

README for the Reproducibility Package for Institutional Capacity for Policy Implementation: An Analytical Framework

Overview

State capacity is an important pre-requisite for policy implementation, yet at the country-level it is difficult to measure, assess, and reform. We propose a focus on institutional capacity: the ability of public institutions to implement the specific policy mandates for which they are responsible. Based on a review of existing literature, we define the different dimensions that compose institutional capacity and group them into two cross-cutting categories: organizational dimensions (personnel, financial resources, information systems, and management practices) and governance dimensions (transparency, independence, and accountability). We propose measures for organizational and governance dimensions using existing data, show intra-institutional variation of these measures within countries, and discuss how new data could be collected to better measure these concepts. Finally, we illustrate how the framework can be used to diagnose the sources of common problems of weak policy implementation.

Data Availability Statement

Dataset Name	File Name(s)	Link/Access Instructions	Access Date	Data Access
Global Survey of Public Servants	gsps.csv	https://www.globalsurveyofpublicservants.org/sites/default/files/2023-11/GSPS_Indicators_Dataset_11_10_23.xlsx	2025	Open
BOOST	boost.csv	Original datasets (<i>filepaths</i>) cleaned to produce <i>boost.csv</i> are available in the Development Data Hub. Specifically: - Armenia (<i>data/input/boost/boost_arm_2006_2022.xlsx</i>): https://datacatalog.worldbank.org/int/search/dataset/0040229 - Paraguay (<i>data/input/boost/boost_pgy_2006_2022.xlsx</i>): https://datacatalog.worldbank.org/int/search/dataset/0038079 - Uganda (<i>data/input/boost_uga_2004_2022.xlsx</i>): https://datacatalog.worldbank.org/int/search/dataset/0038076	2025	Open.
GovTech Maturity Index (Clean)	gtmiwide_clean.csv	Produced from the GovTech Maturity Index (Raw), listed below.	2025	Open
GovTech Maturity Index (Raw)	WBG_GovTech Dataset_Oct2022.xlsx	https://datacatalogfiles.worldbank.org/ddh-published/0037889/DR0089805/WBG_GovTech%20Dataset_Oct2022.xlsx	2025	Open
Indicators on the Governance of Sector Regulators	oecd_gsr.csv	Data available at: https://www.oecd.org/content/dam/oecd/en/publications/support-materials/2025/03/the-2023-indicators-on-the-governance-of-sector-regulators_eb33f9bb/2023%20Indicators%20on%20the%20Governance%20of%20Sector%20Regulators%20(February%202025).xlsx	2025	Open
World Bank regional classification	regional classification.dta	Latest version of the data available at: https://ddh-openapi.worldbank.org/resources/DR0095333/download . Note that because the World Bank annually updates regional classifications, the latest version of the data might not be the same as the current version in the repository.	2023	Open

Statement about Rights

I certify that the author(s) of the manuscript have legitimate access to and permission to use the data used in this manuscript.

I certify that the author(s) of the manuscript have documented permission to redistribute/publish the data contained within this replication package. Appropriate permissions are documented in the LICENSE.txt file.

Instructions for Replicators

In order to reproduce the analysis of this paper, you will need to:

1. Open the *reproducibility.Rproj* file.
2. Run *renv::restore()* in your console and install all required package dependencies.
3. Source the *reproduce.R* file.

Computational Requirements and Runtime

The code is OS agnostic, but requires R to compile.

Software Requirements

R > 4.5.1.

Memory and Storage Requirements

The data analyzed is small and the analysis is not computationally intensive.

List of Exhibits

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Folder Structure

This reproducibility package contains the following folders:

1. **source:** contains all scripts necessary to reproduce the analysis. For completeness, the script used to clean both the BOOST and GovTech Maturity Index data is provided in *prepare.R*. It is not necessary to source it to reproduce the analysis.
2. **data:** contains all input datasets. The **output** folder contains the cleaned BOOST and GovTech Maturity Index data.
3. **figs:** contains all the figures featured in the paper.