

MEASURING SOCIALISM DATA SET

Version 1.0

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Abstract

Measuring Socialism is a compilation of metrics that measure various means by which governments influence or intervene in markets. It is intended to provide users with data to test propositions that a country's proximity to "free market" or "socialist" ideals affect society.

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INTRODUCTION

Discussions about the net societal benefits of capitalism *versus* socialism are fraught with arguments that hinge on conceptual fuzziness, pure theory, and anecdotal evidence. These kinds of arguments may work well as rhetorical strategies, but they present serious hazards when used as guides to effective policy-making. Economic policy debates might be helped by more systematic, better-specified empirical assessment of which countries are more “capitalist”, and how their fates have diverged from more “socialist” countries.

The *Measuring Socialism* data set compiles data from several databases to create a comprehensive, cross-sectional snapshot of data capturing different facets of government taxation, spending, organizational resources, regulations, and programs. These data can be used to derive more systematic, empirically-based assessments of the degree to which countries embody the ideals of capitalism or socialism, and the ways in which the fates of more capitalist and socialist countries may differ.

In its present state, the set includes 243 variables that capture some dimension of countries’ conformity to socialist or capitalist ideals. There is no consensus method for agglomerating these metrics into simpler, easier-to-comprehend indexes. In the spirit of open science and crowdsourcing, we are releasing this data in advance of our efforts to create such an index in our own analyses. Our plan is to develop this project openly, and invite others to verify and use our data, share their comments and findings, and conduct an open collaboration towards the refinement of public economic policy debates through empirical research.

If you are interested in conducting analyses in conversation with us, please reach out via email or social media. You can follow Joseph Cohen’s work on this topic as posted notes [here](#), or on his Open Science Foundation project page [here](#). If you conduct and post similar analyses, please let us know via email at joseph.cohen@qc.cuny.edu and jvandernaald@gradcenter.cuny.edu or via Twitter [@jncohen](#) and [@jvandernaald](#).

More Information

A copy of the data, its documentation, and the R scripts that were used to create this set can be downloaded from the Open Science Framework at the url: <https://osf.io/4g37h/>

Citing this Set

If you use this data set in an analysis, please cite it:

Cohen, Joseph Nathan and Joseph van der Naald. 2019. “Measuring Socialism Data Set, version 1.0.” Data Set. Retrieved (osf.io/4g37h).

Licensing

The R scripts used to generate this data set, as well as this codebook, are governed by a Creative Commons attribution-share alike license. You are welcome to copy, use, and redistribute the fruits of these scripts.

However, we ask that you also cite our set and share the results and scripts publicly for use by other researchers.

WHAT IS SOCIALISM?

Here, we conceive of **socialism** as existing where governments control and direct a society's economic resources. Economic activity is "socialized" in the sense that it has come under communal control and administered by an agency that at least purports to act in the collective interest. Taxing and government spending is a form of socialism, as is economic regulation, public programs, public employment, and economic subsidies. There are many ways in which the government can take control of economic activity, and we will enumerate several below.

Socialism itself is often argued to affect countries' economic development, political freedoms, political economic order, governance quality, or overall wellbeing. However, it is important to note that these are separate concepts that are posited to be related. If we are to assume that socialism harms economic freedom, we should see that more socialist countries tend to have things like single-party rule or political prisoners when we look at the data. If we think socialism hurts job creation or economic prosperity, we can develop measures of countries' proximity to "socialism" and check the empirical record. That is how we think through arguments about socialism empirically.

At present, there is no consensus method for operationalizing the concept of socialism. Engaging arguments about socialism require that we develop valid measurements that help us discern more from less socialist societies with more rigor than the impressionistic *Venezuela-versus-Sweden* arguments that often arise in public debate. This is a data set from which one can work towards developing such measures.

ABOUT THE DATA

COVERAGE

The first version of this set is a cross-sectional set that covers 41 countries¹ from 2015 – 2017. This set presents the mean of metrics in which countries have multiple reported values in the sets we examined.

¹ This set includes the United States, Canada, Mexico, Chile, the United Kingdom, Ireland, the Netherlands, Belgium, Luxembourg, France, Switzerland, Spain, Portugal, Germany, Poland, Austria, Hungary, the Czech Republic, Slovakia, Italy, Malta, Croatia, Slovenia, Greece, Cyprus, Bulgaria, Romania, Estonia, Latvia, Lithuania, Finland, Sweden, Norway, Denmark, Israel, South Africa, Turkey, Iceland, China, Korea, Japan, India, Indonesia, Australia, and New Zealand.

SOURCES

This set is an agglomeration of several data sets, most of which are published by the OECD. They include:

- The World Bank's (2019) [World Development Indicators](#)² (herein: WDI)
- OECD (2018) [Governments at a Glance, 2017](#)³ (herein: GOV2017)
- OECD (2019) [Government Revenue Statistics, 2018](#) (herein: REV2018)
- OECD (2015) [Indicators of Product Market Regulation, 2013](#)⁴ (herein: REG2015)
- OECD (2019) [Social Expenditure - Aggregated Data](#)⁵ (herein: SOCPROT)

USING WITH OTHER DATA SETS

This data set is indexed by countries [Correlates of War](#) country codes. To merge this data with other data, create country identifier based on [Correlates of War codes](#) in the other set. If you are using R, we recommend doing so using the [countrycode package](#). Then, merge the new set with the *Measuring Socialism* set using the **merge()** command in the base package. In this example, we merge the *Measuring Socialism* set with an extract of Marshall and Gurr's (2017) [Polity IV](#) data set, a well-regarded index measuring countries' conformity to democratic ideals. The extract is stored as a CSV file called "Polity IV Extract.csv", which can be downloaded from [this project's OSF page \(https://osf.io/4g37h/\)](https://osf.io/4g37h/).

² World Bank (2019) *World Development Indicators* Online Database. Accessed 5/2/2019 <https://datacatalog.worldbank.org/dataset/world-development-indicators>. To compensate for spotty reporting over recent years, I collapsed the 2015 - 2017 data by means into a country-level cross-sectional data set. These data tend to be stable from year to year within countries.

³ OECD (2018) *Governments at a Glance, 2017* https://www.oecd-ilibrary.org/docserver/gov_glance-2017-en.pdf

⁴ Koske, I., I. Wanner, R. Bitetti and O. Barbiero (2015), "The 2013 update of the OECD product market regulation indicators: policy insights for OECD and non-OECD countries", OECD Economics Department Working Papers, No. 1200.

⁵ Note that all figures from this set are net publicly mandated expenditures, which excludes social benefits delivered via money incentives to private enterprises, as they are "tax breaks [that are] tantamount to financing private social benefits." (see pp. 36 - 37). We averaged scores from 2015 to 2017 in effort to balance recency and representativeness.

```

#Set Working Directory
setwd("E:/Dropbox/Research/Measuring Socialism Data Set")

#Loan Measuring Socialism set
data.1 <- read.csv("Measuring Socialism Data Set v1-0.csv")

#Import data that you wish to merge with
#Measuring Socialism set
data.2 <- read.csv("Polity IV Extract.csv")

#Create Correlates of War country identifiers in
#the new data set.  countrycode() comes pre-loaned with
#PolityIV numeric codes
library(countrycode)
data.2$ccode <- countrycode(data.2$scode, origin = 'p4c', destination = 'cown
')

#You should get a warning message telling you which observations were
#not matched. Review to ensure you are not missing any of the
#Measuring socialism countries. Note that, for Polity IV, I manually changed
#countries that did not receive an iso3c coding.

#Merge two sets
data.merged <- merge(data.1, data.2, by="ccode",
                      all.x = T, all.y = F)

#Verify merge
head(data.merged[c(1:3,244:246)])

##   ccode population exp.total  scode      country polity2
## 1     2  322987045  38.18333   USA  United States     10
## 2    20   36117554  40.54333   CAN      Canada      10
## 3    70  123322986  24.50333   MEX      Mexico       8
## 4   155   18216287      NA    CHL       Chile      10
## 5   200   65594428  43.75667  UKG  United Kingdom     10
## 6   205   4754893  35.74667   IRE      Ireland     10

```

MISSING DATA CODES

In this version, missing values are coded as blank on the CSV.

STRUCTURE OF THE DATA SET

To ease navigation through these variables, we have subdivided them into categories. This categorization scheme does not imply that this is *the* way to group these variables. It is an *a priori* sorting to help those who wish to organize and reduce these data by more rigorous means.

- **Public Expenditures.** How much money did governments spend? Towards which purposes was this money spent? Which level of government (i.e. federal, state, local) disbursed these expenditures?
- **Public Revenues.** How much did governments draw from the economy? What blend of revenue schemes do they employ? Which levels of government drew money and by which tax type?
- **Public Savings and Investment.** How much does the government invest directly in the economy? What is the government's financial net worth?
- **Economic Regulation.** Which kinds of rules do governments impose on the behavior of economic actors?
- **Public Sector Work Force.** How many people does the government employ? Do they administer them directly or through subcontracts?
- **Other.** A residual category.

We review these variables in turn below.

CODEBOOK

Public Expenditures Indicators

Unless noted, all variables combine national and sub-national spending, and all figures are denominated in percentage of GDP.

Variable Name	Description
exp.total	General Government Public Expenditures (% GDP). EXP.TOTAL is a measure of a country's total amount of public spending. Expenditures encompass all things on which governments spend their revenues, including everything from social services and insurance, public transportation, public sector costs, public safety, the military, and elections. EXPENDITURES is a higher order category that is inclusive of all other expenditure variables in the GOV2017 dataset. <i>Source:</i> GOV2017
exp.consumption	General government consumption expenditures (% GDP). EXP.CONSUMPTION measures the amount of government spending on providing goods and services used to satisfy the needs of citizens on an individual or collective level. Consumption expenditures on services used individually or on the level of the household include things like health care reimbursement or in-kind transfers like food stamps; services used collectively include things like public safety, public education, or military expenditures. <i>Source:</i> WDI
exp.military	Defense expenditures, includes foreign military aid and research and development (% GDP). EXP.MILITARY measures the amount of government spending on a country's military. Military expenditures entail spending on armed and peacekeeping forces, the functioning of defense ministries and government agencies engaged in national defense, and militarily trained and equipped paramilitary forces. Specifically, military expenditures go toward the costs of military personnel salaries, pensions for military personnel, social services provided to military personnel, the operation, maintenance, and procurement of military equipment, research and development for military purposes, spending on military infrastructure including bases, as well as military aid to foreign countries. MILITARY does not include veterans' benefits, demobilization costs, or civil defense costs. <i>Source:</i> GOV2017

exp.military.wdi	Supplemental military expenditure measure from the World Development Indicators dataset (WDI). MILITARY.WDI measures the amount of government spending on a country's military. Military expenditures entail spending on armed and peacekeeping forces, the functioning of defense ministries and government agencies engaged in national defense, and militarily trained and equipped paramilitary forces. Specifically, military expenditures go toward the costs of military personnel salaries, pensions for military personnel, social services provided to military personnel, the operation, maintenance, and procurement of military equipment, research and development for military purposes, spending on military infrastructure including bases, as well as military aid to foreign countries. MILITARY.WDI does not include veterans' benefits, demobilization costs, or civil defense costs. <i>Source: GOV2017</i>
exp.order	Public order and safety expenditures (% GDP). EXP.ORDER measures the amount of government spending on safety and maintaining public order. This includes spending on police, fire, the prison system, and the court system, as well as research and development costs associated with these services. <i>Source: GOV2017</i>
exp.econaffairs	Economic affairs expenditures (% GDP). EXP.ECONAFFAIRS measures the amount of government spending on programs and services that manage the national economy. This includes expenditures associated with managing a nation's natural resources, such as its forests, mines, and other sources of energy generation, its agriculture, communications systems, labor relations, and the maintenance of public transportation systems. All costs associated with conducting commercial and economic regulation are included in ECONAFFAIRS, as well as costs for research and development. <i>Source: GOV2017</i>
exp.environment	Environmental protection expenditures (% GDP). EXP.ENVIRONMENT measures the amount of government spending on environmental protection. This includes costs associated with waste and waste water management, programs for the reduction of pollution, programs to enhance biodiversity and the maintenance of landscapes, as well as the costs for research into environmental protection. <i>Source: GOV2017</i>
exp.housing	Housing and community development expenditures (% GDP). EXP.HOUSING measures the amount of government spending on housing and collectively utilized community services. This includes the development of housing, maintenance of water supplies, the construction and maintenance of street lighting, as well as research and development for these services. <i>Source: GOV2017</i>
exp.health	Health expenditures (% GDP). EXP.HEALTH measures the amount of government spending on health care. This includes expenditures on services related to public health and the funding of hospitals, as well as government funding for publicly-financed medical products, equipment, and appliances. <i>Source: GOV2017</i>
exp.recreation	Recreation expenditures (% GDP). EXP.RECREATION measures the amount of government spending on recreation and cultural expenditures. This includes sports, media and broadcasting, support for religious and community programs, in addition to other state-funded cultural programs. <i>Source: GOV2017</i>
exp.education	Education expenditures (% GDP). EXP.EDUCATION measures the amount of government spending on educational services. This includes spending on the maintenance of all levels of education from pre-primary and primary schooling to higher education and its related services. <i>Source: GOV2017</i>
exp.genservices	General public service expenditures (% GDP). EXP.GENSERVICES measures the amount of government spending on forms of general public service expenditure. This includes all forms of expenditure that maintain state functions, as well as costs such as foreign aid. Forms of general public service expenditure include maintenance of the executive and legislative arms of government, maintenance of public debt, and transfers from the federal government to other branches of the state. <i>Source: GOV2017</i>

exp.socprot	Social protection expenditures (% GDP) (GOV2017 version). EXP.SOCPROT measures the amount of government spending on supporting the standard of living of disadvantaged or vulnerable groups. Benefits may be targeted at low-income households, the elderly, disabled, sick, unemployed, or young persons. Social spending comprises cash benefits, direct in-kind provision of goods and services, and tax breaks with social purposes. To be considered "social", programs have to involve either redistribution of resources across households or compulsory participation. <i>Source: GOV2017</i>
soc.total	Social protection expenditures (% GDP) (SOCPROT version) SOC.TOTAL is the sum of all previous social protection expenditure measures. Note these figures represent the mean 2015 – 2017, unlike exp.socprot above, which comes from a different set. <i>Source: SOCPROT</i>
soc.oldage	Social protection expenditures: Old Age Programs. SOC.OLDAGE measures expenditures on social insurance elderly benefits. <i>Source: SOCPROT</i>
soc.survivors	Social protection expenditures: Survivors Programs. SOC.INCAPACITY measures expenditures survivors' benefits. Public spending on incapacity refers to spending due to sickness, disability and occupational injury. <i>Source: SOCPROT</i>
soc.incap	Social protection expenditures: Incapacity Programs. SOC.INCAPACITY measures expenditures on incapacity services. Public spending on incapacity refers to spending due to sickness, disability and occupational injury. <i>Source: SOCPROT</i>
soc.health	Social protection expenditures: Health Programs. SOC.HEALTH measures expenditures on in- and out-patient care, medical goods, and preventative goods and services. <i>Source: SOCPROT</i>
soc.family	Social protection expenditures: Family Programs. SOC.FAMILY measures expenditures on family benefits. Family benefits spending includes financial support that is exclusively for families and children. Expenditures from other social policy domains including health and housing that also assists families, but not exclusively, is not included in this measure. There exist three varieties of public spending on family benefits: cash transfers (cash benefits) to families with children, public income support payments for periods of parental leave, and income support for single parent families. <i>Source: SOCPROT</i>
soc.labmkt	Social protection expenditures: Labor Market. SOC.LABMKT measures expenditures on labor market programs. Public spending on labor market programs includes public employment services, training, hiring subsidies and public sector direct job creation, in addition to unemployment benefits. <i>Source: SOCPROT</i>
soc.unempl	Social protection expenditures: Unemployment Programs. SOC.UNEMPL measures expenditures on unemployment benefits. Public unemployment spending is expenditure on cash benefits for people who are unemployed. This includes redundancy payments from public funds, as well as the payment of pensions to beneficiaries before they reach pension age if these payments are made because the recipients are unemployed. <i>Source: SOCPROT</i>
soc.housing	Social protection expenditures: Housing Programs. SOC.HOUSING measures expenditures on housing assistance benefits, which includes rent subsidies and other forms of support given to mitigate housing costs. Housing assistance spending is expenditure on cash transfers that provide financial assistance toward housing for individuals or families. <i>Source: SOCPROT</i>
soc.other	Social protection expenditures: Other. SOC.OTHER measures expenditures on all other forms of social protection not included in the above measures. <i>Source: SOCPROT</i>

Government Revenue Indicators

Government revenue includes all money that governments draw from other actors in society. This set includes data on revenue taken in at different levels and through different types of taxes or non-tax revenue sources. These levels include the federal, state or provincial, and local government, as well as supranational governments (i.e., the European Union) and a separate level on behalf of social security services. Measures of each kind of revenue featured in this section are included under every level of government. The structure of the kinds of revenue data are described below in Figure 1. Note that all data are from REV2019 unless otherwise noted.

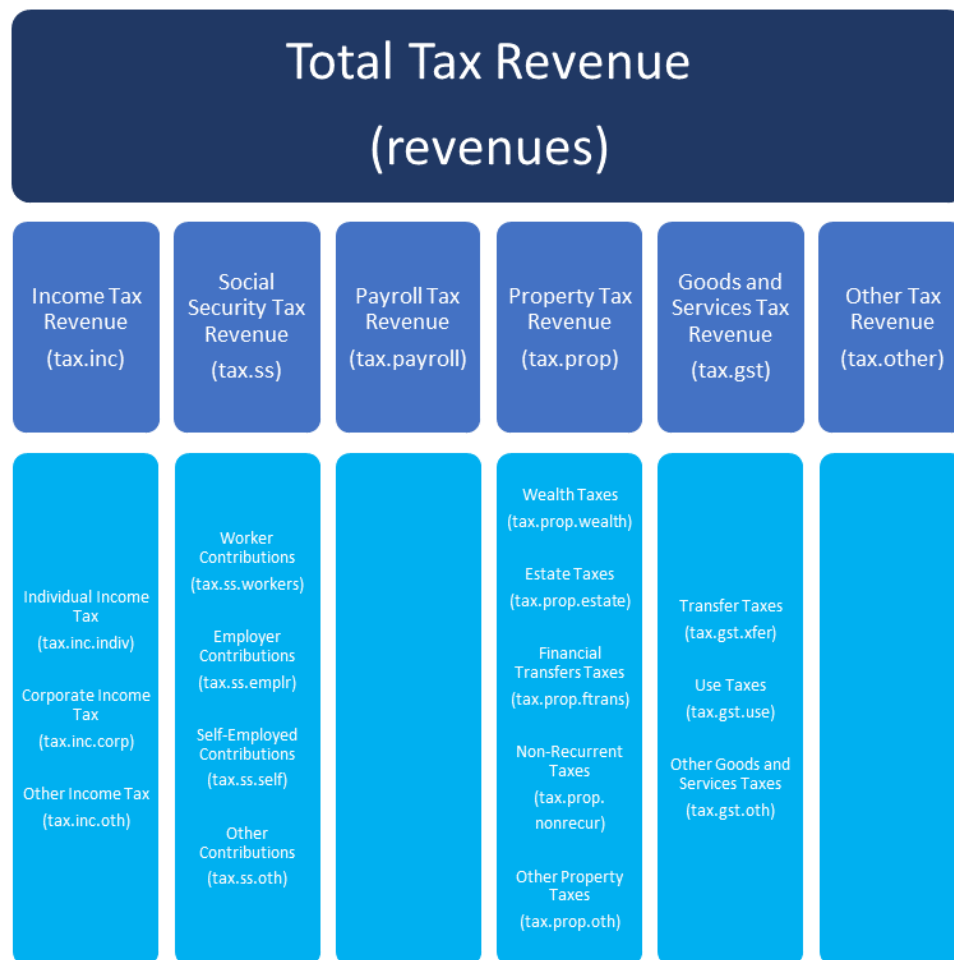


Figure 1: Structure of Revenue Data

Variable Name	Description
revenues	General government revenues (% GDP). REVENUES measures the amount of revenue a government develops. REVENUES is a sum of tax revenue, social contributions, grants and other revenues. <i>Source: GOV2017</i>
tax.supra.tot	Supranational Taxes, Total (% GDP). TAX.SUPRA.TOT measures the relative share of tax revenue collected on behalf of a supranational authority. In practice, this level includes only revenues collected by the European Union and this measure applies only to the European Union's twenty-three member states. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.inc	Supranational Taxes, Income Tax (% GDP). TAX.SUPRA.INC measures the relative share of supranational tax revenue that is derived from income taxes, individual, corporate, and other forms of income tax. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.inc.indiv	Supranational Taxes, Individual Income Tax (% GDP). TAX.SUPRA.INC.INDIV measures the relative share of supranational tax revenue that is derived from individual income taxes. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.inc.corp	Supranational Taxes, Corporate Income Tax (% GDP). TAX.SUPRA.INC.CORP measures the relative share of supranational tax revenue that is derived from corporate income taxes. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.inc.oth	Supranational Taxes, Other Income Tax (% GDP). TAX.SUPRA.INC.OTH measures the relative share of supranational tax revenue that is derived from other forms of income tax not included in the individual and corporate shares. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.ss	Supranational Taxes, Social Security (% GDP). TAX.SUPRA.SS measures the relative share of supranational tax revenue that is derived from social security contributions, collected from workers, employers, the self-employed, and others. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.ss.workers	Supranational Taxes, Social Security, Worker Contributions (% GDP). TAX.SUPRA.SS.WORKER measures the relative share of supranational tax revenue that is derived from social security contributions collected from workers. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.ss.emplr	Supranational Taxes, Social Security, Employer Contributions (% GDP). TAX.SUPRA.SS.EMPLR measures the relative share of supranational tax revenue that is derived from social security contributions, collected from employers. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.ss.self	Supranational Taxes, Social Security, Self-Employed Contributions (% GDP). TAX.SUPRA.SS.SELF measures the relative share of supranational tax revenue that is derived from social security contributions, collected from the self-employed. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.ss.oth	Supranational Taxes, Social Security, Other Contributions (% GDP). TAX.SUPRA.SS.OTH measures the relative share of supranational tax revenue that is derived from social security contributions, collected from other categories of contributors. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.payroll	Supranational Taxes, Payroll Tax (% GDP). TAX.SUPRA.PAYROLL measures the relative share of supranational tax revenue that is derived from payroll deductions. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.prop	Supranational Taxes, Property Tax (% GDP). TAX.SUPRA.PROP measures the relative share of supranational tax revenue that is derived from property taxes on wealth, estates, financial transfers, non-recurrent taxes, as well as other property categories. This variable is measured as a percentage of total gross domestic product (GDP).

tax.supra.prop.wealth	Supranational Taxes, Property Tax, Wealth (% GDP). TAX.SUPRA.PROP.WEALTH measures the relative share of supranational tax revenue that is derived from property taxes on wealth. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.prop.estate	Supranational Taxes, Property Tax, Estate (% GDP). TAX.SUPRA.PROP.ESTATE measures the relative share of supranational tax revenue that is derived from property taxes on estates. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.prop.ftrans	Supranational Taxes, Property Tax, Financial Transfers Tax (% GDP). TAX.SUPRA.PROP.FTRANS measures the relative share of supranational tax revenue that is derived from property taxes on financial transfers. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.prop.nonrecur	Supranational Taxes, Property Tax, Non-Recurrent Tax (% GDP). TAX.SUPRA.PROP.NONRECUR measures the relative share of supranational tax revenue that is derived from non-recurrent property taxes. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.prop.oth	Supranational Taxes, Property Tax, Other (% GDP). TAX.SUPRA.PROP.OTH measures the relative share of supranational tax revenue that is derived from property taxes on other kinds of property. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.gst	Supranational Taxes, Goods and Services Total (% GDP). TAX.SUPRA.GST measures the relative share of supranational tax revenue that is derived from taxes on the production, distribution, and sale of goods and services, including separate categories for transfer, use, and other sources of good and services tax. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.gst.xfer	Supranational Taxes, Goods and Services Transfers Tax (% GDP). TAX.SUPRA.GST.XFER measures the relative share of supranational tax revenue that is derived from transfer taxes on goods and services. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.gst.use	Supranational Taxes, Goods and Services Use Tax (% GDP). TAX.SUPRA.GST.USE measures the relative share of supranational tax revenue that is derived from use taxes on goods and services. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.gst.oth	Supranational Taxes, Goods and Services Other (% GDP). TAX.SUPRA.GST.OTH measures the relative share of supranational tax revenue that is derived from other taxes on goods and services. This variable is measured as a percentage of total gross domestic product (GDP).
tax.supra.other	Supranational Taxes, All Other Total (% GDP). TAX.SUPRA.OTHER measures the relative share of supranational tax revenue that is derived from sources of revenue not included in other categories in this level. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.tot	Federal Taxes, Total (% GDP). TAX.FED.TOT measures the relative share of tax revenue collected on behalf of a federal or central government. This level is inclusive of all departments, offices, establishments and other bodies overseen by the central government with a purview that extends the entire nation. The single exception is the administration of social security funds, which are delineated in a separate set of revenue variables in this dataset. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.inc	Federal Taxes, Income Tax (% GDP). TAX.FED.INC measures the relative share of central government tax revenue that is derived from income taxes, individual, corporate, and other. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.inc.indiv	Federal Taxes, Individual Income Tax (% GDP). TAX.FED.INC.INDIV measures the relative share of central government tax revenue that is derived from individual income taxes. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.inc.corp	Federal Taxes, Corporate Income Tax (% GDP). TAX.FED.INC.CORP measures the relative share of central government tax revenue that is derived from corporate income taxes. This variable is measured as a percentage of total gross domestic product (GDP).

tax.fed.inc.oth	Federal Taxes, Other Income Tax (% GDP). TAX.FED.INC.OTH measures the relative share of central government tax revenue that is derived from other forms of income tax not included in the individual and corporate shares. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.ss	Federal Taxes, Social Security (% GDP). TAX.FED.SS measures the relative share of central government tax revenue that is derived from social security contributions, collected from workers, employers, the self-employed, and others. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.ss.workers	Federal Taxes, Social Security, Worker Contributions (% GDP). TAX.FED.SS.WORKER measures the relative share of central government tax revenue that is derived from social security contributions collected from workers. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.ss.emplr	Federal Taxes, Social Security, Employer Contributions (% GDP). TAX.FED.SS.EMPLR measures the relative share of central government tax revenue that is derived from social security contributions, collected from employers. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.ss.self	Federal Taxes, Social Security, Self-Employed Contributions (% GDP). TAX.FED.SS.SELF measures the relative share of central government tax revenue that is derived from social security contributions, collected from the self-employed. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.ss.oth	Federal Taxes, Social Security, Other Contributions (% GDP). TAX.FED.SS.OTH measures the relative share of central government tax revenue that is derived from social security contributions, collected from other categories of contributors. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.payroll	Federal Taxes, Payroll Tax (% GDP). TAX.FED.PAYROLL measures the relative share of central government tax revenue that is derived from payroll deductions. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.prop	Federal Taxes, All Levels Total (% GDP). TAX.FED.PROP measures the relative share of central government tax revenue that is derived from property taxes on wealth, estates, financial transfers, non-recurrent taxes, as well as other property categories. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.prop.wealth	Federal Taxes, Wealth Tax (% GDP). TAX.FED.PROP.WEALTH measures the relative share of central government tax revenue that is derived from property taxes on wealth. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.prop.estate	Federal Taxes, Estate Tax (% GDP). TAX.FED.PROP.ESTATE measures the relative share of central government tax revenue that is derived from property taxes on estates. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.prop.ftrans	Federal Taxes, Financial Transfers Tax (% GDP). TAX.FED.PROP.FTRANS measures the relative share of central government tax revenue that is derived from property taxes on financial transfers. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.prop.nonrecur	Federal Taxes, Non-Recurrent Tax (% GDP). TAX.FED.PROP.NONRECUR measures the relative share of central government tax revenue that is derived from non-recurrent property taxes. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.prop.oth	Federal Taxes, Other (% GDP). TAX.FED.PROP.OTH measures the relative share of central government tax revenue that is derived from property taxes on other kinds of property. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.gst	Federal Taxes, Goods and Services Total (% GDP). TAX.FED.GST measures the relative share of central government tax revenue that is derived from taxes on the production, distribution, and sale of goods and services, including separate categories for transfer, use, and other sources of good and services tax. This variable is measured as a percentage of total gross domestic product (GDP).

tax.fed.gst.xfer	Federal Taxes, Goods and Services Transfers Tax (% GDP). TAX.FED.GST.XFER measures the relative share of central government tax revenue that is derived from transfer taxes on goods and services. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.gst.use	Federal Taxes, Goods and Services Use Tax (% GDP). TAX.FED.GST.USE measures the relative share of central government tax revenue that is derived from use taxes on goods and services. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.gst.oth	Federal Taxes, Goods and Services Other (% GDP). TAX.FED.GST.OTH measures the relative share of central government tax revenue that is derived from other taxes on goods and services. This variable is measured as a percentage of total gross domestic product (GDP).
tax.fed.other	Federal Taxes, All Other Total (% GDP). TAX.FED.OTHER measures the relative share of central government tax revenue that is derived from sources of revenue not included in other categories in this level. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.tot	State Taxes, Total (% GDP). TAX.STATE.TOT measures the relative share of tax revenue collected on behalf of a state government. This level is inclusive of governmental bodies that act independently of the central government to administer smaller localities and territories. The single exception is the administration of social security funds, which are delineated in a separate set of revenue variables in this dataset. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.inc	State Taxes, Income Tax (% GDP). TAX.STATE.INC measures the relative share of state government tax revenue that is derived from income taxes, individual, corporate, and other. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.inc.indiv	State Taxes, Individual Income Tax (% GDP). TAX.STATE.INC.INDIV measures the relative share of state government tax revenue that is derived from individual income taxes. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.inc.corp	State Taxes, Corporate Income Tax (% GDP). TAX.STATE.INC.CORP measures the relative share of state government tax revenue that is derived from corporate income taxes. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.inc.oth	State Taxes, Other Income Tax (% GDP). TAX.STATE.INC.OTH measures the relative share of state government tax revenue that is derived from other forms of income tax not included in the individual and corporate shares. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.ss	State Taxes, Social Security (% GDP). TAX.STATE.SS measures the relative share of state government tax revenue that is derived from social security contributions, collected from workers, employers, the self-employed, and others. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.ss.workers	State Taxes, Social Security, Worker Contributions (% GDP). TAX.STATE.SS.WORKER measures the relative share of state government tax revenue that is derived from social security contributions collected from workers. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.ss.emplr	State Taxes, Social Security, Employer Contributions (% GDP). TAX.STATE.SS.EMPLR measures the relative share of state government tax revenue that is derived from social security contributions, collected from employers. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.ss.self	State Taxes, Social Security, Self-Employed Contributions (% GDP). TAX.STATE.SS.SELF measures the relative share of state government tax revenue that is derived from social security contributions, collected from the self-employed. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.ss.oth	State Taxes, Social Security, Other Contributions (% GDP). TAX.STATE.SS.OTH measures the relative share of state government tax revenue that is derived from social security contributions, collected from other categories of contributors. This variable is measured as a percentage of total gross domestic product (GDP).

tax.state.payroll	State Taxes, Payroll Tax (% GDP). TAX.STATE.PAYROLL measures the relative share of state government tax revenue that is derived from payroll deductions. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.prop	State Taxes, All Levels Total (% GDP). TAX.STATE.PROP measures the relative share of state government tax revenue that is derived from property taxes on wealth, estates, financial transfers, non-recurrent taxes, as well as other property categories. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.prop.wealth	State Taxes, Wealth Tax (% GDP). TAX.STATE.PROP.WEALTH measures the relative share of state government tax revenue that is derived from property taxes on wealth. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.prop.estate	State Taxes, Estate Tax (% GDP). TAX.STATE.PROP.ESTATE measures the relative share of state government tax revenue that is derived from property taxes on estates. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.prop.ftrans	State Taxes, Financial Transfers Tax (% GDP). TAX.STATE.PROP.FTRANS measures the relative share of state government tax revenue that is derived from property taxes on financial transfers. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.prop.nonrecur	State Taxes, Non-Recurrent Tax (% GDP). TAX.STATE.PROP.NONRECUR measures the relative share of state government tax revenue that is derived from non-recurrent property taxes. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.prop.oth	State Taxes, Other (% GDP). TAX.STATE.PROP.OTH measures the relative share of state government tax revenue that is derived from property taxes on other kinds of property. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.gst	State Taxes, Goods and Services Total (% GDP). TAX.STATE.GST measures the relative share of state government tax revenue that is derived from taxes on the production, distribution, and sale of goods and services, including separate categories for transfer, use, and other sources of good and services tax. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.gst.xfer	State Taxes, Goods and Services Transfers Tax (% GDP). TAX.STATE.GST.XFER measures the relative share of state government tax revenue that is derived from transfer taxes on goods and services. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.gst.use	State Taxes, Goods and Services Use Tax (% GDP). TAX.STATE.GST.USE measures the relative share of state government tax revenue that is derived from use taxes on goods and services. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.gst.oth	State Taxes, Goods and Services Other (% GDP). TAX.STATE.GST.OTH measures the relative share of state government tax revenue that is derived from other taxes on goods and services. This variable is measured as a percentage of total gross domestic product (GDP).
tax.state.other	State Taxes, All Other Total (% GDP). TAX.STATE.OTHER measures the relative share of state government tax revenue that is derived from sources of revenue not included in other categories in this level. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.tot	Local Taxes, Total (% GDP). TAX.LOCAL.TOT measures the relative share of tax revenue collected on behalf of a local government. This level is inclusive of governmental bodies that act semi-autonomously of the state government within localities and territories. The single exception is the administration of social security funds, which are delineated in a separate set of revenue variables in this dataset. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.inc	Local Taxes, Income Tax (% GDP). TAX.LOCAL.INC measures the relative share of local government tax revenue that is derived from income taxes, individual, corporate, and other. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.inc.indiv	Local Taxes, Individual Income Tax (% GDP). TAX.LOCAL.INC.INDIV measures the relative share of local government tax revenue that is derived from individual income taxes. This variable is measured as a percentage of total gross domestic product (GDP).

tax.local.inc.corp	Local Taxes, Corporate Income Tax (% GDP). TAX.LOCAL.INC.CORP measures the relative share of local government tax revenue that is derived from corporate income taxes. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.inc.oth	Local Taxes, Other Income Tax (% GDP). TAX.LOCAL.INC.OTH measures the relative share of local government tax revenue that is derived from other forms of income tax not included in the individual and corporate shares. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.ss	Local Taxes, Social Security (% GDP). TAX.LOCAL.SS measures the relative share of local government tax revenue that is derived from social security contributions, collected from workers, employers, the self-employed, and others. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.ss.workers	Local Taxes, Social Security, Worker Contributions (% GDP). TAX.LOCAL.SS.WORKER measures the relative share of local government tax revenue that is derived from social security contributions collected from workers. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.ss.emplr	Local Taxes, Social Security, Employer Contributions (% GDP). TAX.LOCAL.SS.EMPLR measures the relative share of local government tax revenue that is derived from social security contributions, collected from employers. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.ss.self	Local Taxes, Social Security, Self-Employed Contributions (% GDP). TAX.LOCAL.SS.SELF measures the relative share of local government tax revenue that is derived from social security contributions, collected from the self-employed. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.ss.oth	Local Taxes, Social Security, Other Contributions (% GDP). TAX.LOCAL.SS.OTH measures the relative share of local government tax revenue that is derived from social security contributions, collected from other categories of contributors. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.payroll	Local Taxes, Payroll Tax (% GDP). TAX.LOCAL.PAYROLL measures the relative share of local government tax revenue that is derived from payroll deductions. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.prop	Local Taxes, All Levels Total (% GDP). TAX.LOCAL.PROP measures the relative share of local government tax revenue that is derived from property taxes on wealth, estates, financial transfers, non-recurrent taxes, as well as other property categories. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.prop.wealth	Local Taxes, Wealth Tax (% GDP). TAX.LOCAL.PROP.WEALTH measures the relative share of local government tax revenue that is derived from property taxes on wealth. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.prop.estate	Local Taxes, Estate Tax (% GDP). TAX.LOCAL.PROP.ESTATE measures the relative share of local government tax revenue that is derived from property taxes on estates. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.prop.ftrans	Local Taxes, Financial Transfers Tax (% GDP). TAX.LOCAL.PROP.FTRANS measures the relative share of local government tax revenue that is derived from property taxes on financial transfers. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.prop.nonrecur	Local Taxes, Non-Recurrent Tax (% GDP). TAX.LOCAL.PROP.NONRECUR measures the relative share of local government tax revenue that is derived from non-recurrent property taxes. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.prop.oth	Local Taxes, Other (% GDP). TAX.LOCAL.PROP.OTH measures the relative share of local government tax revenue that is derived from property taxes on other kinds of property. This variable is measured as a percentage of total gross domestic product (GDP).

tax.local.gst	Local Taxes, Goods and Services Total (% GDP). TAX.LOCAL.GST measures the relative share of local government tax revenue that is derived from taxes on the production, distribution, and sale of goods and services, including separate categories for transfer, use, and other sources of good and services tax. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.gst.xfer	Local Taxes, Goods and Services Transfers Tax (% GDP). TAX.LOCAL.GST.XFER measures the relative share of local government tax revenue that is derived from transfer taxes on goods and services. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.gst.use	Local Taxes, Goods and Services Use Tax (% GDP). TAX.LOCAL.GST.USE measures the relative share of local government tax revenue that is derived from use taxes on goods and services. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.gst.oth	Local Taxes, Goods and Services Other (% GDP). TAX.LOCAL.GST.OTH measures the relative share of local government tax revenue that is derived from other taxes on goods and services. This variable is measured as a percentage of total gross domestic product (GDP).
tax.local.other	Local Taxes, All Other Total (% GDP). TAX.LOCAL.OTHER measures the relative share of local government tax revenue that is derived from sources of revenue not included in other categories in this level. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.tot	Social Security Taxes, Total (% GDP). TAX.SOCSEC.TOT measures the relative share of tax revenue collected on behalf of governmental social security schemes. Social security schemes are forms of social insurance that benefit citizens of the governments that administer them, and is inclusive of all forms of social insurance (e.g. illness, old-age, unemployment, family allowance, etc.) Social security schemes operate at the federal level; however, their assets and liabilities are often held separately, giving them a degree of financial autonomy, and thus warranting their own level in this dataset. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.inc	Social Security Taxes, Income Tax (% GDP). TAX.SOCSEC.INC measures the relative share of social security tax revenue that is derived from income taxes, individual, corporate, and other. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.inc.indiv	Social Security Taxes, Individual Income Tax (% GDP). TAX.SOCSEC.INC.INDIV measures the relative share of social security tax revenue that is derived from individual income taxes. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.inc.corp	Social Security Taxes, Corporate Income Tax (% GDP). TAX.SOCSEC.INC.CORP measures the relative share of social security tax revenue that is derived from corporate income taxes. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.inc.oth	Social Security Taxes, Other Income Tax (% GDP). TAX.SOCSEC.INC.OTH measures the relative share of social security tax revenue that is derived from other forms of income tax not included in the individual and corporate shares. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.ss	Social Security Taxes, Social Security (% GDP). TAX.SOCSEC.SS measures the relative share of social security tax revenue that is derived from social security contributions, collected from workers, employers, the self-employed, and others. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.ss.workers	Social Security Taxes, Social Security, Worker Contributions (% GDP). TAX.SOCSEC.SS.WORKER measures the relative share of social security tax revenue that is derived from social security contributions collected from workers. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.ss.emplr	Social Security Taxes, Social Security, Employer Contributions (% GDP). TAX.SOCSEC.SS.EMPLR measures the relative share of social security tax revenue that is derived from social security contributions, collected from employers. This variable is measured as a percentage of total gross domestic product (GDP).

tax.socsec.ss.self	Social Security Taxes, Social Security, Self-Employed Contributions (% GDP). TAX.SOCSEC.SS.SELF measures the relative share of social security tax revenue that is derived from social security contributions, collected from the self-employed. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.ss.oth	Social Security Taxes, Social Security, Other Contributions (% GDP). TAX.SOCSEC.SS.OTH measures the relative share of social security tax revenue that is derived from social security contributions, collected from other categories of contributors. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.payroll	Social Security Taxes, Payroll Tax (% GDP). TAX.SOCSEC.PAYROLL measures the relative share of social security tax revenue that is derived from payroll deductions. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.prop	Social Security Taxes, All Levels Total (% GDP). TAX.SOCSEC.PROP measures the relative share of social security tax revenue that is derived from property taxes on wealth, estates, financial transfers, non-recurrent taxes, as well as other property categories. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.prop.wealth	Social Security Taxes, Wealth Tax (% GDP). TAX.SOCSEC.PROP.WEALTH measures the relative share of social security tax revenue that is derived from property taxes on wealth. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.prop.estate	Social Security Taxes, Estate Tax (% GDP). TAX.SOCSEC.PROP.ESTATE measures the relative share of social security tax revenue that is derived from property taxes on estates. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.prop.ftrans	Social Security Taxes, Financial Transfers Tax (% GDP). TAX.SOCSEC.PROP.FTRANS measures the relative share of social security tax revenue that is derived from property taxes on financial transfers. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.prop.nonrecur	Social Security Taxes, Non-Recurrent Tax (% GDP). TAX.SOCSEC.PROP.NONRECUR measures the relative share of social security tax revenue that is derived from non-recurrent property taxes. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.prop.oth	Social Security Taxes, Other (% GDP). TAX.SOCSEC.PROP.OTH measures the relative share of social security tax revenue that is derived from property taxes on other kinds of property. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.gst	Social Security Taxes, Goods and Services Total (% GDP). TAX.SOCSEC.GST measures the relative share of social security tax revenue that is derived from taxes on the production, distribution, and sale of goods and services, including separate categories for transfer, use, and other sources of good and services tax. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.gst.xfer	Social Security Taxes, Goods and Services Transfers Tax (% GDP). TAX.SOCSEC.GST.XFER measures the relative share of social security tax revenue that is derived from transfer taxes on goods and services. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.gst.use	Social Security Taxes, Goods and Services Use Tax (% GDP). TAX.SOCSEC.GST.USE measures the relative share of social security tax revenue that is derived from use taxes on goods and services. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.gst.oth	Social Security Taxes, Goods and Services Other (% GDP). TAX.SOCSEC.GST.OTH measures the relative share of social security tax revenue that is derived from other taxes on goods and services. This variable is measured as a percentage of total gross domestic product (GDP).
tax.socsec.other	Social Security Taxes, All Other Total (% GDP). TAX.SOCSEC.OTHER measures the relative share of social security tax revenue that is derived from sources of revenue not included in other categories in this level. This variable is measured as a percentage of total gross domestic product (GDP).

tax.all.tot	All Taxes, All Levels Total (% GDP). TAX.ALL.TOT measures the sum of all kinds of tax revenues collected at all levels of government. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.inc	All Income Taxes, All Levels Total (% GDP). TAX.ALL.INC measures the share of tax revenue that is derived from income taxes, individual, corporate, and other across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.inc.indiv	All Income Taxes, Individual Level (% GDP). TAX.ALL.INC.INDIV measures the share of tax revenue that is derived from individual income taxes across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.inc.corp	All Income Taxes, Corporate Level (% GDP). TAX.ALL.INC.CORP measures the share of tax revenue that is derived from corporate income taxes across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.inc.oth	All Income Taxes, Other (% GDP). TAX.ALL.INC.OTH measures the share of tax revenue that is derived from other forms of income tax not included in the individual and corporate shares across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.ss	All Social Security Taxes, All Levels Total (% GDP). TAX.ALL.SS measures the share of tax revenue that is derived from contributions, collected from workers, employers, the self-employed, and others across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.ss.workers	All Social Security Taxes, Worker Contribution (% GDP). TAX.ALL.SS.WORKER measures the share of tax revenue that is derived from contributions collected from workers across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.ss.emplr	All Social Security Taxes, Employer Contribution (% GDP). TAX.ALL.SS.EMPLR measures the share of tax revenue that is derived from contributions, collected from employers across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.ss.self	All Social Security Taxes, Self-Employed Contribution (% GDP). TAX.ALL.SS.SELF measures the share of tax revenue that is derived from contributions, collected from the self-employed across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.ss.oth	All Social Security Taxes, Other (% GDP). TAX.ALL.SS.OTH measures the share of tax revenue that is derived from contributions, collected from other categories of contributors across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.payroll	All Payroll Taxes, All Levels Total (% GDP). TAX.ALL.PAYROLL measures the share of tax revenue that is derived from payroll deductions across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.prop	All Property Taxes, All Levels Total (% GDP). TAX.ALL.PROP measures the share of tax revenue that is derived from property taxes on wealth, estates, financial transfers, non-recurrent taxes, as well as other property categories across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.prop.wealth	All Property Taxes, Wealth Tax (% GDP). TAX.ALL.PROP.WEALTH measures the share of tax revenue that is derived from property taxes on wealth across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.prop.estate	All Property Taxes, Estate Tax (% GDP). TAX.ALL.PROP.ESTATE measures the share of tax revenue that is derived from property taxes on estates across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.prop.ftrans	All Property Taxes, Financial Transfers Tax (% GDP). TAX.ALL.PROP.FTRANS measures the share of tax revenue that is derived from property taxes on financial transfers across all

	governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.prop.nonrecur	All Property Taxes, Non-Recurrent Tax (% GDP). TAX.ALL.PROP.NONRECUR measures the share of tax revenue that is derived from non-recurrent property taxes across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.prop.oth	All Property Taxes, Other (% GDP). TAX.ALL.PROP.OTH measures the share of tax revenue that is derived from property taxes on other kinds of property across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.gst	All Goods and Services Taxes, All Levels Total (% GDP). TAX.ALL.GST measures the share of tax revenue that is derived from taxes on the production, distribution, and sale of goods and services, including separate categories for transfer, use, and other sources of good and services tax across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.gst.xfer	All Goods and Services Taxes, Transfers Tax (% GDP). TAX.ALL.GST.XFER measures the share of tax revenue that is derived from transfer taxes on goods and services across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.gst.use	All Goods and Services Taxes, Use Tax (% GDP). TAX.ALL.GST.USE measures the share of tax revenue that is derived from use taxes on goods and services across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.gst.oth	All Goods and Services Taxes, Other (% GDP). TAX.ALL.GST.OTH measures the share of tax revenue that is derived from other taxes on goods and services across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).
tax.all.other	All Other Taxes, All Levels Total (% GDP). TAX.ALL.OTHER measures the share of tax revenue that is derived from sources of revenue not included in other categories across all governmental levels. This variable is measured as a percentage of total gross domestic product (GDP).

Public Savings & Investment

At present, we have two metrics that engage the topics of government savings and investment. These metrics capture some facet of governments' influence in finance.

gfinworth	General government financial net worth (% GDP). GFINWORTH measures the total value of a government's financial assets minus the total value of its outstanding liabilities. Financial assets and the corresponding liabilities include monetary gold and special drawing rights, currency and deposits, debt securities, loans, equity and investment fund shares, insurance, pension and standardized guarantee schemes, financial derivatives and employee stock options, and other accounts receivable/payable. The variable is denominated in percentage points of GDP <i>Source:</i> GOV2017
ginv	Government investment (% GDP). GINV measures the amount of spending that governments put into fixed investments, or the purchase of things like machinery, land, buildings, and technology. GINV measures investment across all the expenditure measures and captures the cost of capital formation and acquisitions before disposal of non-financial assets. This variable includes expenditures at all levels of government and is measured as a percentage of gross domestic product (GDP). <i>Source:</i> GOV2017

Economic Regulation

Economic regulations are government-imposed rules on the behavior of economic actors, even in private transactions. Regulation is difficult to quantify, and today's regulations cover a very wide range of economic activities. This version of *Measuring Socialism* includes data from Koske *et al.* (2015), an attempt to quantify regulation in product markets, utilities, professional services, and retail markets. Each cluster of regulation metrics is presented with an underlying conceptual model and agglomerative scheme, depicted below. These models are not empirical and not definitive, however, and researchers might find benefit in using empirical methods to reconceptualize the kinds of regulations profiled here.

PRODUCT MARKET REGULATION

Product market regulation looks at regulation that influences the operations of economic producers. The index is organized as described below in Figure 2. Note that all data come from REG2015.

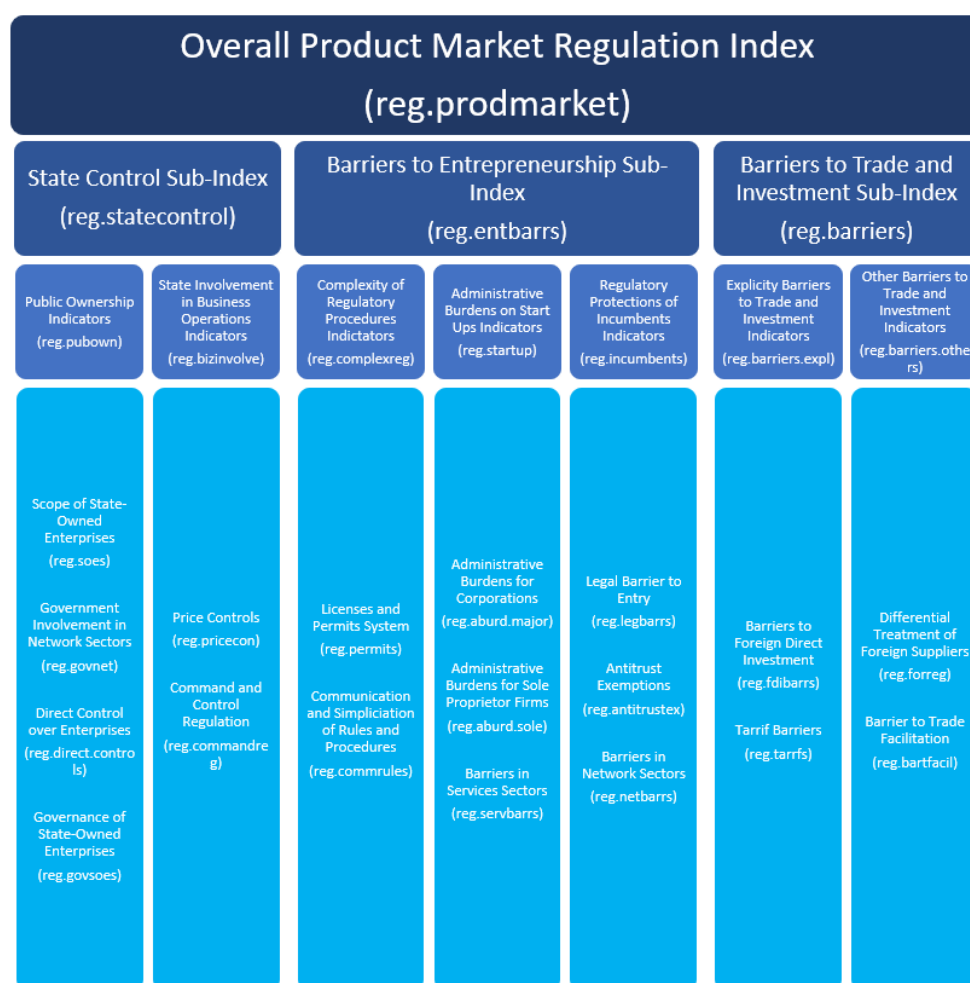


Figure 2: Koske *et al.* (2015) Product Market Regulation Indicators Deconstructed

Variable Name	Description
reg.prodmarket	Overall Product Market Regulation Index score. REG.PRODMARKET is the product market regulation index that is the aggregation of all three high-level product market regulation indicators, state control, barriers to entrepreneurship, and barriers to trade and investment. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.statecontrol	State Control Index. REG.STATECONTROL is a product market regulation index that is the aggregation of two mid-level indicators, public ownership and involvement in business operations. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.pubown	Public Ownership Index. REG.PUBOWN is a product market regulation index that is the aggregation of four low-level indicators, scope of state-owned owned enterprises, government involvement in network sectors, direct control over enterprises, and governance of state-owned enterprises. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.bizinvolve	Involvement in Business Operations Index. REG.BIZINVOLVE is a product market regulation index that is the aggregation of two low-level indicators, price controls and command and control regulation. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.entbarrs	Barriers to Entrepreneurship Index. REG.ENTBARRS is a product market regulation index that is the aggregation of three of the mid-level indicators, complexity of regulatory procedures, administrative burdens on start-ups, and regulatory protection of incumbents. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.startup	Administrative Burdens on Startups Index. REG.STARTUP is a product market regulation index that is the aggregation of three low-level indicators, administrative burdens for corporations, administrative burdens for sole proprietor firms, and barriers in services sectors. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.barriers	Barriers to Trade and Investment Index. REG.ENTBARRS is a product market regulation index that is the aggregation of two of the mid-level indicators, explicit barriers to trade and investment and other barriers to trade and investment. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.barriers.expl	Explicit Barriers to Trade and Investment. REG.BARRIERS.EXPL is a product market regulation index that is the aggregation of two low-level indicators, barriers to foreign direct investment and tariff barriers. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.barriers.other	Other Barriers to Trade and Investment. REG.BARRIERS.OTHER is a product market regulation index that is the aggregation of two low-level indicators, differential treatment of foreign suppliers and barriers to trade facilitation. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.soes	Scope of SOEs. REG.SOES is a low-level indicator that measures the pervasiveness of state ownership across thirty different business sectors measured as the share of sectors in which the government controls at least one firm. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.commandreg	Command and Control Regulation. REG.COMMANDREG is a low-level indicator that measures the extent to which the government uses coercive, as opposed to incentive-based, regulation. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.

reg.pricecon	Price Controls. REG.PRICECON is a low-level indicator that measures the extent and type of price controls in eight different sectors, including air transport, road freight transport, retail distribution, telecommunication, electricity, gas, water, and professional services. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.permits	Licenses and Permits System. REG.PERMITS is a low-level indicator that measures the extensiveness of licensing, including the use of ‘one-stop-shops’ and the ‘silence is consent’ rules for issuing licenses and accepting notifications. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.complexreg	Complexity of Regulatory Procedures. REG.COMPLEXREG is a product market regulation index that is the aggregation of two low-level indicators, licenses and permits system and communication and simplification of rules and procedures. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.commrules	Communication and Simplification of Rules and Procedures. REG.COMMRULES is a low-level indicator that measures the extent of the government’s communication strategy and efforts to reduce and simplify the administrative burden of interacting with the government. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.aburd.major	Administrative Burdens for Corporations. REG.ABURD.MAJOR is a low-level indicator that measures the administrative burdens on creating a public limited company. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.aburd.sole	Administrative Burdens for Sole Proprietor Firms. REG.ABURD.SOLE is a low-level indicator that measures the administrative burdens on creating an individual enterprise or firm. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.legbarrs	Legal Barriers. REG.LEGBARRS is a low-level indicator that measures the pervasiveness of barriers to entry in thirty different business sectors as a share of sectors in which there are explicit legal limitations on the number of competitors. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.incumbents	Regulatory Protection of Incumbents Index. REG.INCUMBENTS is a product market regulation index that is the aggregation of three low-level indicators, legal barriers to entry, antitrust exemptions, and barriers in network sectors. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.antitrustex	Antitrust Exemptions. REG.ANTITRUSTEX is a low-level indicator that measures the scope of exemptions from competition law for public enterprises. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.tariffs	Tariff Barriers. REG.TARIFFS is a low-level indicator that measures the simple cross-product average of effectively applied tariffs. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.directcontrols	Direct Control Over Enterprises. REG.DIRECTCONTROLS is a low-level indicator that measures the degree to which there is special voting rights for the government in privately-owned firms, as well as constraints on the sale of government stakes in publicly-controlled firms across thirty business sectors. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.fdibarrs	Barriers to Foreign Direct Investment. REG.FDIBARRS is a low-level indicator that measures the restrictiveness of a country’s foreign direct investment rules across twenty-two sectors in terms of foreign equity limitations, screening or approval mechanisms, restrictions on the employment of foreigners as key personnel and operational restrictions, restrictions on branching, and on capital repatriation or land ownership. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.

reg.govnet	Government Involvement in Network Sectors. REG.GOVNET is a low-level indicator that measures the amount of government ownership in the largest firms in across the network sectors of electricity, gas, rail transport, air transport, postal services and telecommunication. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.netbarrs	Barriers in Network Sectors. REG.NETBARRS is a low-level indicator that measures entry barriers in the network sectors of gas, electricity, water, rail transport, air transport, road freight transport, postal services and telecommunication, as well as the degree of vertical separation in the network sectors of gas, electricity and rail transport. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.govsoes	Governance of State-Owned Enterprises. REG.GOVSOES is a low-level indicator that measures the level of insulation state-owned enterprises have from market discipline and degree of political interference in the management of state-owned enterprises. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.servbarrs	Barriers in Service Sectors. REG.SERVBARRS is a low-level indicator that measures entry barriers in professional services, freight transport services and retail distribution. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.forreg	Differential Treatment of Foreign Suppliers. REG.FORREG is a low-level indicator that measures the level of discrimination against foreign firms with respect to taxes and subsidies, public procurement, entry regulation and appeal and procedures. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.bartfacil	Barriers to Trade Facilitation. REG.BARTFACIL is a low-level indicator that measures the level of recognition of foreign regulations, use of international standards and international transparency of domestic regulation. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.

UTILITIES REGULATION

Non-market regulation captures the regulation of utility sectors. The index is organized as described below in Figure 3. Note that all data come from REG2015.

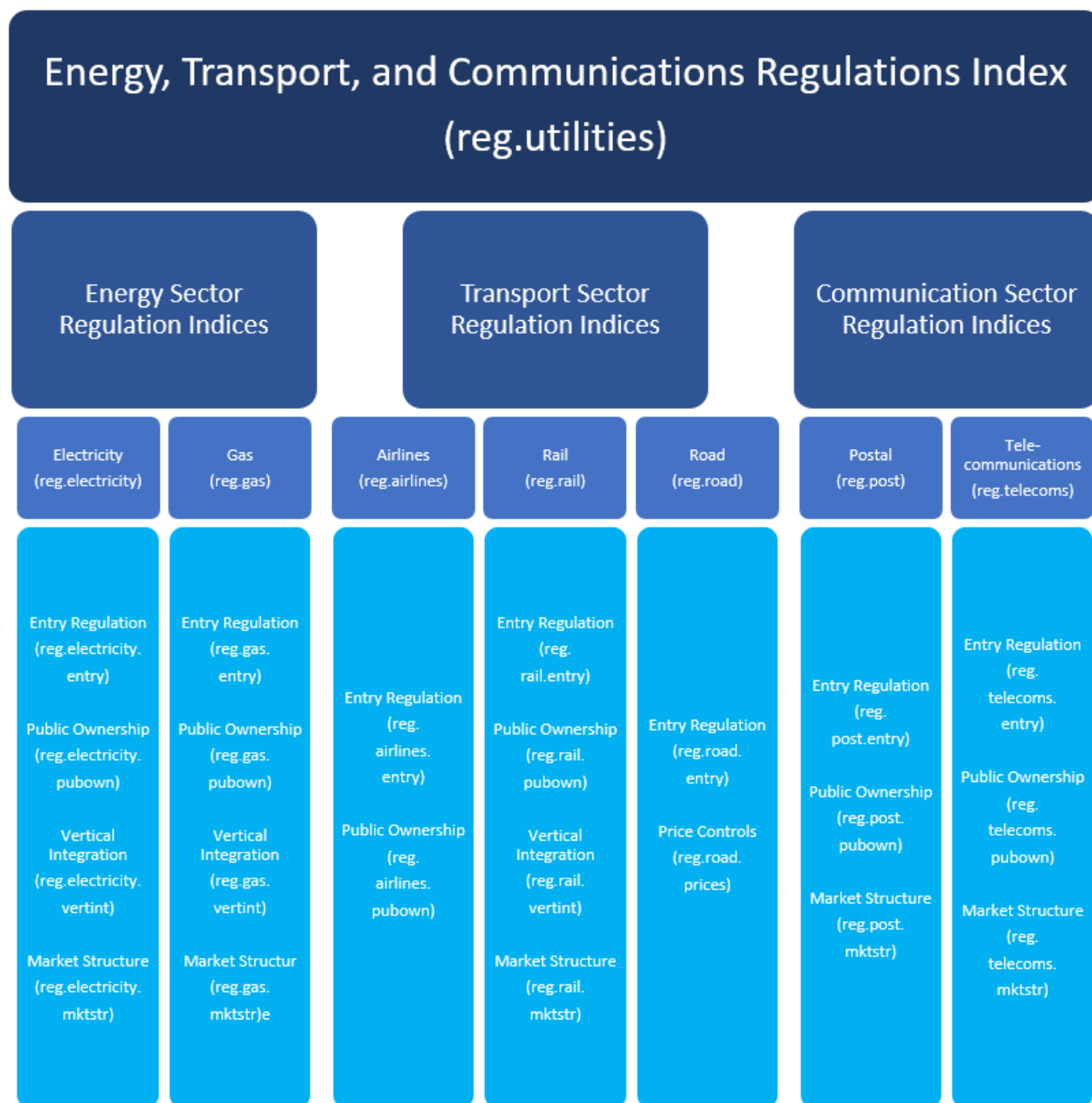


Figure 3: Kosuke *et al.*'s (2015) Utilities Regulation Metrics

Variable Name	Description
reg.utilities	Regulation Index: Six Major Utilities. REG.UTILITIES is the product market regulation index that is the aggregation of the seven non-manufacturing utility regulation indicators, electricity and gas (energy), air, rail, and road (transport), and post and telecommunications (communications). This index measures the degree of government regulation over a nation's utilities. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.airlines	Regulation Index: Airlines. REG.AIRLINES is a sectoral regulation index of the air transport utility, and is the aggregation of two low-level indicators, public ownership and entry regulation. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.airlines.pubown	Industry Regulations: Airlines: Public Ownership. REG.AIRLINES.PUBOWN is a low-level indicator of the sectoral regulation of the air transport services utility, measuring the percentage of shares owned by the government in the largest company (separately for infrastructure and passenger transport). The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.airlines.entry	Industry Regulations: Airlines: Entry Regulation. REG.AIRLINES.ENTRY is a low-level indicator of the sectoral regulation of the air transport services utility, measuring the extensiveness of the liberalization of internal routes and, on the international side, the nation's participation in an agreement liberalizing access to routes within a region and/or the existence of an "open skies" agreement with the United States. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.telecoms	Regulation Index: Telecoms. REG.TELECOMS is a sectoral regulation index of the telecommunications utility, and is the aggregation of three low-level indicators, entry regulation, public ownership, and market structure. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.telecoms.entry	Industry Regulations: Telecoms: Entry Regulation. REG.TELECOMS.ENTRY is a low-level indicator of the sectoral regulation of the telecommunications utility, measuring the extensiveness of terms and conditions for third party access, as well as the extent of choice of suppliers for consumers. This index measures the degree of government regulation over a nation's utilities. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.telecoms.pubown	Industry Regulations: Telecoms: Public Ownership. REG.TELECOMS.PUB is a low-level indicator of the sectoral regulation of the telecommunications utility, measuring the mean percentage of shares of the country's largest Internet service provider, mobile telecommunications company and landline telecommunications operators are owned by the government. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.

reg.telecoms.mktstr	Industry Regulations: Telecoms: Market Structure. REG.TELECOMS.MKTSTR is a low-level indicator of the sectoral regulation of the telecommunications utility, measuring the market share of new entrants in each of the telecommunications services covered by the indicator, gauging the extent to which existing regulations actually succeed in promoting competition. This index measures the degree of government regulation over a nation's utilities. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.electricity	Regulation Index: Electricity. REG.ELECTRICITY is a sectoral regulation index of the electrical services utility, and is the aggregation of four low-level indicators, entry regulation, public ownership, vertical integration, and market structure. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.electricity.entry	Industry Regulations: Electricity: Entry Regulation. REG.ELECTRICITY.ENTRY is a low-level indicator of the sectoral regulation of the electrical services utility, measuring the extensiveness of terms and conditions for third party access, as well as the extent of choice of suppliers for consumers. This index measures the degree of government regulation over a nation's utilities. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.electricity.pubown	Industry Regulations: Electricity: Public Ownership. REG.ELECTRICITY.PUBOWN is a low-level indicator of the sectoral regulation of the electrical services utility that describes the prevalence of public ownership in generation/import, transmission, distribution, supply markets in the energy sector, measured by the mean percentage of shares in the largest firm that are owned by the government (and multiplied by six to conform to this set's standardized scale).
reg.electricity.vertint	Industry Regulations: Electricity: Vertical Integration. REG.ELECTRICITY.VERTINT is a low-level indicator of the sectoral regulation of the rail electrical services utility, measuring the degree to which the utilities competitive activities are separated from natural monopoly activities. The degree of separation of the two ranges from full integration to mere legal separation, to separation into distinct companies owned by different shareholders. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.elect.mktstr	Industry Regulations: Electricity: Market Structure. REG.ELECT.MKSTR is a low-level indicator of sectoral regulation of the rail electrical services utility, measuring the market shares of the largest companies in the various segments of the industry in order to gauge the extent to which the regulatory framework succeeds in moderating the market power of incumbent firms. The index score is standardized to a zero (industry leader market share below 50%), 3 (between 50% and 90%), and 6 (over 90%) scale.
reg.gas	Industry Regulation: Gas. REG.ELECTRICITY is a sectoral regulation index of the gas services utility, and is the aggregation of three low-level indicators, entry regulation, public ownership, and market structure. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.

reg.gas.entry	Industry Regulation: Gas: Entry Regulation. REG.GAS.ENTRY is a low-level indicator of the sectoral regulation of the gas services utility, measuring the extensiveness of terms and conditions for third party access, as well as the extent of choice of suppliers for consumers. This index measures the degree of government regulation over a nation's utilities. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.gas.pubown	Industry Regulation: Gas: Public Ownership. REG.GAS.PUBOWN is a low-level indicator of the sectoral regulation of the gas services utility that describes the prevalence of public ownership in production/import, transmission, distribution, supply markets of the energy sector, measured by the mean percentage of shares in the largest firm that are owned by the government (and multiplied by six to conform to this set's standardized scale).
reg.gas.mktstr	Industry Regulation: Gas: Market Structure. REG.GAS.MKTSTR is a low-level indicator of the sectoral regulation of the gas services utility, measuring the market shares of the largest companies in the various segments of the industry in order to gauge the extent to which the regulatory framework succeeds in moderating the market power of incumbent firms. This index measures the degree of government regulation over a nation's utilities. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.post	Regulation Index: Post. REG.POST is a sectoral regulation index of the postal utility, and is the aggregation of two low-level indicators, entry regulation and market structure. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.post.entry	Industry Regulation: Post: Entry Regulation. REG.POST.ENTRY is a low-level indicator of the sectoral regulation of the postal utility, measuring the extensiveness of terms and conditions for third party access, as well as the extent of choice of suppliers for consumers. This index measures the degree of government regulation over a nation's utilities. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.post.mktstr	Industry Regulation: Post: Market Structure. REG.POST.MKTSTR is a low-level indicator of the sectoral regulation of the postal utility, measuring the market share of new entrants in each of the postal services covered by the indicator, gauging whether existing regulations actually succeed in engendering competition. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.rail	Regulation Index: Rail. REG.ELECTRICITY is a sectoral regulation index of the rail transport services utility, and is the aggregation of four low-level indicators, entry regulation, public ownership, vertical integration, and market structure. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.rail.entry	Industry Regulation: Rail: Entry Regulation. REG.RAIL.ENTRY is a low-level indicator of the sectoral regulation of the rail transport services utility. This variable measures whether a country has either free entry (regulated through access fees to its rail network infrastructure), franchising to several firms, or franchising to a single rail transport firm. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.

reg.rail.pubown	Industry Regulation: Rail: Public Ownership. REG.RAIL.PUBOWN is a low-level indicator of the sectoral regulation of the rail transport services utility, measuring the percentage shares owned by the government in the largest rail transport companies in infrastructure, passenger transport and freight transport, and operations management in rail industry. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.rail.mktstr	Industry Regulation: Rail: Market Structure. REG.RAIL.MKTSTR is a low-level indicator of the sectoral regulation of the rail transport services utility, measuring the degree of franchising, where either a country franchises to several companies, each operating as their own local monopoly, or a country franchises to several firms, each competing with one another in a given geographical area. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.rail.vertint	Industry Regulation: Rail: Vertical Integration. REG.RAIL.VERTINT is a low-level indicator of the sectoral regulation of the rail transport services utility, measuring the degree to which the utilities competitive activities are separated from natural monopoly activities. The degree of separation of the two ranges from full integration to mere legal separation, to separation into distinct companies owned by different shareholders. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.road	Regulation Index: Roads. REG.ROAD is a sectoral regulation index of the road freight utility, and is the aggregation of two low-level indicators, entry regulation and price controls. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.road.entry	Industry Regulation: Roads: Entry Regulation. REG.ROAD.ENTRY is a low-level indicator of the sectoral regulation of the road freight utility, measuring whether there exists a restrictive or discretionary licensing system and whether incumbents can intervene in decisions concerning entry or price setting. This index measures the degree of government regulation over a nation's utilities. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.road.prices	Industry Regulation: Roads: Price Controls. REG.ROAD.PRICES is a low-level indicator of the sectoral regulation of the road freight utility, measuring the degree to which either the retail prices of road freight are regulated by the government or whether the government provides pricing guidelines. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.

PROFESSIONAL SERVICES REGULATION

These metrics capture various forms of regulation in the professional services sector. Their organization is depicted below in Figure 4. Note that all data come from REG2015.

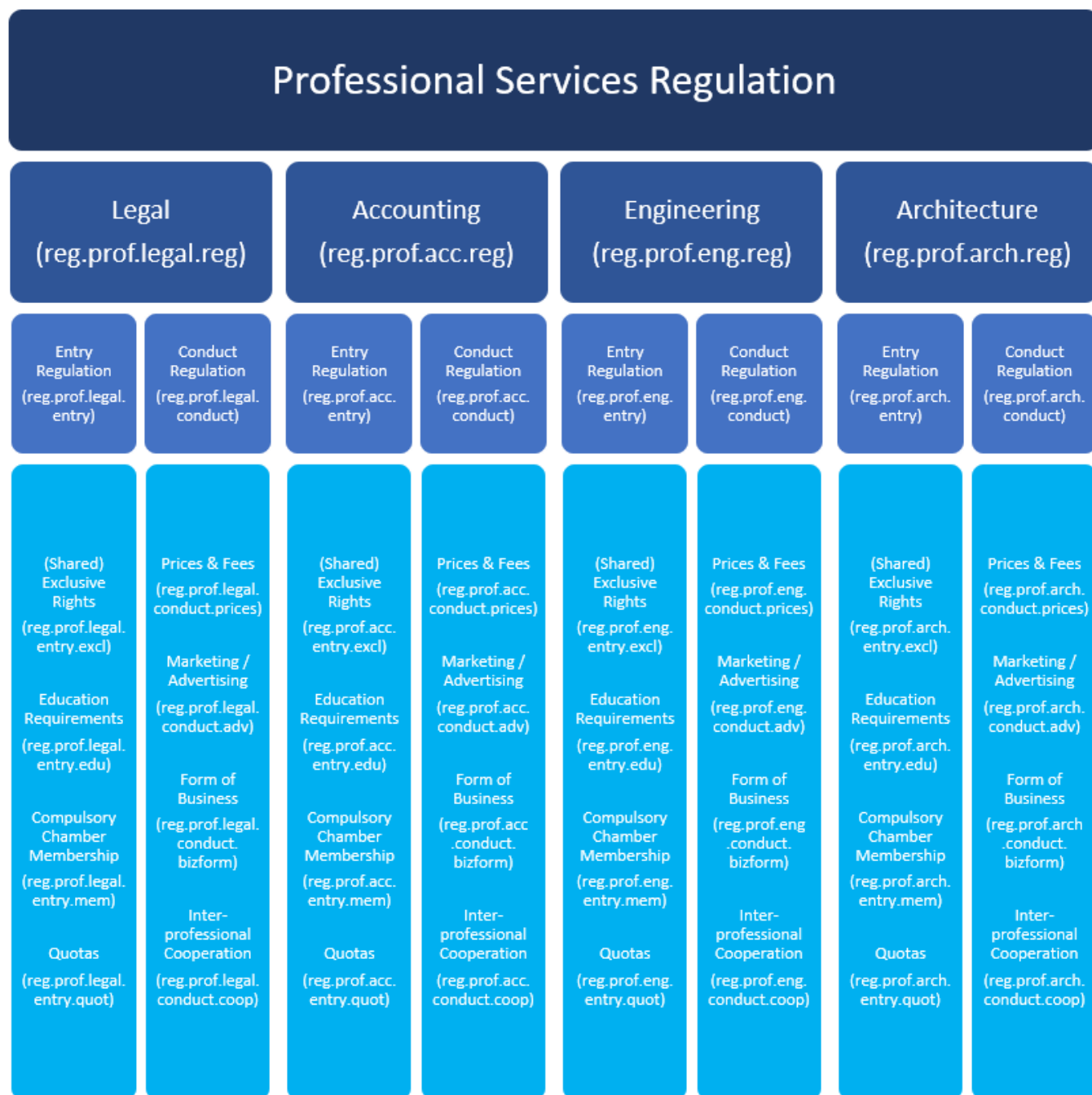


Figure 4: Kosuke *et al.*'s (2015) Professional Services Regulation Metrics

Variable Name	Description
reg.prof.legal.reg	Professional Regulation: Legal: Overall. REG.PROF.LEGAL.REG is a sectoral regulation index of the legal services sector, and is the aggregation of two mid-level indicators, entry regulation and conduct regulation. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.legal.entry	Professional Regulation: Legal: Entry Regulation. REG.PROF.LEGAL.ENTRY is a sectoral regulation index of the legal services sector measuring entry regulation, and is the aggregation of four low-level indicators, exclusive rights, education requirements, compulsory chamber membership, and quotas. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.legal.entry.excl	Professional Regulation: Legal: Entry Regulation: Exclusive Rights. REG.PROF.LEGAL.ENTRY.EXCL is a low-level indicator of the sectoral regulation of the legal services sector measuring entry regulation pertaining to licensing, which measures the number of services that the profession has the exclusive right to provide. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.legal.entry.edu	Professional Regulation: Legal: Entry Regulation: Education Reqs. REG.PROF.LEGAL.ENTRY.EDU is a low-level indicator of the sectoral regulation of the legal services sector measuring entry regulation pertaining to education requirements, which gauges the degree to which specialized education, exam completion, and duration of time practicing are required to be a full member of the profession. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.legal.entry.mem	Professional Regulation: Legal: Entry Regulation: Compulsory chamber membership. REG.PROF.LEGAL.ENTRY.MEM is a low-level indicator of the sectoral regulation of the legal services sector measuring entry regulation pertaining to chamber membership requirements, which measures whether chamber membership is required to practice professional services. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.legal.entry.quot	Professional Regulation: Legal: Entry Regulation: Quotas. REG.PROF.LEGAL.ENTRY.QUOT is a low-level indicator of the sectoral regulation of the legal services sector pertaining to entry regulation measuring the number of foreign professionals permitted to practice restricted by quotas or economic needs testing. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.legal.conduct	Professional Regulation: Legal: Conduct Regulation. REG.PROF.LEGAL.CONDUCT is a sectoral regulation index of the legal services sector measuring conduct regulation, and is the aggregation of four low-level indicators, prices and fees, marketing, form of business, and interprofessional cooperation. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.

reg.prof.legal.conduct.prices	Professional Regulation: Legal: Conduct Regulation: Price Controls. REG.PROF.LEGAL.CONDUCT.PRICES is a low-level indicator of the sectoral regulation of the legal services sector measuring conduct regulation, which gauges the degree to which the profession charges fees or prices that are regulated in any way by the government or is self-regulated. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.legal.conduct.bizform	Professional Regulation: Legal: Conduct Regulation: Forms of Business. REG.PROF.LEGAL.CONDUCT.BIZFORM is a low-level indicator of the sectoral regulation of the legal services sector measuring conduct regulation that measures whether the legal form of business is restricted to a particular type. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.legal.conduct.adv	Professional Regulation: Legal: Conduct Regulation: Marketing Restrictions. REG.PROF.LEGAL.CONDUCT.ADV is a low-level indicator of the sectoral regulation of the legal services sector measuring conduct regulation that measures whether advertising or marketing is regulated in any way. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.legal.conduct.coop	Professional Regulation: Legal: Conduct Regulation: Inter-Professional Cooperation. REG.PROF.LEGAL.CONDUCT.COOP is a low-level indicator of the sectoral regulation of the legal services sector measuring conduct regulation, which gauges the level of cooperation that is allowed between professionals. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.arch.reg	Professional Regulation: Architecture: Overall. REG.PROF.ARCH.REG is a sectoral regulation index of the architecture services sector, and is the aggregation of two mid-level indicators, entry regulation and conduct regulation. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.arch.entry	Professional Regulation: Architecture: Entry Regulation. REG.PROF.ARCH.ENTRY is a sectoral regulation index of the architecture services sector measuring entry regulation, and is the aggregation of four low-level indicators, exclusive rights, education requirements, compulsory chamber membership, and quotas. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.arch.entry.excl	Professional Regulation: Architecture: Entry Regulation: Exclusive Rights. REG.PROF.ARCH.ENTRY.EXCL is a low-level indicator of the sectoral regulation of the architecture services sector measuring entry regulation pertaining to licensing, which gauges the number of services that the profession has the exclusive right to provide. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.arch.entry.edu	Professional Regulation: Architecture: Entry Regulation: Education Requirements. REG.PROF.ARCH.ENTRY.EDU is a low-level indicator of the sectoral regulation of the architecture services sector measuring entry regulation pertaining to education requirements, which gauges the degree to which specialized education, exam completion, and duration of time practicing are required to be a full member of the profession. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.

reg.prof.arch.entry.mem	Professional Regulation: Architecture: Entry Regulation: Compulsory Chamber Membership. REG.PROF.ARCH.ENTRY.MEM is a low-level indicator of the sectoral regulation of the architecture services sector measuring entry regulation pertaining to chamber membership requirements, which gauges whether chamber membership is required to practice professional services. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.arch.entry.quot	Professional Regulation: Architecture: Entry Regulation: Quotas. REG.PROF.ARCH.ENTRY.QUOT is a low-level indicator of the sectoral regulation of the architecture services sector pertaining to entry regulation measuring the number of foreign professionals permitted to practice restricted by quotas or economic needs tests. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.arch.conduct	Professional Regulation: Architecture: Conduct Regulation. REG.PROF.ARCH.CONDUCT is a sectoral regulation index of the architecture services sector measuring conduct regulation, and is the aggregation of four low-level indicators, prices and fees, marketing, form of business, and interprofessional cooperation. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.arch.conduct.prices	Professional Regulation: Architecture: Conduct Regulation: Price Controls. REG.PROF.ARCH.CONDUCT.PRICES is a low-level indicator of the sectoral regulation of the architecture services sector measuring conduct regulation, which gauges the degree to which the profession charges fees or prices that are regulated in any way by the government or is self-regulated. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.arch.conduct.bizform	Professional Regulation: Architecture: Conduct Regulation: Forms of Business. REG.PROF.ARCH.CONDUCT.BIZFORM is a low-level indicator of the sectoral regulation of the architecture services sector measuring conduct regulation, which gauges whether the legal form of business is restricted to a particular type. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.arch.conduct.adv	Professional Regulation: Architecture: Conduct Regulation: Marketing Restrictions. REG.PROF.ARCH.CONDUCT.ADV is a low-level indicator of the sectoral regulation of the architecture services sector measuring conduct regulation, which gauges whether advertising or marketing is regulated in any way. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.arch.conduct.coop	Professional Regulation: Architecture: Conduct Regulation: Inter-Professional Cooperation. REG.PROF.ARCH.CONDUCT.COOP is a low-level indicator of the sectoral regulation of the architecture services sector measuring conduct regulation, which gauges the level of cooperation that is allowed between professionals. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.eng.reg	Professional Regulation: Engineering: Overall. REG.PROF.ENG.REG is a sectoral regulation index of the engineering services sector, and is the aggregation of two mid-level indicators, entry regulation and conduct regulation. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.

reg.prof.eng.entry	Professional Regulation: Engineering: Entry Regulation. REG.PROF.ENG.ENTRY is a sectoral regulation index of the engineering services sector measuring entry regulation, and is the aggregation of four low-level indicators, exclusive rights, education requirements, compulsory chamber membership, and quotas. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.eng.entry.excl	Professional Regulation: Engineering: Entry Regulation: Exclusive Rights. REG.PROF.ENG.ENTRY.EXCL is a low-level indicator of the sectoral regulation of the engineering services sector measuring entry regulation pertaining to licensing, which gauges the number of services that the profession has the exclusive right to provide. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.eng.entry.edu	Professional Regulation: Engineering: Entry Regulation: Education Requirements. REG.PROF.ENG.ENTRY.EDU is a low-level indicator of the sectoral regulation of the engineering services sector measuring entry regulation pertaining to education requirements, which gauges the degree to which specialized education, exam completion, and duration of time practicing are required to be a full member of the profession. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.eng.entry.mem	Professional Regulation: Engineering: Entry Regulation: Compulsory Chamber Membership. REG.PROF.ENG.ENTRY.MEM is a low-level indicator of the sectoral regulation of the engineering services sector measuring entry regulation pertaining to chamber membership requirements, which gauges whether chamber membership is required to practice professional services. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.eng.entry.quot	Professional Regulation: Engineering: Entry Regulation: Compulsory Chamber Membership. REG.PROF.ENG.ENTRY.QUOT is a low-level indicator of the sectoral regulation of the engineering services sector pertaining to entry regulation measuring the number of foreign professionals permitted to practice restricted by quotas or economic needs tests. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.eng.conduct	Professional Regulation: Engineering: Conduct Regulation. REG.PROF.ENG.CONDUCT is a sectoral regulation index of the engineering services sector measuring conduct regulation, and is the aggregation of four low-level indicators, prices and fees, marketing, form of business, and interprofessional cooperation. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.eng.conduct.prices	Professional Regulation: Engineering: Conduct Regulation: Price Controls. REG.PROF.ENG.CONDUCT.PRICES is a low-level indicator of the sectoral regulation of the engineering services sector measuring conduct regulation, which gauges the degree to which the profession charges fees or prices that are regulated in any way by the government or is self-regulated. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.eng.conduct.bizform	Professional Regulation: Engineering: Conduct Regulation: Forms of Business. REG.PROF.ENG.CONDUCT.BIZFORM is a low-level indicator of the sectoral regulation of the engineering services sector measuring conduct regulation, which gauges whether the legal form of business is restricted to a particular type. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.

reg.prof.eng.conduct.adv	Professional Regulation: Engineering: Conduct Regulation: Marketing Restrictions. REG.PROF.ENG.CONDUCT.ADV is a low-level indicator of the sectoral regulation of the engineering services sector measuring conduct regulation, which gauges whether advertising or marketing is regulated in any way. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.eng.conduct.coop	Professional Regulation: Engineering: Conduct Regulation: Inter-Professional Cooperation. REG.PROF.ENG.CONDUCT.COOP is a low-level indicator of the sectoral regulation of the engineering services sector measuring conduct regulation, which gauges the level of cooperation that is allowed between professionals. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.acc.reg	Professional Regulation: Accounting: Overall. REG.PROF.ACC.REG is a sectoral regulation index of the accounting services sector, and is the aggregation of two mid-level indicators, entry regulation and conduct regulation. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.acc.entry	Professional Regulation: Accounting: Entry Regulation. REG.PROF.ACC.ENTRY is a sectoral regulation index of the accounting services sector measuring entry regulation, and is the aggregation of four low-level indicators, exclusive rights, education requirements, compulsory chamber membership, and quotas. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.acc.entry.excl	Professional Regulation: Accounting: Entry Regulation: Exclusive Rights. REG.PROF.ACC.ENTRY.EXCL is a low-level indicator of the sectoral regulation of the accounting services sector measuring entry regulation pertaining to licensing, which gauges the number of services that the profession has the exclusive right to provide. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.acc.entry.edu	Professional Regulation: Accounting: Entry Regulation: Education Requirements. REG.PROF.ACC.ENTRY.EDU is a low-level indicator of the sectoral regulation of the accounting services sector measuring entry regulation pertaining to education requirements, which gauges the degree to which specialized education, exam completion, and duration of time practicing are required to be a full member of the profession. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.acc.entry.mem	Professional Regulation: Accounting: Entry Regulation: Compulsory Chamber Membership. REG.PROF.ACC.ENTRY.MEM is a low-level indicator of the sectoral regulation of the accounting services sector measuring entry regulation pertaining to chamber membership requirements, which gauges whether chamber membership is required to practice professional services. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.acc.entry.quot	Professional Regulation: Accounting: Entry Regulation: Quotas. REG.PROF.ACC.ENTRY.QUOT is a low-level indicator of the sectoral regulation of the accounting services sector pertaining to entry regulation measuring the number of foreign professionals permitted to practice restricted by quotas or economic needs tests. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.

reg.prof.acc.conduct	Professional Regulation: Accounting: Conduct Regulation. REG.PROF.ACC.CONDUCT is a sectoral regulation index of the accounting services sector measuring conduct regulation, and is the aggregation of four low-level indicators, prices and fees, marketing, form of business, and interprofessional cooperation. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.acc.conduct.prices	Professional Regulation: Accounting: Conduct Regulation: Price Controls. REG.PROF.ACC.CONDUCT.PRICES is a low-level indicator of the sectoral regulation of the accounting services sector measuring conduct regulation, which gauges the degree to which the profession charges fees or prices that are regulated in any way by the government or is self-regulated. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.acc.conduct.bizform	Professional Regulation: Accounting: Conduct Regulation: Forms of Business. REG.PROF.ACC.CONDUCT.BIZFORM is a low-level indicator of the sectoral regulation of the accounting services sector measuring conduct regulation, which gauges whether the legal form of business is restricted to a particular type. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.acc.conduct.adv	Professional Regulation: Accounting: Conduct Regulation: Marketing Restrictions. REG.PROF.ACC.CONDUCT.ADV is a low-level indicator of the sectoral regulation of the accounting services sector measuring conduct regulation, which gauges whether advertising or marketing is regulated in any way. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.prof.acc.conduct.coop	Professional Regulation: Accounting: Conduct Regulation: Inter-Professional Cooperation. REG.PROF.ACC.CONDUCT.COOP is a low-level indicator of the sectoral regulation of the accounting services sector measuring conduct regulation, which gauges the level of cooperation that is allowed between professionals. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.

RETAIL MARKETS

These metrics capture various forms of regulation in the retail distribution sector. Their organization is composed of one over-arching index, which is an agglomeration of six lower-level indices, depicted below in Figure 5. Note that all data come from REG2015.



Figure 5: Kosuke et al.'s (2015) Retail Distribution Regulation Metrics

Variable Name	Description
reg.ret.overall	Retail Regulation: Overall. REG.RET.OVERALL is a sectoral regulation index of the retail distribution sector, and is the aggregation of six low-level indicators, registration and licensing, special regulation of large outlets, protection of existing firms, regulation of shop opening hours, price controls, and promotions and discounts. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.ret.reglic	Retail Regulation: Registration and Licensing. REG.RET.REGLIC is a low-level indicator of the sectoral regulation of the retail distribution sector measuring registration and licensing that measures the degree to which outlets require permits and licensing in order to engage in commercial activity. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.ret.largeo	Retail Regulation: Special Regulation of Large Outlets. REG.RET.LARGEO is a low-level indicator of the sectoral regulation of the retail distribution sector measuring the threshold surface limit for regulation of large outlets. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.ret.protfirms	Retail Regulation: Protection of Existing Firms. REG.RET.PROTFIRMS is a low-level indicator of the sectoral regulation of the retail distribution sector measuring whether professional bodies or representatives of trade and commercial interests are involved licensing decisions, and the degree to which there are products that can only be sold in outlets operating under a local or national legal monopoly. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.ret.ophours	Retail Regulation: Regulation of Shop Opening Hours. REG.RET.OPHOURS is a low-level indicator of the sectoral regulation of the retail distribution sector measuring the degree to which shop opening hours are regulated. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.ret.pricecon	Retail Regulation: Price Controls. REG.RET.PRICECON is a low-level indicator of the sectoral regulation of the retail distribution sector measuring extensiveness of price controls. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.
reg.ret.promo	Retail Regulation: Promotions & Discounts. REG.RET.PROMO is a low-level indicator of the sectoral regulation of the retail distribution sector measuring extensiveness of rules on promotions and discounts. The index score is standardized to a zero-to-six scale, with lower values indicating less restrictive product market regulation.

Public Sector Work Force

This section includes metrics that capture the size and character of a country's public sector workforce.

Variable Name	Description
gout	Government outsourcing (% Goods and services used by government). GOUT measures the proportion of total good services that a government uses that are outsourced. Outsourced goods and services are defined as those products which are purchased from private sources to be used intermediately, as when governments use contractors for specific purposes, or those services for which governments reimburse citizens through transfers that are provided by private actors, as when social security pays private health care providers. This variable includes expenditures at all levels of government and is measured as a percentage of total government expenditures for goods and services.
gemp	Employment in government (% total employment). GEMP measures the proportion of the total active labor force that is employed by the government (public sector). The public sector comprises all levels of government (central, state, local and social security funds) and includes core ministries, agencies, departments and non-profit institutions that are controlled by public authorities. Public corporations are legal units producing goods or services for the market and that are controlled and/or owned by government units. Public corporations also include quasi-corporations. This variable includes employment at all levels of government and is measured as a percentage of total employment of the active labor force.

Residual Category

Additional Metrics

tariffs	Weighted mean tariff rate on all products. TARIFFS is the average percentage of the tariff rate on products across all product categories imported into a country weighted by the product import shares corresponding to each partner country. This variable is measured as a percentage.
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