African Spaghetti Bowl: Assessing State Rationales in African Peacekeeping Operations, 1999-2016.

Codebook for R replication code and datasets.

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1 African Spaghetti Dataset

The following codebook provides a summary of the methodology and variables used for the quantitative analysis in *African Spaghetti Bowl: Assessing State Rationales in African Peacekeeping Operations, 1999-2016.* Maximum likelihood estimation (MLE) and Monte Carlo simulation was used assess the likelihood for African peacekeeping contributions given political, economic, institutional, security, and normative rationales. The primary dataset used for the analysis was compiled from publicly available sources including United Nations and African Union reports, non-governmental organizations, and hand-coded observational data.

The dataset was created as a time-series, cross-sectional (TSCS) data frame composed of country-year observations from 1999 to 2016. I specify the model as a panel count to denote the spatio-temporal and event count characteristics of the observations. Due to high missingness among certain observations, variables were treated using non-parametric multiple imputation. I have included the imputed datasets for replication work of my original results. Additional clarification of the MI algorithm and justification for its use is located in the thesis, chapter 3.

Finally, this codebook is a working document. Future entries will include instructions on R replication code, methodologies, and simulated datasets for use in machine learning. Please contact me at my email address with questions, concerns, or issues. All datasets are free and publicly available at https://dataverse.harvard.edu/dataverse/african_spaghetti.

2 Variable names

The following section provides a brief explanation of all variables used in the analysis. The variables are listed according to the rationales that they operationalized.

2.1.1 Ccode

Country code unique identifier taken from the Correlates of War (COW) Project. Please see: http://www.correlatesofwar.org/data-sets/cow-country-codes for additional details.

2.1.2 Country_name

Country name for each African Union member state.

2.1.3 Date

MM-DD-YYYY format. Check formatting for conflicts within R. The R Tidyverse package, **lubridate** may be useful for potential data wrangling. See ttps://lubridate.tidyverse.org/ for more details.

2.2.1 Events

The outcome variable `event` is operationalized as an event count, where $(Y_i = 1, ..., n)$, if a state contributes peacekeepers to a given number of peacekeeping operations, and $(Y_i = 0)$, if otherwise. The variable indexes observations as the total number of peacekeeping operations supported during a calendar year. Entries are captured used monthly official UN reports. Of note, contributions are defined as troop and civilian police contributions only. UN Military Observers and Experts-on-Mission were not considered active contributors to peacekeeping missions due to their small footprint and restrictive legal authorities.

2.3 Political Rationales

The following variables operationalize political rationales for providing African peacekeepers to UN-PKO.

2.3.1 Governance

This variable measures overall domestic government performance in terms of providing public services. The Ibrahim Index for African Governance (IIAG) calculates the composite score across four dimensions available per country-year from 2000 to 2016. MI is used to impute missing observations for missing year, $t_i = 1999$. The result is an interval level measurement, which is normalized using min-max scaling.

2.3.2 Pol_accountability

Political accountability attempts to measure the level of public accountability maintained over the ruling regime. The variable is operationalized as an interval measurement using the Varieties of Democracy Accountability Index (V-Dem), which includes three sub-indicators: (i) the presence of

credible elections; (ii) institutional checks and balances; and (iii) the influence of civil society and media activity.

2.4 Security Rationales

The following variables operationalize security rationales for providing African peacekeepers to UN-PKO.

2.4.1 Militarization

Militarization measures the weight and importance of a state's security sector relative to civil society as a whole (BICC-GMI, 2017). High levels of militarization may indicate a politically powerful security sector that leverages influence over foreign policy outcomes. The militarization variable is a non-negative interval measurement. The score is computed as the average of three indicators from the Bonn International Center for Conversion, Global Militarization Index (BICC-GMI).

2.4.2 National_cap

National material capability complements the `militarization` variable by providing a measure of military strength relative to other African states. Of note, the Composite Index of National Capability (CINC v. 5.0) provides observational data up to the year 2012. Multiple imputation (MI) is used to deal with missing observations from 2013-2016. The score is calculated as the average for a given state on each of the six indicators, which are equally weighted. The result is a percentage for each African state ranked relative to all other states on an interval scale.

2.4.3 Foreign_mil_post

This variable will assess the role of bilateral security partnerships with NATO and European Union allies. This measure is operationalized by assessing the presence of enduring foreign military posts present within African states. Bilateral partner nations include: US, UK, Belgium, Netherlands, Canada, Germany, Italy, and France. The variable is dummy-coded ($x_{ij} = 1$) if an African state has a foreign military post and ($x_{ij} = 0$), if otherwise.

2.5 Normative Rationales

The following variables operationalize normative rationales for providing African peacekeepers to UN-PKO.

2.5.1 Autoc_pol

The Autocratic polity variable is a sub-measure of the normative rationale. The polity measurement is subset as two regime types: (i) a democratic polity, `democratic_polity`, and (ii) autocratic polity, `autocratic_polity`, to capture the unique features of each regime type. The measure is

used to assess the propensity for peacekeeping through a set of shared normative values. The polity score is derived from a set of four indicators that are compiled as an interval measurement.

2.5.2 Democ_pol

The democratic polity variable measures the relationship between democratic governments and the likelihood for peacekeeping contributions.

2.6 Economic Rationales

The following variables operationalize economic rationales for providing African peacekeepers to UN-PKO.

I am interested in the effect of regional economic integration on security cooperation. I define regional integration as a "spaghetti bowl" of potential dimensions including: (i) trade agreements (RTAs); (ii) security partnerships and alliances, (iii) regional infrastructure projects, (iv) financial integration, and (v) the free movement of people across borders.

Five core indicators are selected to build a composite measurement of integration (World Bank, 2013). Due to limited observational data prior to 2013, I approximate the African Regional Integration Index (ARII) by including the following variables: (i) the Logistics Performance Index (LPI) to measure regional infrastructure; (ii) the World Bank Trading-across-Borders index focused on institutional barriers to trade; (iii) intra-regional imports as a percentage of total gross domestic product (GDP); (iv) exports as a percentage of total GDP; and (v) foreign direct investment as a percentage of total GDP. The five interval-level indicators are normalized using min-max scaling. The indicators were assessed separately to extract greater insights from the data.

2.6.1 LPI_score

Logistics Performance Index (LPI) reported by World Bank every two years uses six dimensions to measure a country's overall level of logistics, customs, and infrastructure to support global trade. The weighted average of all six dimensions is calculated to produce the composite score.

2.6.2 Trade_across_borders

The Trade across Borders index reported by World Bank records the time and costs associated with the logistical process of importing and exporting good. Countries that achieve a higher score across dimensions (0 representing the lowest and 100 representing the best performance) are associated with greater levels of international and intraregional trade. This variable is used to assess trade openness among AU member states.

2.6.3 Imports_%GDP

Domestic imports as percentage of total gross domestic product (GDP) for given calendar year.

2.6.4 Exports_%GDP

Domestic exports as percentage of total GDP for given calendar year.

2.6.5 FDI_%GDP

Foreign direct investment into AU member state as percentage of total GDP for given calendar year.

2.6.6 IRG_Exports_%GDP

Intra-regional exports as percentage of total GDP per given calendar year.

2.6.7 IRG_Imports_%GDP

Intra-regional imports as percentage of total GDP per given calendar year.

2.6.8 Total_IRG_%REC

Total intra-regional trade flows by regional economic community.

2.7 Institutional Rationales

The following variables are used to assess regional leadership influence on peacekeeping contributions.

2.7.1 UNSC_NP

Dummy-coded 1 if non-permanent member of UN Security Council, otherwise = 0.

2.7.2 UNSC_A3_member

Dummy-coded 1 if rotational African member of UN Security Council, otherwise = 0.

2.7.3 AU_PSC

Dummy-coded 1 if current member of African Union Peace and Security Council, otherwise = 0.

2.7.4 Chair_AUC

Dummy-coded 1 if current member of African Union Commission, otherwise = 0.

2.7.5 Chair_AU

Dummy-coded 1 if current chairmanship of African Union, otherwise = 0.

2.7.6 Total_ldr

Aggregate total of all regional leadership tenures across UN and AU for given calendar year.

3 Acknowledgements