

Overview

The code in this replication package can be used to reproduce the results of the working paper "Development acupuncture: The network structure of multidimensional poverty and its implications*" by Viktor Stojkoski , Luis F. Lopez-Calva, Kimberly Bolch , and Almudena Fernandez.

To replicate the results of the working paper, please follow the steps below:

1. Download the repository folder. It includes the .ipynb files, additional .py files, and the databases used to run all tables and figures of the working paper.
2. All data should be stored in a subfolder called /data.
3. Execute the lines of complexity-mp-analysis.ipynb to replicate all tables and figures.
4. All tables and figures are stored in the subfolder /output.

Data Availability Statement

The paper uses data from the Demographic and Health Surveys (DHS) Program (<https://dhsprogram.com/>) and the Multiple Indicator Cluster Surveys (MICS) by UNICEF (<https://mics.unicef.org/>). Data is subject to a redistribution restriction, but can be freely downloaded from <https://dhsprogram.com/> and <https://mics.unicef.org/> upon registration. The reproducer should include a brief description of the project, and agree to the conditions of use. These data are then transformed to Poverty indicators using the .do files provided by the Oxford Poverty and Human Development Initiative (OPHI). Instructions on how to do this is available at <https://ophi.org.uk/global-mpi/2023> (together with the .do files).

For the reproducibility package, the poverty indicators adapted data is provided. This data is located in /data.

The paper also uses:

- 1) World Bank's list for the region and income classification of countries. This is public data that can be accessed at: <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>.

- 2) Data on Ethiopia's general government expenditure that is detrended and normalized to be in per capita USD constant 2021 (in PPP). This data can be downloaded from: <https://data.worldbank.org/indicator/NE.CON.GOV.T.ZS> (government expenditure) and <https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.KD> (gdp per capita in constant 2021 USD (PPI adjusted))
- 3) Data on Ethiopia's World Governance indicators on Rule of Law and Control of Corruption in 2011 and 2021 (<https://www.worldbank.org/en/publication/worldwide-governance-indicators>)

The summary of the data is:

Data.Name	Data.File	Location	Provided	Original Source
Afghanistan 2011 Poverty Outcome by Indicator and Household	afg_mics10-11.csv	/data	TRUE	2011 Afghanistan MICS Survey
Afghanistan 2016 Poverty Outcome by Indicator and Household	afg_dhs15-16.csv	/data	TRUE	2016 Afghanistan DHS Survey
Albania 2009 Poverty Outcome by Indicator and Household	alb_dhs08-09.csv	/data	TRUE	2009 Albania DHS Survey
Albania 2018 Poverty Outcome by Indicator and Household	alb_dhs17-18.csv	/data	TRUE	2018 Albania DHS Survey
Armenia 2010 Poverty Outcome by Indicator and Household	arm_dhs10.csv	/data	TRUE	2010 Armenia DHS Survey
Armenia 2016 Poverty Outcome by Indicator and Household	arm_dhs15-16.csv	/data	TRUE	2016 Armenia DHS Survey
Bangladesh 2014 Poverty Outcome by Indicator and Household	bgd_dhs14.csv	/data	TRUE	2014 Bangladesh DHS Survey
Bangladesh 2019 Poverty Outcome by Indicator and Household	bgd_mics19.csv	/data	TRUE	2019 Bangladesh MICS Survey
Belize 2011 Poverty Outcome by Indicator and Household	blz_mics11.csv	/data	TRUE	2011 Belize MICS Survey
Belize 2016 Poverty Outcome by Indicator and Household	blz_mics15-16.csv	/data	TRUE	2016 Belize MICS Survey
Bolivia 2003 Poverty Outcome by Indicator and Household	bol_dhs03.csv	/data	TRUE	2003 Bolivia DHS Survey
Bolivia 2008 Poverty Outcome by Indicator and Household	bol_dhs08.csv	/data	TRUE	2008 Bolivia DHS Survey
Bosnia and Herzegovina 2006 Poverty Outcome by Indicator and Household	bih_mics06.csv	/data	TRUE	2006 Bosnia and Herzegovina MICS Survey
Bosnia and Herzegovina 2012 Poverty Outcome by Indicator and Household	bih_mics11-12.csv	/data	TRUE	2012 Bosnia and Herzegovina MICS Survey
Burundi 2010 Poverty Outcome by Indicator and Household	bdi_dhs10.csv	/data	TRUE	2010 Burundi DHS Survey
Burundi 2017 Poverty Outcome by Indicator and Household	bdi_dhs16-17.csv	/data	TRUE	2017 Burundi DHS Survey
Cameroon 2011 Poverty Outcome by Indicator and Household	cmr_dhs11.csv	/data	TRUE	2011 Cameroon DHS Survey
Cameroon 2018 Poverty Outcome by Indicator and Household	cmr_dhs18.csv	/data	TRUE	2018 Cameroon DHS Survey
Central African Republic 2010 Poverty Outcome by Indicator and Household	caf_mics10.csv	/data	TRUE	2010 Central African Republic MICS Survey
Central African Republic 2019 Poverty Outcome by Indicator and Household	caf_mics18-19.csv	/data	TRUE	2019 Central African Republic MICS Survey
Chad 2010 Poverty Outcome by Indicator and Household	tcd_mics10.csv	/data	TRUE	2010 Chad MICS Survey
Chad 2015 Poverty Outcome by Indicator and Household	tcd_dhs14-15.csv	/data	TRUE	2015 Chad DHS Survey
Colombia 2010 Poverty Outcome by Indicator and Household	col_dhs10.csv	/data	TRUE	2010 Colombia DHS Survey
Colombia 2016 Poverty Outcome by Indicator and Household	col_dhs15-16.csv	/data	TRUE	2016 Colombia DHS Survey
Congo 2005 Poverty Outcome by Indicator and Household	cog_dhs05.csv	/data	TRUE	2005 Congo DHS Survey
Congo 2015 Poverty Outcome by Indicator and Household	cog_mics14-15.csv	/data	TRUE	2015 Congo MICS Survey
Dominican Republic 2007 Poverty Outcome by Indicator and Household	dom_dhs07.csv	/data	TRUE	2007 Dominican Republic DHS Survey

Dominican Republic 2019 Poverty Outcome by Indicator and Household	dom_mics19.csv	/data	TRUE	2019 Dominican Republic MICS Survey
Egypt 2008 Poverty Outcome by Indicator and Household	egy_dhs08.csv	/data	TRUE	2008 Egypt DHS Survey
Egypt 2014 Poverty Outcome by Indicator and Household	egy_dhs14.csv	/data	TRUE	2014 Egypt DHS Survey
Eswatini 2010 Poverty Outcome by Indicator and Household	swz_mics10.csv	/data	TRUE	2010 Eswatini MICS Survey
Eswatini 2014 Poverty Outcome by Indicator and Household	swz_mics14.csv	/data	TRUE	2014 Eswatini MICS Survey
Ethiopia 2011 Poverty Outcome by Indicator and Household	eth_dhs11.csv	/data	TRUE	2011 Ethiopia DHS Survey
Ethiopia 2016 Poverty Outcome by Indicator and Household	eth_dhs16.csv	/data	TRUE	2016 Ethiopia DHS Survey
Ethiopia 2019 Poverty Outcome by Indicator and Household	eth_dhs19.csv	/data	TRUE	2019 Ethiopia DHS Survey
Gabon 2000 Poverty Outcome by Indicator and Household	gab_dhs00.csv	/data	TRUE	2000 Gabon DHS Survey
Gabon 2012 Poverty Outcome by Indicator and Household	gab_dhs12.csv	/data	TRUE	2012 Gabon DHS Survey
Gambia 2013 Poverty Outcome by Indicator and Household	gmb_dhs13.csv	/data	TRUE	2013 Gambia DHS Survey
Gambia 2020 Poverty Outcome by Indicator and Household	gmb_dhs19-20.csv	/data	TRUE	2020 Gambia DHS Survey
Ghana 2011 Poverty Outcome by Indicator and Household	gha_mics11.csv	/data	TRUE	2011 Ghana MICS Survey
Ghana 2018 Poverty Outcome by Indicator and Household	gha_mics17-18.csv	/data	TRUE	2018 Ghana MICS Survey
Guinea 2012 Poverty Outcome by Indicator and Household	gin_dhs12.csv	/data	TRUE	2012 Guinea DHS Survey
Guinea 2018 Poverty Outcome by Indicator and Household	gin_dhs18.csv	/data	TRUE	2018 Guinea DHS Survey
Guinea-Bissau 2014 Poverty Outcome by Indicator and Household	gnb_mics14.csv	/data	TRUE	2014 Guinea-Bissau MICS Survey
Guinea-Bissau 2019 Poverty Outcome by Indicator and Household	gnb_mics18-19.csv	/data	TRUE	2019 Guinea-Bissau MICS Survey
Guyana 2009 Poverty Outcome by Indicator and Household	guy_dhs09.csv	/data	TRUE	2009 Guyana DHS Survey
Guyana 2014 Poverty Outcome by Indicator and Household	guy_mics14.csv	/data	TRUE	2014 Guyana MICS Survey
Guyana 2020 Poverty Outcome by Indicator and Household	guy_mics19-20.csv	/data	TRUE	2020 Guyana MICS Survey
Haiti 2012 Poverty Outcome by Indicator and Household	hti_dhs12.csv	/data	TRUE	2012 Haiti DHS Survey
Haiti 2017 Poverty Outcome by Indicator and Household	hti_dhs16-17.csv	/data	TRUE	2017 Haiti DHS Survey
Honduras 2006 Poverty Outcome by Indicator and Household	hnd_dhs05-06.csv	/data	TRUE	2006 Honduras DHS Survey
Honduras 2012 Poverty Outcome by Indicator and Household	hnd_dhs11-12.csv	/data	TRUE	2012 Honduras DHS Survey
Honduras 2019 Poverty Outcome by Indicator and Household	hnd_mics19.csv	/data	TRUE	2019 Honduras MICS Survey
Indonesia 2012 Poverty Outcome by Indicator and Household	idn_dhs12.csv	/data	TRUE	2012 Indonesia DHS Survey
Indonesia 2017 Poverty Outcome by Indicator and Household	idn_dhs17.csv	/data	TRUE	2017 Indonesia DHS Survey
Iraq 2011 Poverty Outcome by Indicator and Household	irq_mics11.csv	/data	TRUE	2011 Iraq MICS Survey
Iraq 2018 Poverty Outcome by Indicator and Household	irq_mics18.csv	/data	TRUE	2018 Iraq MICS Survey
Jordan 2012 Poverty Outcome by Indicator and Household	jor_dhs12.csv	/data	TRUE	2012 Jordan DHS Survey
Jordan 2018 Poverty Outcome by Indicator and Household	jor_dhs17-18.csv	/data	TRUE	2018 Jordan DHS Survey
Kazakhstan 2011 Poverty Outcome by Indicator and Household	kaz_mics10-11.csv	/data	TRUE	2011 Kazakhstan MICS Survey
Kazakhstan 2015 Poverty Outcome by Indicator and Household	kaz_mics15.csv	/data	TRUE	2015 Kazakhstan MICS Survey
Kenya 2009 Poverty Outcome by Indicator and Household	ken_dhs08-09.csv	/data	TRUE	2009 Kenya DHS Survey
Kenya 2014 Poverty Outcome by Indicator and Household	ken_dhs14.csv	/data	TRUE	2014 Kenya DHS Survey
Kyrgyzstan 2006 Poverty Outcome by Indicator and Household	kgz_mics05-06.csv	/data	TRUE	2006 Kyrgyzstan MICS Survey
Kyrgyzstan 2014 Poverty Outcome by Indicator and Household	kgz_mics14.csv	/data	TRUE	2014 Kyrgyzstan MICS Survey
Kyrgyzstan 2018 Poverty Outcome by Indicator and Household	kgz_mics18.csv	/data	TRUE	2018 Kyrgyzstan MICS Survey
Laos 2012 Poverty Outcome by Indicator and Household	lao_mics11-12.csv	/data	TRUE	2012 Laos MICS Survey
Laos 2017 Poverty Outcome by Indicator and Household	lao_mics17.csv	/data	TRUE	2017 Laos MICS Survey

Lesotho 2009 Poverty Outcome by Indicator and Household	lso_dhs09.csv	/data	TRUE	2009 Lesotho DHS Survey
Lesotho 2014 Poverty Outcome by Indicator and Household	lso_dhs14.csv	/data	TRUE	2014 Lesotho DHS Survey
Liberia 2007 Poverty Outcome by Indicator and Household	lbr_dhs07.csv	/data	TRUE	2007 Liberia DHS Survey
Liberia 2013 Poverty Outcome by Indicator and Household	lbr_dhs13.csv	/data	TRUE	2013 Liberia DHS Survey
Liberia 2020 Poverty Outcome by Indicator and Household	lbr_dhs19-20.csv	/data	TRUE	2020 Liberia DHS Survey
Madagascar 2009 Poverty Outcome by Indicator and Household	mdg_dhs08-09.csv	/data	TRUE	2009 Madagascar DHS Survey
Madagascar 2018 Poverty Outcome by Indicator and Household	mdg_mics18.csv	/data	TRUE	2018 Madagascar MICS Survey
Malawi 2010 Poverty Outcome by Indicator and Household	mwi_dhs10.csv	/data	TRUE	2010 Malawi DHS Survey
Malawi 2016 Poverty Outcome by Indicator and Household	mwi_dhs15-16.csv	/data	TRUE	2016 Malawi DHS Survey
Malawi 2020 Poverty Outcome by Indicator and Household	mwi_mics19-20.csv	/data	TRUE	2020 Malawi MICS Survey
Mali 2006 Poverty Outcome by Indicator and Household	mli_dhs06.csv	/data	TRUE	2006 Mali DHS Survey
Mali 2018 Poverty Outcome by Indicator and Household	mli_dhs18.csv	/data	TRUE	2018 Mali DHS Survey
Moldova 2005 Poverty Outcome by Indicator and Household	mda_dhs05.csv	/data	TRUE	2005 Moldova DHS Survey
Moldova 2012 Poverty Outcome by Indicator and Household	mda_mics12.csv	/data	TRUE	2012 Moldova MICS Survey
Mongolia 2010 Poverty Outcome by Indicator and Household	mng_mics10.csv	/data	TRUE	2010 Mongolia MICS Survey
Mongolia 2013 Poverty Outcome by Indicator and Household	mng_mics13.csv	/data	TRUE	2013 Mongolia MICS Survey
Montenegro 2013 Poverty Outcome by Indicator and Household	mne_mics13.csv	/data	TRUE	2013 Montenegro MICS Survey
Montenegro 2018 Poverty Outcome by Indicator and Household	mne_mics18.csv	/data	TRUE	2018 Montenegro MICS Survey
Mozambique 2003 Poverty Outcome by Indicator and Household	moz_dhs03.csv	/data	TRUE	2003 Mozambique DHS Survey
Mozambique 2011 Poverty Outcome by Indicator and Household	moz_dhs11.csv	/data	TRUE	2011 Mozambique DHS Survey
Namibia 2007 Poverty Outcome by Indicator and Household	nam_dhs06-07.csv	/data	TRUE	2007 Namibia DHS Survey
Namibia 2013 Poverty Outcome by Indicator and Household	nam_dhs13.csv	/data	TRUE	2013 Namibia DHS Survey
Nepal 2011 Poverty Outcome by Indicator and Household	npl_dhs11.csv	/data	TRUE	2011 Nepal DHS Survey
Nepal 2016 Poverty Outcome by Indicator and Household	npl_dhs16.csv	/data	TRUE	2016 Nepal DHS Survey
Nepal 2019 Poverty Outcome by Indicator and Household	npl_mics19.csv	/data	TRUE	2019 Nepal MICS Survey
Niger 2006 Poverty Outcome by Indicator and Household	ner_dhs06.csv	/data	TRUE	2006 Niger DHS Survey
Niger 2012 Poverty Outcome by Indicator and Household	ner_dhs12.csv	/data	TRUE	2012 Niger DHS Survey
Nigeria 2013 Poverty Outcome by Indicator and Household	nga_dhs13.csv	/data	TRUE	2013 Nigeria DHS Survey
Nigeria 2018 Poverty Outcome by Indicator and Household	nga_dhs18.csv	/data	TRUE	2018 Nigeria DHS Survey
North Macedonia 2011 Poverty Outcome by Indicator and Household	mkd_mics11.csv	/data	TRUE	2011 North Macedonia MICS Survey
North Macedonia 2019 Poverty Outcome by Indicator and Household	mkd_mics18-19.csv	/data	TRUE	2019 North Macedonia MICS Survey
Pakistan 2013 Poverty Outcome by Indicator and Household	pak_dhs12-13.csv	/data	TRUE	2013 Pakistan DHS Survey
Pakistan 2018 Poverty Outcome by Indicator and Household	pak_dhs17-18.csv	/data	TRUE	2018 Pakistan DHS Survey
Palestine 2010 Poverty Outcome by Indicator and Household	pse_mics10.csv	/data	TRUE	2010 Palestine MICS Survey
Palestine 2014 Poverty Outcome by Indicator and Household	pse_mics14.csv	/data	TRUE	2014 Palestine MICS Survey
Palestine 2020 Poverty Outcome by Indicator and Household	pse_mics19-20.csv	/data	TRUE	2020 Palestine MICS Survey
Peru 2012 Poverty Outcome by Indicator and Household	per_dhs12.csv	/data	TRUE	2012 Peru DHS Survey
Philippines 2013 Poverty Outcome by Indicator and Household	phl_dhs13.csv	/data	TRUE	2013 Philippines DHS Survey
Philippines 2017 Poverty Outcome by Indicator and Household	phl_dhs17.csv	/data	TRUE	2017 Philippines DHS Survey
Rwanda 2010 Poverty Outcome by Indicator and Household	rwa_dhs10.csv	/data	TRUE	2010 Rwanda DHS Survey

Rwanda 2015 Poverty Outcome by Indicator and Household	rwa_dhs14-15.csv	/data	TRUE	2015 Rwanda DHS Survey
Rwanda 2020 Poverty Outcome by Indicator and Household	rwa_dhs19-20.csv	/data	TRUE	2020 Rwanda DHS Survey
Sao Tome and Principe 2009 Poverty Outcome by Indicator and Household	stp_dhs08-09.csv	/data	TRUE	2009 Sao Tome and Principe DHS Survey
Sao Tome and Principe 2019 Poverty Outcome by Indicator and Household	stp_mics19.csv	/data	TRUE	2019 Sao Tome and Principe MICS Survey
Senegal 2005 Poverty Outcome by Indicator and Household	sen_dhs05.csv	/data	TRUE	2005 Senegal DHS Survey
Senegal 2017 Poverty Outcome by Indicator and Household	sen_dhs17.csv	/data	TRUE	2017 Senegal DHS Survey
Senegal 2019 Poverty Outcome by Indicator and Household	sen_dhs19.csv	/data	TRUE	2019 Senegal DHS Survey
Serbia 2010 Poverty Outcome by Indicator and Household	srb_mics10.csv	/data	TRUE	2010 Serbia MICS Survey
Serbia 2014 Poverty Outcome by Indicator and Household	srb_mics14.csv	/data	TRUE	2014 Serbia MICS Survey
Serbia 2019 Poverty Outcome by Indicator and Household	srb_mics19.csv	/data	TRUE	2019 Serbia MICS Survey
Sierra Leone 2013 Poverty Outcome by Indicator and Household	sle_dhs13.csv	/data	TRUE	2013 Sierra Leone DHS Survey
Sierra Leone 2019 Poverty Outcome by Indicator and Household	sle_dhs19.csv	/data	TRUE	2019 Sierra Leone DHS Survey
Sudan 2010 Poverty Outcome by Indicator and Household	sdn_mics10.csv	/data	TRUE	2010 Sudan MICS Survey
Sudan 2014 Poverty Outcome by Indicator and Household	sdn_mics14.csv	/data	TRUE	2014 Sudan MICS Survey
Suriname 2006 Poverty Outcome by Indicator and Household	sur_mics06.csv	/data	TRUE	2006 Suriname MICS Survey
Suriname 2010 Poverty Outcome by Indicator and Household	sur_mics10.csv	/data	TRUE	2010 Suriname MICS Survey
Suriname 2018 Poverty Outcome by Indicator and Household	sur_mics18.csv	/data	TRUE	2018 Suriname MICS Survey
Thailand 2012 Poverty Outcome by Indicator and Household	tha_mics12.csv	/data	TRUE	2012 Thailand MICS Survey
Thailand 2019 Poverty Outcome by Indicator and Household	tha_mics19.csv	/data	TRUE	2019 Thailand MICS Survey
Timor-Leste 2010 Poverty Outcome by Indicator and Household	tls_dhs09-10.csv	/data	TRUE	2010 Timor-Leste DHS Survey
Timor-Leste 2016 Poverty Outcome by Indicator and Household	tls_dhs16.csv	/data	TRUE	2016 Timor-Leste DHS Survey
Togo 2010 Poverty Outcome by Indicator and Household	tgo_mics10.csv	/data	TRUE	2010 Togo MICS Survey
Togo 2014 Poverty Outcome by Indicator and Household	tgo_dhs13-14.csv	/data	TRUE	2014 Togo DHS Survey
Togo 2017 Poverty Outcome by Indicator and Household	tgo_mics17.csv	/data	TRUE	2017 Togo MICS Survey
Trinidad and Tobago 2006 Poverty Outcome by Indicator and Household	tto_mics06.csv	/data	TRUE	2006 Trinidad and Tobago MICS Survey
Trinidad and Tobago 2011 Poverty Outcome by Indicator and Household	tto_mics11.csv	/data	TRUE	2011 Trinidad and Tobago MICS Survey
Tunisia 2012 Poverty Outcome by Indicator and Household	tun_mics11-12.csv	/data	TRUE	2012 Tunisia MICS Survey
Tunisia 2018 Poverty Outcome by Indicator and Household	tun_mics18.csv	/data	TRUE	2018 Tunisia MICS Survey
Turkmenistan 2006 Poverty Outcome by Indicator and Household	tkm_mics06.csv	/data	TRUE	2006 Turkmenistan MICS Survey
Turkmenistan 2019 Poverty Outcome by Indicator and Household	tkm_mics19.csv	/data	TRUE	2019 Turkmenistan MICS Survey
Uganda 2011 Poverty Outcome by Indicator and Household	uga_dhs11.csv	/data	TRUE	2011 Uganda DHS Survey
Uganda 2016 Poverty Outcome by Indicator and Household	uga_dhs16.csv	/data	TRUE	2016 Uganda DHS Survey
Ukraine 2007 Poverty Outcome by Indicator and Household	ukr_dhs07.csv	/data	TRUE	2007 Ukraine DHS Survey
Ukraine 2012 Poverty Outcome by Indicator and Household	ukr_mics12.csv	/data	TRUE	2012 Ukraine MICS Survey
Vietnam 2021 Poverty Outcome by Indicator and Household	vnm_mics20-21.csv	/data	TRUE	2021 Vietnam MICS Survey
Yemen 2006 Poverty Outcome by Indicator and Household	yem_mics06.csv	/data	TRUE	2006 Yemen MICS Survey
Yemen 2013 Poverty Outcome by Indicator and Household	yem_dhs13.csv	/data	TRUE	2013 Yemen DHS Survey
Zambia 2007 Poverty Outcome by Indicator and Household	zmb_dhs07.csv	/data	TRUE	2007 Zambia DHS Survey
Zambia 2014 Poverty Outcome by Indicator and Household	zmb_dhs13-14.csv	/data	TRUE	2014 Zambia DHS Survey
Zambia 2018 Poverty Outcome by Indicator and Household	zmb_dhs18.csv	/data	TRUE	2018 Zambia DHS Survey

Zimbabwe 2011 Poverty Outcome by Indicator and Household	zwe_dhs10-11.csv	/data	TRUE	2011 Zimbabwe DHS Survey
Zimbabwe 2015 Poverty Outcome by Indicator and Household	zwe_dhs15.csv	/data	TRUE	2015 Zimbabwe DHS Survey
Zimbabwe 2019 Poverty Outcome by Indicator and Household	zwe_mics19.csv	/data	TRUE	2019 Zimbabwe MICS Survey
Country region and income groups	OGHIST.xlsx	/data	TRUE	The World Bank
Government expenditure data	general-government-data.xlsx	/data	TRUE	Own calculations using World Bank data
Rule of law and control of corruption data	wgi-data..xlsx	/data	TRUE	Own calculations using World Bank data

Computational requirements

All calculations were done in Python 3.9.13 and require the following packages:

- numpy: 1.26.4
- pandas: 2.2.0
- scipy: 1.12.0
- statsmodels: 0.14.1
- matplotlib: 3.8.3
- plotly: 5.9.0
- networkx: 2.8.4
- sklearn: 1.0.2
- linearmodels: 5.4
- stargazer==0.0.6
- policy_priority_inference (imported from the .py file provided in the reproducibility package)

Description of programs/code

- The program complexity-mp-analysis.ipynb generates all tables and figures in the main body and the appendices of the article. Output files are called appropriate names (e.g., table1.html, figure2.pdf) and should be easy to correlate with the manuscript.
- The program policy_priority_inference.py are used to simulate the Policy Priority Inference (PPI). They are adapted from the PPI GitHub package:
<https://github.com/oguerrer/ppi>.

List of generated tables and programs

The provided code reproduces selected tables and figures in the paper, as explained and justified below.

Figure/Table #	Program	Output file	Note
Table 1	complexity_mp_analysis.ipynb	table1.html	Reproduced in raw format.
Table 2	complexity_mp_analysis.ipynb	table2.html	Reproduced in raw format.
Table 3	complexity_mp_analysis.ipynb	table3.html	Reproduced in raw format.
Table A1.1	/	/	The table does not use any data. Therefore, not reproduced.
Table A1.2	/	/	The table does not use any data. Therefore, not reproduced.
Figure 1 a Kyrgyzstan 2006	complexity_mp_analysis.ipynb	figure1a_kgz06.pdf	Reproduced in raw format.
Figure 1 a Kyrgyzstan 2018	complexity_mp_analysis.ipynb	figure1a_kgz18.pdf	Reproduced in raw format.
Figure 1 a Ethiopia 2011	complexity_mp_analysis.ipynb	figure1a_eth11.pdf	Reproduced in raw format.
Figure 1 a Ethiopia 2019	complexity_mp_analysis.ipynb	figure1a_eth19.pdf	Reproduced in raw format.
Figure 2	complexity_mp_analysis.ipynb	figure2.pdf	Reproduced in raw

Figure 3	complexity_mp_analysis.ipynb	figure3.pdf	format. Reproduced in raw format.
Figure A3.1	complexity_mp_analysis.ipynb	figureA31.pdf	Reproduced in raw format.
Figure A3.2	complexity_mp_analysis.ipynb	figureA32.pdf	Reproduced in raw format.
Figure A2.1	complexity_mp_analysis.ipynb	figureA21.pdf	Reproduced in raw format.