Online Appendix 1

*Table A1: Definition of variables and sources*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **General sources** | | | | |
| Variable | Definition | Source | N full sample |
| Cash crop dummy | Dummy for the presence of cash crop production | Hailey survey, question 3 | 299 |
| Soil water capacity | water holding capacity of the soil | ISRIC World Soil Information: https://data.isric.org/geonetwork/  srv/eng/catalog.search#/metadata/  9cce26c0-456d-4519-aeac-cb3ab7d616ed, accessed September 2019 | 270 |
| N.A. Jurisdictional hierarchy (Murdock) | Average of jurisdictional hierarchy score from the Murdock atlas, weighted by area the ethnic groups occupied in each Native Authority | Murdock atlas group boundaries are obtained from Nathan Nunn. The Native authorities boundaries are obtained from digitizing original colonial maps | 331 |
| Traditional selection NA | Dummy indicating whether the appointment of the Native Authority is done within the Native Authority itself, usually by inheritance or selection from among a small set of ‘chiefly’ families | Hailey survey, question 7b | 294 |
| NA sets budget | Dummy indicating that the Native Authority sets its own budget estimates | Hailey survey, question 8e | 286 |
| Presence appeal court | Dummy indicating whether the Native Courts had appellate powers or not | Hailey survey, question 11b | 296 |
| Number of chiefs per NA | The number of chiefs per Native Treasury | Hailey survey, question 8a | 294 |
| Removal by the people | Dummy indicating whether the people could remove or 'destool' the chief | Hailey survey, question 7f | 279 |
| Elected NA | Dummy indicating whether the Native Authorities were elected by the people | Hailey survey, question 7b | 294 |
| Chief in Council | Dummy indicating whether the Native Authorities consisted of Chief and a council to balance power | Hailey survey, question 7c | 293 |
| Solo Chief | Dummy indicating whether the Native Authorities consisted of only a chief | Hailey survey, question 7c | 293 |

|  |  |  |
| --- | --- | --- |
| **Country specific sources** | | |
| **Gold Coast** | | |
| **Variable** | **Definition** | **Source** |
| Revenue collected |  | Report on Local Government Finance (Accra 1952) |
| Population |  | Census of Population 1948: Report and Tables (Accra 1948), table 14, p. 79 |
| Distance to large city | Shortest distance between the geometric mean of each Native Authority area to the nearest city with 35,000 inhabitants or more, obtained from colonial censuses | Colonial map and Census of Population 1948: Report and Tables (Accra 1948) |
| Railway stations per 1000 population | Number of railway station per 1000 population | Colonial map GP.D./W/. 792/525/5/46, Survey H.Q. Accra, Gold Coast, 1946 |
|  | | |
| **Kenya** | | |
| **Variable** | **Definition** | **Source** |
| Revenue collected |  | Report on Native Affairs 1946-47 (Nairobi, 1949) |
| Population |  | Report on Native Affairs 1946-47 (Nairobi, 1949) |
| Distance to large city | Shortest distance between the geometric mean of each Native Authority area to the nearest city with 35,000 inhabitants or more, obtained from colonial censuses | Colonial map and Report on the Census of the native population of Kenya colony and protectorate, section E - Urbanization |
| Railway stations per 1000 population | Number of railway station per 1000 population | Map of the colony and Protectorate of Kenya Shewing district boundaries and provinces (1936) |

|  |  |  |
| --- | --- | --- |
| **Nigeria** | | |
| **Variable** | **Definition** | **Source** |
| Revenue collected |  | Native Treasury Estimates, 1947-8, in TNA CO 1019/41 |
| Population |  | Population Census 1952-3 (Lagos, 1955) |
| Distance to large city | Shortest distance between the geometric mean of each Native Authority area to the nearest city with 35,000 inhabitants or more, obtained from colonial censuses | Colonial maps and Population census of Nigeria 1952-53 (Lagos, 1955), table 9 |
| Railway stations per 1000 population | Number of railway station per 1000 population | Colonial regional, provincial and divisional map of Nigeria, 4000/413/5-53, Survey department, Lagos, 1953; Provincial maps for Abeokuta, 1933; Benin, 1949; Colony, Abeokuta and Ijebu, 1935; Ijebu, 1935; Ondo, 750/809/4-50, 1949; Oyo, 750/1002/8-50, 1949; Warri, 1949; Northern Nigeria, July 1930; Northern Nigeria Native Authority areas; Eastern Nigeria, 450/450/5-57, 1954, printed and published 1957 |
|  |  |  |
| **Nyasaland** | | |
| **Variable** | **Definition** | **Source** |
| Revenue collected |  | ‘Economic Statistics 1951’, in CO 1015/522; Provincial Annual Reports, various years |
| Population |  | ‘Economic Statistics 1951’, in CO 1015/522; Provincial Annual Reports, various years |
| Distance to large city | Shortest distance between the geometric mean of each Native Authority area to the nearest city with 35,000 inhabitants or more, obtained from colonial censuses | Colonial map and Population census of the Federation of Rhodesia and Nyasaland, 1956, table 2, p. 40 |
| Railway stations per 1000 population | Number of railway station per 1000 population | Colonial map of Nyasaland, 1906, revised boundaries, railways and roads and reprinted at the War office, 1923 |

Online Appendix 2

*Table A2-1: Institutional structures of Native Authorities, c. 1948, Gold Coast*

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | Full samplea | Regression samplea |
| Autonomy | Traditional Selection | 97% | 97% |
| NA sets estimates | 40% | 34% |
| Presence of appeal court | 52% | 52% |
| Voice and accountability | Average no. NAs per Treasury | 1.4 | 1.5 |
| Removal by people | 75% | 75% |
| Elected NA | 3% | 2% |
| Chief in council | 92% | 95% |
| Solo chief | 6% | 0% |
| Observations |  | 88 - 91b | 65 |

*a* Shares indicate the share of native authorities in the sample where the indicator is present. b Number of observations ranges per variable, table shows the minimum and maximum number of observations for the variables in the table

*Table A2-2: Institutional structures of Native Authorities, c. 1948, Kenya*

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | Full samplea | Regression samplea |
| Autonomy | Traditional Selection | 16% | 10% |
| NA sets estimates | 9% | 10% |
| Presence of appeal court | 41% | 33% |
| Voice and accountability | Average no. NAs per Treasury | 15.3 | 14.2 |
| Removal by people | 0% | 0% |
| Elected NA | 8% | 10% |
| Chief in council | 8% | 5% |
| Solo chief | 63% | 65% |
| Observations |  | 23 – 27b | 21 |

*a* Shares indicate the share of native authorities in the sample where the indicator is present. b Number of observations ranges per variable, table shows the minimum and maximum number of observations for the variables in the table.

*Table A2-3: Institutional structures of Native Authorities, c. 1948, Nigeria*

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | Full samplea | Regression samplea |
| Autonomy | Traditional Selection | 60% | 62% |
| NA sets estimates | 10% | 10% |
| Presence of appeal court | 58% | 71% |
| Voice and accountability | Average no. NAs per Treasury | 7 | 5.8 |
| Removal by people | 5% | 7% |
| Elected NA | 40% | 37% |
| Chief in council | 42% | 36% |
| Solo chief | 18% | 26% |
| Observations |  | 153 - 163b | 92 |

*a* Shares indicate the share of native authorities in the sample where the indicator is present. b Number of observations ranges per variable, table shows the minimum and maximum number of observations for the variables in the table

*Table A2-4: Institutional structures of Native Authorities, c. 1948, Nyasaland*

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | Full samplea | Regression samplea |
| Autonomy | Traditional Selection | 100% | 100% |
| NA sets estimates | 7% | 7% |
| Presence of appeal court | 88% | 86% |
| Voice and accountability | Average no. NAs per Treasury | 6.6 | 6.1 |
| Removal by people | 20% | 21% |
| Elected NA | 0% | 0% |
| Chief in council | 20% | 14% |
| Solo chief | 80% | 86% |
| Observations |  | 14 - 17b | 14 |

*a* Shares indicate the share of native authorities in the sample where the indicator is present. b Number of observations ranges per variable, table shows the minimum and maximum number of observations for the variables in the table

Online Appendix 3

Full results for sub-sample of decentralized societies

*Table A3-1: Subnational economic inequalities and per capita revenue*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Revenue per capita | Revenue per capita | Revenue per capita | Revenue per capita |
| Cash crop dummy | 8.788\*\* | 8.470\*\* | 9.037\*\* | 9.276\*\*\* |
|  | -2.55 | -2.39 | -2.59 | -2.64 |
| Distance to large city |  | -0.0279\* | -0.0228 | -0.0216 |
|  |  | (-1.72) | (-1.41) | (-1.33) |
| Railway stations per |  |  | 7.79\*\* | 8.03\*\* |
| 1000 population |  |  | (2.01) | (2.21) |
| Soil water capacity |  |  |  | 0.353 |
|  |  |  |  | (0.73) |
| Constant | 21.56\*\*\* | 27.52\*\*\* | 24.13\*\*\* | 15.03 |
|  | (7.46) | (5.7) | (5.04) | (1.16) |
| Country dummies | Yes | Yes | Yes | Yes |
| N | 124 | 124 | 124 | 124 |
| R-sq | 0.164 | 0.173 | 0.188 | 0.19 |

t statistics adjusted for heteroscedasticity in parentheses. Significance levels: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01

*Table A3-2: Alternative measures of Autonomy and Revenue Per Capita*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Revenue per capita | Revenue per capita | Revenue per capita | Revenue per capita |
| Cash crop dummy | 6.165\* | 13.02\*\*\* | 7.346\*\* | 8.132\*\* |
|  | (1.70) | (4.05) | (2.34) | (2.51) |
| Distance to large city | -0.0263 | -0.0336\*\* | -0.0164 | -0.0178 |
|  | (-1.61) | (-2.15) | (-1.00) | (-1.13) |
| Railway stations per 1000 | 6.63\* | 6.16\* | 6.76 | 8.13\*\* |
| population | (1.76) | (1.84) | (1.06) | (2.36) |
| N.A. Jurisdictional hierarchy | 7.193 |  |  |  |
| (Murdock) | (1.80) |  |  |  |
| Traditional selection N.A. |  | 15.14\*\*\* |  |  |
|  |  | (4.66) |  |  |
| N.A. sets budget |  |  | 24.77\*\*\* |  |
|  |  |  | (3.10) |  |
| Presence appeal court |  |  |  | 11.26\*\*\* |
|  |  |  |  | (2.89) |
| Constant | 12.09 | 23.82\*\*\* | 20.88\*\*\* | 18.90\*\*\* |
|  | (1.36) | (5.17) | (4.01) | (3.88) |
| Country dummies | Yes | Yes | Yes | Yes |
| N | 124 | 124 | 124 | 124 |
| R-sq | 0.208 | 0.248 | 0.317 | 0.245 |

t statistics adjusted for heteroscedasticity in parentheses. Significance levels: \* p<0.10, \*\* p<0.05, \*\*\* p<0.01