# PS1

### Aidan Isaac

January 29

#### The Tanzania Afrobarometer Round 9 Dataset

- 1. This Afrobarometer Round 9 Dataset is a survey of 2400 Tanzanians and their households. The interviews of these people were conducted between October 6th and November 21st, 2022.
- 2. The respondents vary greatly, being categorized by age, gender, ethnicity, language, and whether they live in rural or urban areas. There is a ton of data here, so I compiled age groups to make the data more readable and then limited the table from showing any groups of people that had less than 5 entries total. This made the table much more readable and understandable, although it does sacrifice some of the data. But it made it fit all onto one page, which I think made sense. The table makes it easy to tell how many of a specific group of people there are. 15.8% of the people in this table are rural men over the age of 46 that speak Kiswahili. But only 0.6% are rural women between the ages of 26 and 35 that speak Kigogo. The vast majority of the people in the dataset are of the Kiswahili language group. There are generally more people living in rural areas than urban areas, but just barely.

```
MainTAB<- TAN %>%
  group by (THISINT) %>%
  mutate(Q1 = case_when(
    Q1 >= 18 & Q1 <= 25 ~ "18-25",
    Q1 \ge 26 \& Q1 \le 35 \sim "26-35",
    Q1 >= 36 \& Q1 <= 45 ~ "36-45",
    TRUE ~ "46+"
  )) %>%
  mutate(THISINT = case when(
    THISINT == 1 ~ "Male",
    THISINT == 2 ~ "Female")) %>%
  mutate(URBRUR = case_when(
    URBRUR == 1 ~ "Urban",
    URBRUR == 2 ~ "Rural")) %>%
  mutate(Q2 = case_when(
    Q2 == 4 ~ "Kiswahili",
    Q2 == 749 ~ "Kisukuma",
    Q2 == 750 ~ "Kimasai",
    Q2 == 753 ~ "Kigogo",
    Q2 == 755 ~ "Kifipa",
    Q2 == 758 ~ "Kinyaturu",
    Q2 == 9995 ~ "Other"
  )) %>%
  count(.,THISINT, Q1, Q2,URBRUR) %>%
  filter((n>=5)) %>%
  mutate(Percentage = round(n / sum(n) * 100,2))
MainTAB2 <- MainTAB %>%
```

```
rename(
    Gender = THISINT,
    Age_Group = Q1,
    Urban_Rural = URBRUR,
    NumberofPeople = n,
    Language = Q2)
knitr::kable(MainTAB2, format = 'latex')%>%
    kable_styling(position = "center")
```

#### **Attitudes Towards China**

```
ChinaTAB<- TAN %>%
   mutate(Q78A = case when(
    Q78A == 1 ~ "Very Negative",
    Q78A == 2 ~ "Somewhat Negative",
    Q78A == 3 ~ "Neither Negative nor Positive",
    Q78A == 4 ~ "Somewhat Positive",
    Q78A == 5 ~ "Very Positive",
    Q78A == 8 \sim "Refused",
    Q78A == 9 ~ "Don't Know"
  )) %>%
  mutate(Q78A = factor(Q78A, levels = c(
    "Very Negative",
    "Somewhat Negative",
    "Neither Negative nor Positive",
    "Somewhat Positive",
    "Very Positive",
    "Refused",
    "Don't Know"
  ))) %>%
  count(.,Q78A) %>%
  mutate(Percentage = round(n / sum(n) * 100,1))
ChinaTAB2 <- ChinaTAB %>%
  rename(
    Attitudes = Q78A,
    Respondents = n)
knitr::kable(ChinaTAB2, format = 'latex')%>%
  kable_styling(position = "center")
```

This table is of Tanzanian respondent's attitude towards China. 1 is extremely negative, while 5 is extremely positive. 8 is refused, and 9 is Don't know. Overall, views of China in Tanzania are very positive, with 24.9% of respondents stating that they have positive views on China, with 28.4% saying they have somewhat positive views. 33.2% say they simply do not know enough about China to say, and less than 10% have an unfavorable view of China. Overall this are pretty good attitudes towards China, and it would be interesting to understand why respondents were generally so positive towards China.

#### Attitudes Towards the United States

Gender	Age_Group	Language	Urban_Rural	NumberofPeople	Percentage
Female	18-25	Kigogo	Rural	5	0.43
Female	18-25	Kimasai	Rural	9	0.78
Female	18-25	Kinyaturu	Rural	5	0.43
Female	18-25	Kisukuma	Rural	30	2.59
Female	18-25	Kiswahili	Rural	102	8.81
Female	18-25	Kiswahili	Urban	91	7.86
Female	18-25	Other	Rural	10	0.86
Female	18-25	NA	Rural	18	1.55
Female	26-35	Kigogo	Rural	7	0.60
Female	26-35	Kisukuma	Rural	32	2.76
Female	26-35	Kiswahili	Rural	134	11.57
Female	26-35	Kiswahili	Urban	130	11.23
Female	26-35	Other	Rural	13	1.12
Female	26-35	NA	Rural	20	1.73
Female	36-45	Kigogo	Rural	6	0.52
Female	36-45	Kisukuma	Rural	20	1.73
Female	36-45	Kiswahili	Rural	98	8.46
Female	36-45	Kiswahili	Urban	91	7.86
Female	36-45	Other	Rural	14	1.21
Female	36-45	NA	Rural	19	1.64
Female	36-45	NA	Urban	5	0.43
Female	46+	Kisukuma	Rural	23	1.99
Female	46+	Kiswahili	Rural	121	10.45
Female	46+	Kiswahili	Urban	116	10.02
Female	46+	Other	Rural	7	0.60
Female	46+	NA	Rural	32	2.76
Male	18-25	Kisukuma	Rural	25	2.17
Male	18-25	Kiswahili	Rural	77	6.69
Male	18-25	Kiswahili	Urban	81	7.04
Male	18-25	Other	Rural	5	0.43
Male	18-25	NA	Rural	10	0.87
Male	26-35	Kisukuma	Rural	27	2.35
Male	26-35	Kiswahili	Rural	97	8.43
Male	26-35	Kiswahili	Urban	108	9.38
Male	26-35	Other	Rural	8	0.70
Male	26-35	NA	Rural	21	1.82
Male	36-45	Kisukuma	Rural	33	2.87
Male	36-45	Kiswahili	Rural	103	8.95
Male	36-45	Kiswahili	Urban	86	7.47
Male	36-45	Other	Rural	8	0.70
Male	36-45	NA	Rural	19	1.65
Male	46+	Kigogo	Rural	10	0.87
Male	46+	Kimasai	Rural	5	0.43
Male	46+	Kinyaturu	Rural	6	0.43
Male	46+	Kinyaturu Kisukuma	Rural	31	2.69
Male	46+	Kisukuma	Urban	7	0.61
Male	46+	Kiswahili	Rural	182	15.81
Male	46+	Kiswahili	Urban	148	12.86
Male	46+	Other	Rural	19	1.65
Male	46+	NA	Rural	35	3.04
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Attitudes	Respondents	Percentage
Very Negative	90	3.8
Somewhat Negative	117	4.9
Neither Negative nor Positive	112	4.7
Somewhat Positive	682	28.4
Very Positive	598	24.9
Refused	3	0.1
Don't Know	798	33.2

Attitudes	Respondents	Percentage
Very Negative	131	5.5
Somewhat Negative	157	6.5
Neither Negative nor Positive	142	5.9
Somewhat Positive	636	26.5
Very Positive	393	16.4
Refused	3	0.1
Don't Know	938	39.1

```
USATAB <- TAN %>%
   mutate(Q78B = case_when(
    Q78B == 1 ~ "Very Negative",
    Q78B == 2 ~ "Somewhat Negative",
    Q78B == 3 ~ "Neither Negative nor Positive",
    Q78B == 4 ~ "Somewhat Positive",
    Q78B == 5 \sim "Very Positive",
    Q78B == 8 ~ "Refused",
    Q78B == 9 ~ "Don't Know"
  )) %>%
  mutate(Q78B = factor(Q78B, levels = c(
    "Very Negative",
    "Somewhat Negative",
    "Neither Negative nor Positive",
    "Somewhat Positive",
    "Very Positive",
    "Refused",
    "Don't Know"
  ))) %>%
  count(.,Q78B) %>%
  mutate(Percentage = round(n / sum(n) * 100,1))
USATAB2 <- USATAB %>%
  rename(
    Attitudes = Q78B,
    Respondents = n)
knitr::kable(USATAB2, format = 'latex')%>%
  kable_styling(position = "center")
```

This table is of Tanzanian respondent's attitude towards the United States. This table shows that attitudes towards the United States are generally not as positive as they are for China. Most people still have favorable beliefs about the United States, with 16.4% having very positive views and 26.5% having somewhat positive views. It does appear that public opinion about the United States in Tanzania is a bit more negative, with more people ranking the US at a 1 and 2 than they did China. This means that more people generally dislike the US than China. Interestingly, many Tanzanians said that they did not know enough about the United

States to say, with this being at 39.1% for the US compared to 33.2% for China.

## Difference Between Perceptions

```
NewTAN =
   TAN %>%
   mutate(
    across(
        Q7A:Q7B,
        ~if_else(.x %in% 1:5, .x, NA)
    )
   )

t.test(NewTAN$Q78A, NewTAN$Q78B, paired = TRUE)
```

#### Paired t-test

data: NewTANQ78A and NewTANQ78B t = -3.1054, df = 2399, p-value = 0.001923 alternative hypothesis: true mean difference is not equal to 0 95 percent confidence interval: -0.17810267 -0.04023066 sample estimates: mean difference -0.1091667

The paired t-test reveals that there is statistical significance of Tanzanian respondent's views on China and America. The p-value is 0.001923, which is lower than the 0.05 significance threshold. As I mentioned before, my best understanding is that Tanzanian views on the United States are more negative than they are with China. Perhaps China has had a better impression on the people of Tanzania, without being seen as imperialist as the US could be seen as. It is difficult to say for sure without further research into the data, but it is interesting that there is significance to the relationship at all.