact that fostering cross-ethnic communication is a route to subduing ethnic identity, and using local languages might be more efficient as individuals find it easier to learn as suggested by the fact that individuals who are not from the ethnic group Bemba are 38% more likely to speak Bemba as compared to English. These results are consistent with Miguel (2004) who argues that the use of a common language, Swahili, is one of the important reasons effective nation building has occurred in Tanzania. Our results show that it is not just the use of a common language, but a common languages that is widely understood and spoken in society might be the key to generating national consciousness.

[10]Including all ethnic groups shows that again only 36% of the sample report speaking English.

The role of information

In the previous section we have uncovered a range of channels underlying individuals' preferences for the usage of local language/s. However, on the basis of what information are individuals forming these beliefs and preferences? While we do not find systematic evidence concerning how (lack of) information might bias preferences, we document that many respondents are not aware of the usage of local languages in education and/or government in other countries. For instance, as can be seen in Table 12, 58% of respondents believe that Sweden uses English or French as official language and more than half assume that Malaysia and India rely exclusively on English for educational purposes.[11]

Table 12—: Respondents' knowledge of language use in other countries

	Rural	Urban	Total
Only using English in education in:			
Malaysia	.424	.776	.613
India	.29	.785	.555
French or English are official language in:			
South Korea	.387	.248	.312
Sweden	.688	.495	.584

Source: Authors' calculations.

V. Conclusions

In this paper, we analyze which channels drive individual preferences about the choice of the official language in Zambia. We do so by testing a theoretical framework using data collected in the capital, Lusaka, and a rural site in the northeastern Muchinga Province. The survey uses innovative hypothetical scenarios to elicit beliefs about the effects of variations in Zambia's language policy on schooling outcomes, income, and social cohesion. In general, support for the use of local languages in education and government administration is low. Furthermore, those in favor of local languages are significantly more likely to support a democratic approach. Therefore, the part of society in favor of local languages in education and government administration has limited access to the political process and little chance of being heard.

We find that economic expectations in terms of effects on income are an important determinant of the preference for the use of a local language as official language. Individuals

[11]Both India and Malaysia use local languages in education.

who fear discrimination or disadvantages for linguistic groups whose languages are not chosen are less likely to prefer local languages as official languages. Also the perception that local languages could weaken national identity lowers the probability of preferring local languages. The perceived relative ease with which one can learn a local language other than one's own compared to learning English is positively associated with a preference for a local language. Concerning cultural factors, we find that social identities have no systematic effects on language preferences. Finally, we address individual concerns about class versus ethnic cleavages. We find that when individuals believe that local languages have the potential of narrowing the gap between rich and poor, they are more likely to support the use of local languages, as are individuals concerned about competition between ethnic groups. However, while we do not find a systematic bias caused by the (lack of) information about other countries' language policies, we do find that general knowledge of language policies is quite low.

Our paper provides evidence of the importance of economic concerns of the population, which most likely are rooted in the problems of high unemployment, negligible per capita growth, and low intergenerational mobility.[12] However, the data do not allow us to disentangle how information influences beliefs about effects on earnings. Many respondents believe that only a country using English, French, or Portuguese can be economically successful. Therefore, it would be interesting to see how individuals respond to information treatments, as few know that some countries, including former colonies, successfully rely on languages other than the before mentioned colonial languages. Similarly, we are unable to shed light on the reasons underlying the belief that learning in English is as easy as learning in one's mother tongue or easier than learning in an another local language. This seems to be at odds with some of the evidence presented in Section I on the accumulation of human capital in the former colonial languages, as well as the ease with which people learn and communicate in the languages of the other groups as compared to in English.

[12]We find that paternal education alone explains 17% of the variation in earnings and 35% of the variation in education. A respondent whose father has been to university is three times more likely to have attended university.

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Appendix

A1. Further results

When including various of the presented hypotheses, we find the main results to hold. In Table A2 the left column has preference for at least one local language as official language as dependent variable, whereas the second column refers to preference for exclusively local languages (and not English). We can see that economic concerns remain to be an important driving force of preference for the use of local languages as believed earnings and concerns about the gap between rich and poor are significant. The perceived relative ease of learning in a local language is barely insignificant at conventional levels.

Table A1—: Identity, ethnic, and linguistic distribution of sample

Ethnicity and Identification	Rural Sample	Urban Sample	Total
Identity			
Feel Zambian	.989	1	.995
Feel African	.925	.963	.946
Feel belong to linguistic group	.86	.898	.881
Feel primarily African	.556	.481	.515
Feel primarily Zambian	.222	.37	.303
Feel primarily belong to lingustic group	.156	.148	.152
Ethnic distribution			
Bemba	.826	.275	.527
Nyanja	.065	.22	.149
Tonga	.011	.156	.09
Bisa	.141	0	.065
Silozi	0	.092	.05
Luvale	.011	.046	.03
Kikaonde	0	.055	.03
Namwanga	.022	.009	.015
Tumbuka	.011	.009	.01
Lungu	.011	0	.005
English	.011	0	.005
Lala	.011	0	.005
Other	.022	.138	.084
Distribution of language spoken at home			
Bemba	.913	.459	.667
Nyanja	.043	.734	.418
English	.043	.468	.274
Tonga	.043	.211	.134
Silozi	0	.073	.04
Bisa	.076	0	.035
Kikaonde	.011	.037	.025
Tumbuka	.011	.009	.01
Lunda	0	.009	.005
Luvale	0	.009	.005
Other	0	.009	.005
Namwanga	.011	0	.005
Lala	0	0	0
Lungu	0	0	0
Observations	93	109	202

Notes: Ethnicities and language spoken at home can sum to more than 1 as respondents can provide multiple replies.
Source: Authors' calculations.

Table A2—: Language policy preference (summary)

Dependent variable: Preference for a local language		
	(A local)	(Only local)
Believed earnings English	-0.071**	-0.079***
	(0.032)	(0.028)
Believed earnings local language	0.090***	0.076***
	(0.031)	(0.028)
Local language would reduce gap bewtween rich and poor	0.200**	0.150*
	(0.090)	(0.080)
Disadvantage for groups whose language not chosen	-0.098	-0.125
	(0.087)	(0.078)
Easier to learn in local language	0.063	0.023
	(0.077)	(0.069)
Observations	157	157
R^2	0.231	0.236

Notes: *, ** and *** significant at 10, 5, and 1 % significance level, respectively. Standard errors are in parentheses. All regressions include a constant, age, age squared, gender dummy, urban dummy, earnings, employment dummy, dummy for completion of secondary education, fair or good English skills dummy, and an ethnic Bemba dummy.