

**Economics 172**  
**Issues in African Economic Development**

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**Issues in African Economic Development**

Lecture 25 – April 24, 2007



**Outline:**

- (1) Ethnic diversity and economic development in Africa**
- (2) Tribe or nation in East Africa (Miguel 2004)**

# Easterly and Levine (1997) on ethnic diversity

- Focus on ethno-linguistic fractionalization (ELF) as their measure of diversity. The data was compiled by Soviet anthropologists in the 1960s.  $P_i$  is population proportion of ethnic group  $i$  (e.g., Luhyas in Kenya):

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- Example:  
Three groups each with population share of  $1/3$ . Then  $ELF = 1 - (1/3)^2 - (1/3)^2 - (1/3)^2 = 2/3$   
Two groups with population shares of  $1/3$  and  $2/3$ . Then  $ELF = 1 - (2/3)^2 - (1/3)^2 = 4/9$

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- Highest ELF Countries:  
Tanzania (0.93), Uganda (0.90), Democratic Republic of Congo (0.89), Cameroon (0.89), **India (0.89)**, South Africa (0.88), Nigeria (0.87), Ivory Coast (0.86), Central African Republic (0.83), Kenya (0.83), etc.

# Ethnic diversity and economic growth

- Easterly and Levine's main finding is that economic growth is negatively related to ethnic diversity across all countries in the world. Regression equation:

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<u>Outcomes/channels</u>	<u>b (t-statistic)</u>
Schooling	-0.991 (-6.2)
Financial depth	-0.266 (-3.7)
Exchange rate distortion	0.252 (3.4)
Budget surplus	-0.013 (-1.4)
Telephone lines/person	-3.07 (-7.2)

## Illustrative Case Studies: Ghana

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- In 1949 Easterly and Levine (1997) report that the British colonial government paid farmers 89% of the world price for cocoa – not bad at all!
- Due in part to inflation, by 1983 Ghana paid only 6% (!) of the world price to cocoa farmers, and ethnic divisions may be part of the explanation why – if economic power leads to a political threat

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  - (II) 1967- mid-1980s: Divergent development
  - (III) Mid-1980s - present: Convergence in economic reform and democratization



# Politics in Kenya

- Kenya is extremely ethnically diverse (as is Tanzania):

<u>Ethnic Group</u>	<u>Percentage</u>
Kikuyu (Embu, Meru)	28* (Kenyatta's group)
Luhya	14
Luo	13
Kalenjin	12
Kamba	11
Nomadic groups in north	7
Small numbers of (wealthy) South Asians, Whites	

# Politics in Kenya

- In the immediate post-colonial period there were two main political groupings:
  - (1) KANU (mainly Kikuyu\*, Luo, Kamba ethnic groups): represented interests of the new urban elite
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- KANU won the first post-independence election, but quickly merged with KADU after giving the promise of some cabinet seats and more government programs. As part of this deal Daniel Arap Moi became VP

## Economic policy in Kenyatta's Kenya

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- Before his death in 1978, Kenyatta's policies in Kenya could be characterized as incrementalist, pragmatic, generally pro-market, and pro-US (in the Cold War)
- There was no nationalization of industry, prices paid to farmers for agricultural commodities were among the highest in Africa, the colonial education system was basically retained, private civil society groups flourished, white farmers' land was gradually bought out at market prices (unlike Zimbabwe currently)
- Economic growth in Kenya from the 1960s to the early 1980s was among the fastest in Sub-Saharan Africa

## Public policy in the Moi period (1978-2002)

- His political coalition consisted of ethnic groups previously marginalized during the colonial and Kenyatta periods: Kalenjin, Maasai, coastal groups
- Important policy shifts:
  - (1) Increased tax rates on agricultural exports
  - (2) Replaced Kikuyu civil servants, military officials with loyal Kalenjins
  - (3) Public investments in health, education, roads shifted to Moi's Rift Valley ethnic stronghold → ethnicity was highly politicized

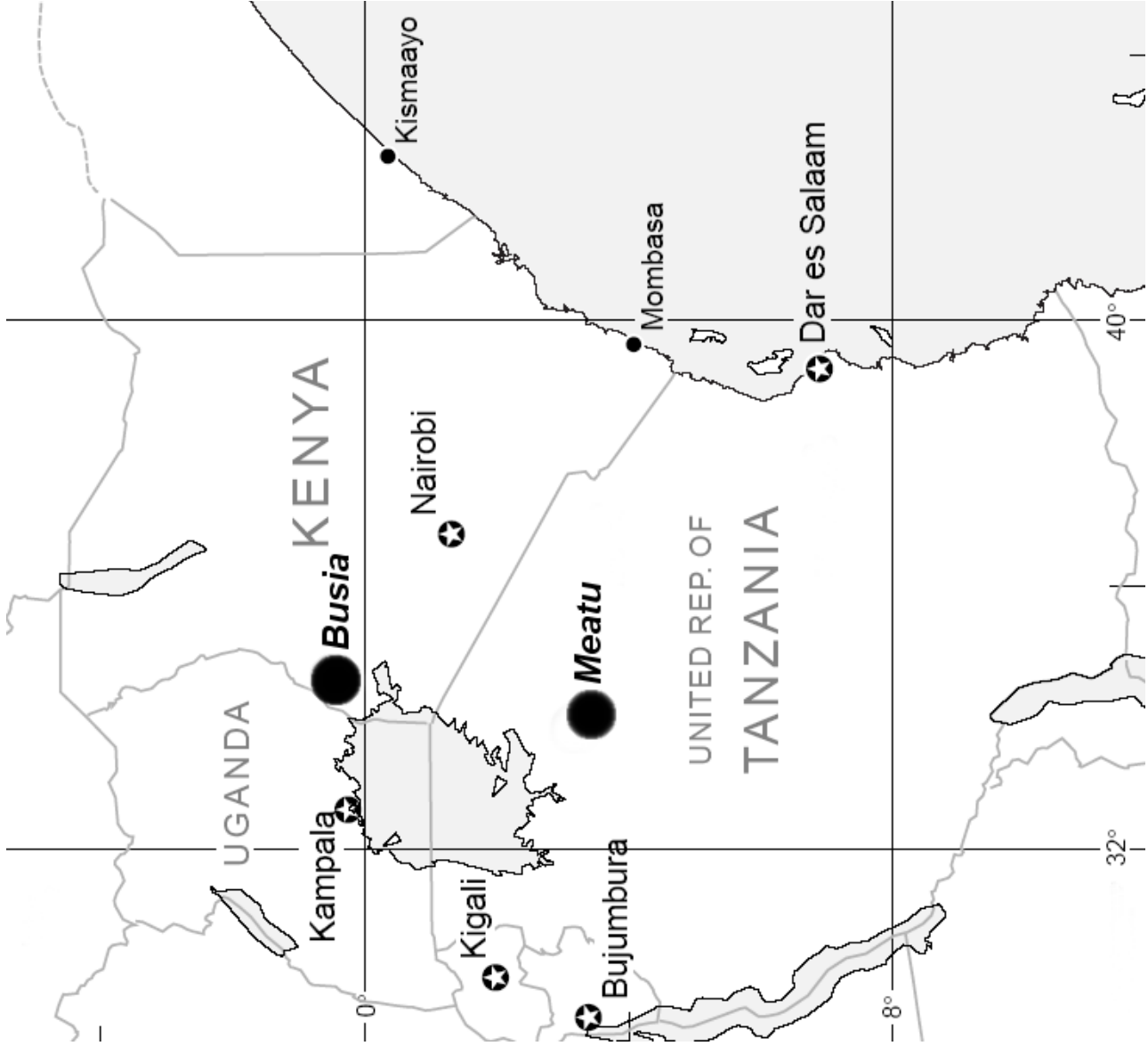
# Ethnic Divisions and Underdevelopment

- Even though ethnic divisions are thought to be impediments to economic development in Africa (Easterly and Levine 1997), the design of policies to address ethnic divisions remains poorly understood
- Tanzania has had the most serious nation-building policies in Africa
  - Next paper: Compare inter-ethnic cooperation in rural western Tanzania versus rural western Kenya, using micro-data on public goods

## Nation-building case study: Kenya vs Tanzania

- Similar geography, climate, ethnic composition, colonial legacy, and arbitrary national border (1890)
- “The cross-national similarities are so constant as to raise questions about the significance of the nation state” (Koff and Von der Muhll 1967)
- Two rural districts near Lake Victoria, 500 km apart: Busia, Kenya and Meatu, Tanzania
  - Comparable cropping patterns, ethnic diversity, community fund-raising for local public goods





# Post-colonial divergences

- Character, philosophies of Jomo Kenyatta (pro-Western, pro-market, pursued ethnic politics) and Julius Nyerere (Pan-African, socialist, actively fought ethnic politics)
- Coherent Tanzania national language policy (Swahili)
- Political socialization in Tanzanian schools
  - Language use, curriculum (pan-African emphasis)

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- Political socialization in Tanzanian schools
  - Language use, curriculum (pan-African emphasis)
- Abolition of tribal chiefs in Tanzania
- Equitable distribution of public investment in Tanzania

## Afro-Barometer Survey Evidence

- Chaligha et al (2002): “Nyerere’s efforts to mould a national identity (for example, by emphasizing Kiswahili and abolishing traditional rule) have borne fruit. The survey certainly provides evidence of a consensual, shared national identity ... If Tanzania was once an artificial construct of colonial mapmakers, it is no more.”

## Data from Busia, Kenya and Meatu, Tanzania

- Kenya: Primary school, well, household surveys
  - 84 primary school communities, collected 1996-2001
  - Ethnic diversity in primary schools within 5 km (ELF)

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  - Ethnic diversity in primary schools within 5 km (ELF)
- Tanzania: Village, primary school, household surveys
  - 66 villages, collected 2001-2002 by NGO
  - Ethnic composition from the village Tax Register
- Communities play leading role in school, water projects



## Comparing Busia and Meatu

- Busia, Kenya:
  - Luhyas 70 percent (Tesos, Luos, Sabot), Table 1
  - Average community diversity measure (ELF) = 0.23
- Meatu, Tanzania:
  - Sukuma 85-90 percent (Nyiramba, Taturu, Hadzabe)
  - Average village diversity (ELF) = 0.13
- Similar livestock, cash crops, well maintenance in both
  - Busia, Kenya has better school infrastructure



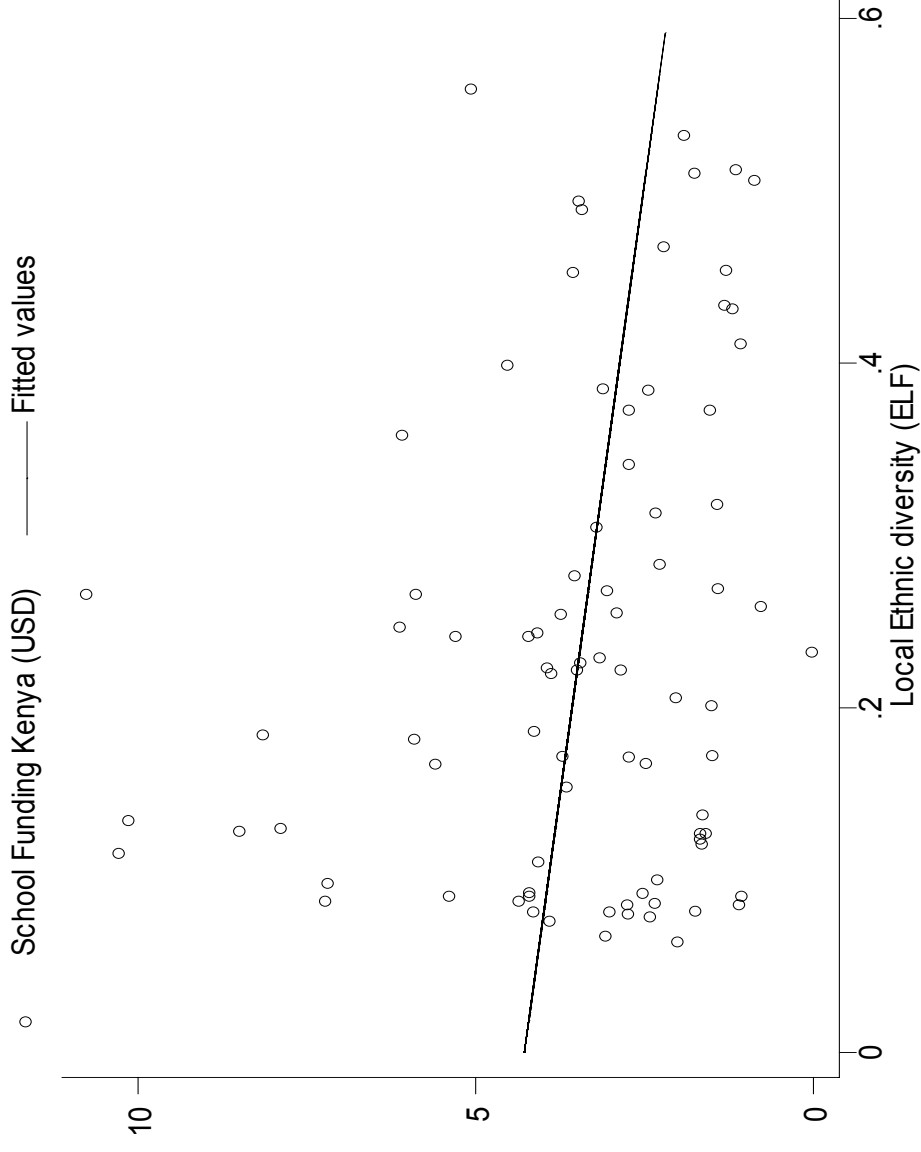
## Estimating Effects Across Countries

- Step 1: Estimate impact of diversity (ETHNIC) on local collection action outcome ( $Y$ ), in community  $i$ , country  $c$ .

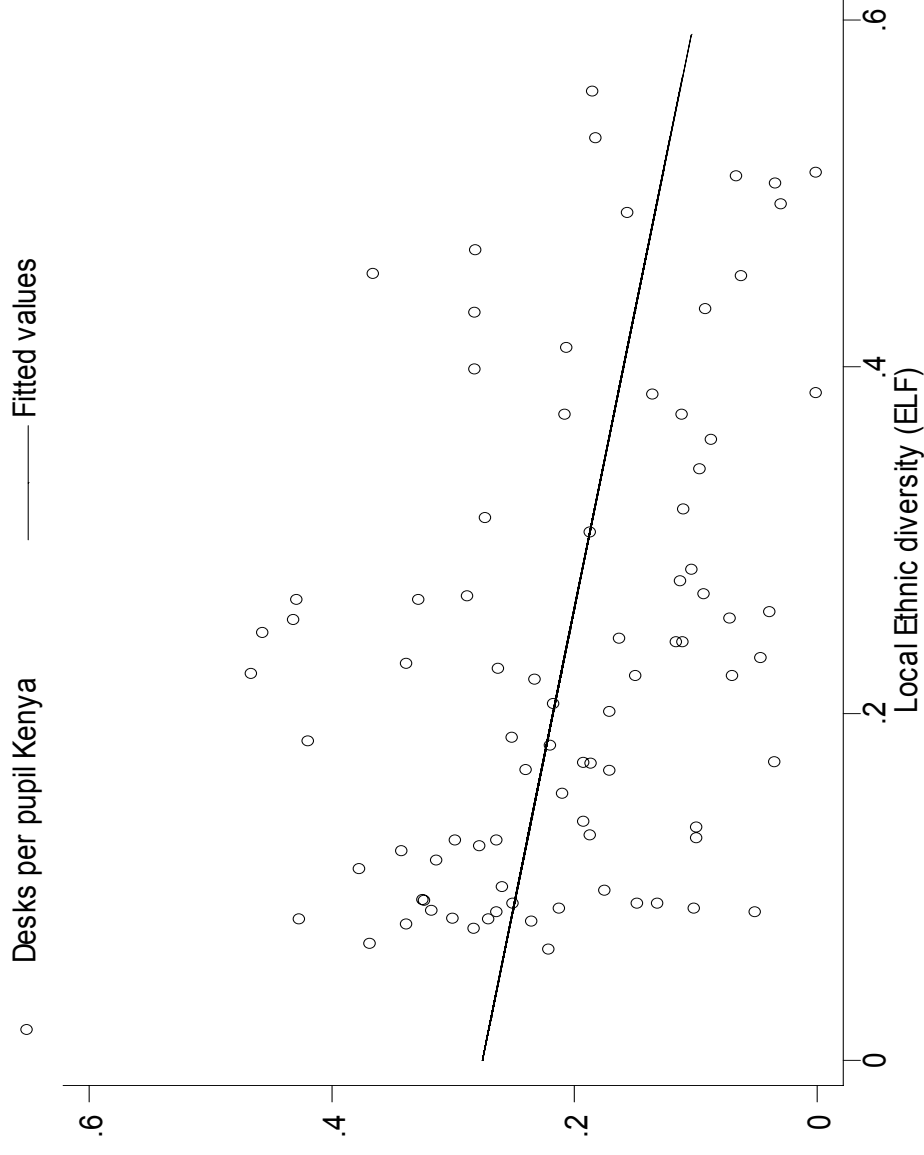
$$Y_{ic} = a + X_{ic}'b + \tau \text{ETHNIC}_{ic} + \mu_{ic}$$

- Step 2: Test if the relationship is different across countries for multiple measures

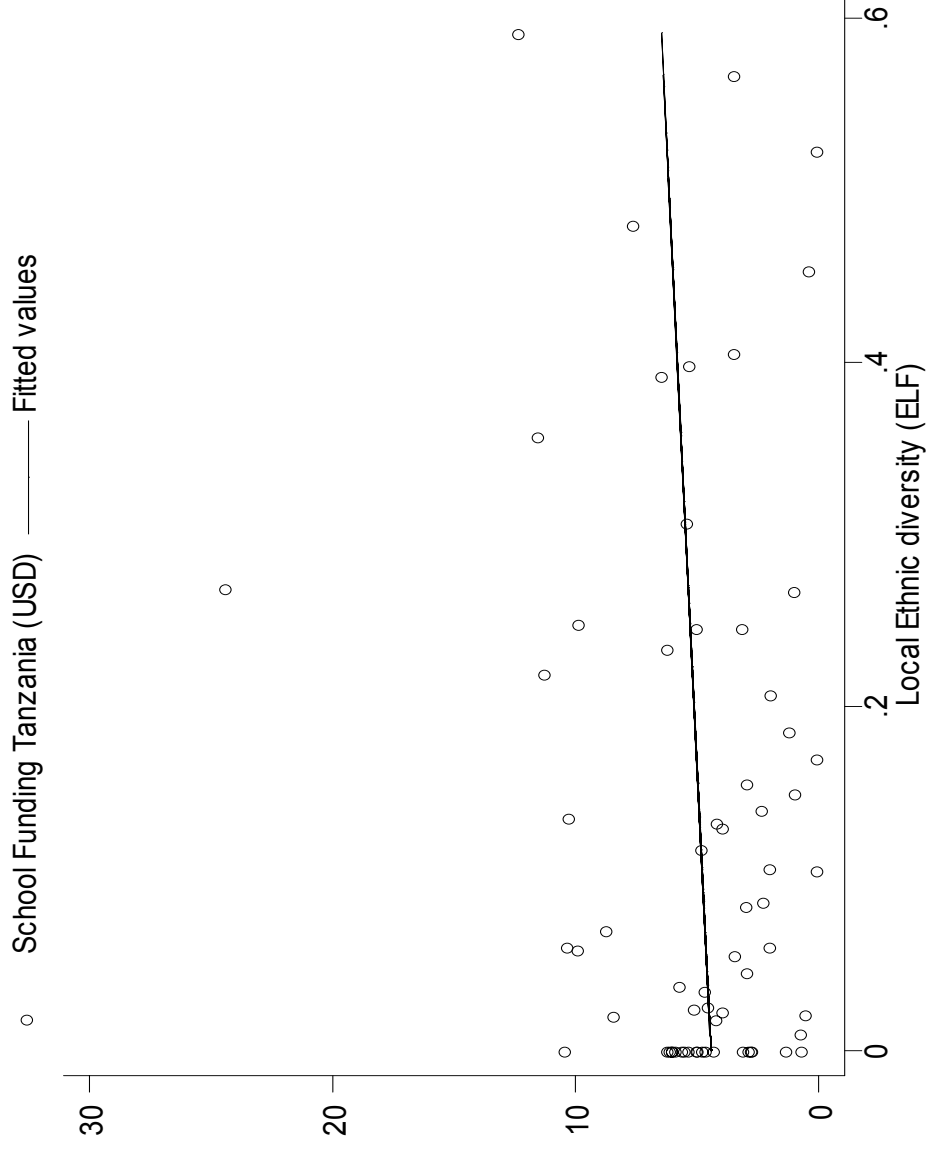
**Figure 2(a):** Busia, Kenya – Total local primary school funds per pupil in 1995 versus local ethno-linguistic fractionalization



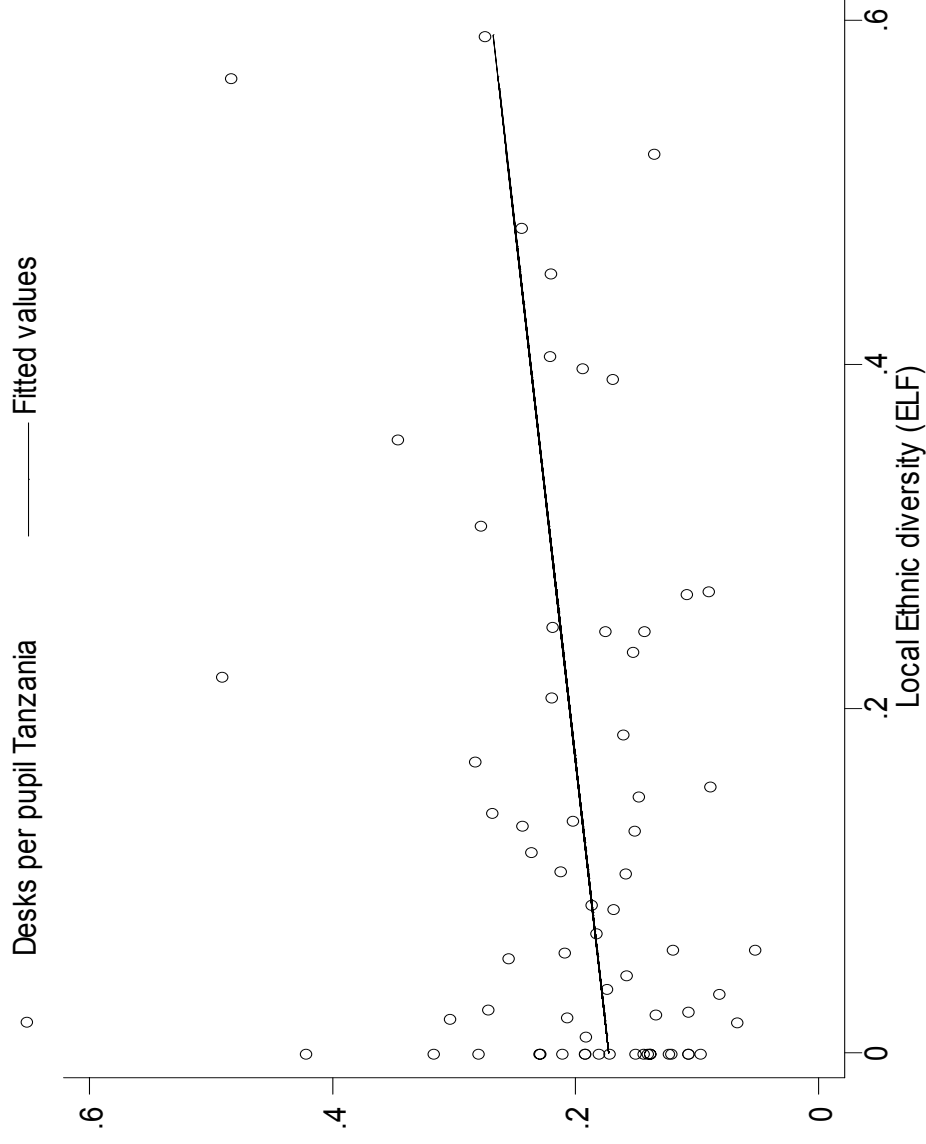
**Figure 2(b):** Busia, Kenya –  
Desks per primary school pupil in 1996  
versus local ethno-linguistic fractionalization



**Figure 2(c):** Meatu, Tanzania – Total local school funds per pupil per year in 1997-2002 versus village ethno-linguistic fractionalization



**Figure 2(d):** Meatu, Tanzania –  
Desks per primary school pupil in 2001  
versus village ethno-linguistic fractionalization



**Table 3: Local Public Goods and Collective Action,  
Tanzania sample**

Dependent variable	Coefficient estimate on local ELF
<b><u>Panel A: Public Finance Outcomes, 2001-2002 Village Council Data</u></b>	
Annual total local expenditures on all public goods projects, per household (USD)	7.0 (8.3)
Total annual local tax collection, per household	0.6 (2.7)
Average number of completed local public goods project, per year	-0.33 (0.42)
<b><u>Panel B: Local Infrastructure</u></b>	
Wells with normal water flow, per household	0.002 (0.006)
Average road quality (scale 1-4)	-0.0 (0.4)

## Qualitative evidence from structured interviews

- In Busia, Kenya (2000):
  - Rivalry between groups over control of school committee
  - Social sanctions on free-riders are rarely applied in diverse communities (Miguel and Gugerty 2005)
- In Meatu, Tanzania (2000-2002):
  - “This is Tanzania – we do not have that sort of problem”
  - “We are all Tanzanians”
  - “They [village residents] simply live as Tanzanians”

# National evidence from Kenya and Tanzania

- Tanzanian economic growth has been substantially faster than the Kenyan rate since 1990
  - All twelve measures of institutional quality and governance are better in Tanzania (UNDP 2002)
  - Less political violence in Tanzania in the 1990s



# Further Estimation Issues

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- No longitudinal (panel) data on ethnic cooperation (so difference in differences approaches not possible)
- Possible endogeneity of central government policies
- Inability to estimate the impact of distinct Tanzanian policies (e.g., language versus abolition of tribal chiefs)
- Radical socialist reforms in Tanzania

# Implications and Discussion

- Democratization episodes may be windows of opportunity to adopt elements of the Tanzanian model in other countries. Post-conflict periods, too?
  - Investments in long-run stability, economic growth
- The Tanzanian case sheds light on the origins of institutions, social capital

- For next time: week 15 readings on violence and development in Sierra Leone

# Whiteboard #1

# Whiteboard #2

# Whiteboard #3



# Whiteboard #4

# Whiteboard #5

