

Hands-on the 9,560 data points of the Global Data Barometer's Public Finance Module: A step-by-step guide

The Global Data Barometer (GDB) is an exciting tool for understanding the state of data for the public good. The GDB works as a repository that enables anyone to access more than 1,100 datasets and 900 regulations from 109 countries and jurisdictions worldwide. Thanks to the work of the GDB team, partners, and more than 100 researchers, the GDB collected over 60,000 data points and organized them through 4 pillars, 2 core modules, and 7 thematic modules (Public Finance -PF-, Public Procurement, Land, Health and COVID-19, Political Integrity, Climate Action, Company Information).

The release of the GDB databases presents many opportunities to be explored by data enthusiasts worldwide. As a result, the GDB team published the “Dig Deeper” blog series. The [first article](#) contains an introduction to the structure of the GDB, and the [second article](#) reviews questions you can answer using the GDB data. Next, the Global Initiative for Fiscal Transparency (GIFT) team developed the blog “[Advocating for accurate, timely, and trustworthy fiscal information](#)” to explore broad global trends from the results of the Public Finance (PF) module.

To continue mining into the depths of this great well of information for the public good, the GIFT team built this step-by-step guide for the PF module. It aims to facilitate understanding and use of the PF module, from downloading the database to answering specific concerns from stakeholders such as government officials, legislators, journalists, the organized civil society, academics, students, data enthusiasts, and anyone interested in the power of public financial data for the public good.

What is the Global Data Barometer (GDB)?

The GDB is a multi-dimensional and multi-layered study that created a new global data benchmark. To achieve this, it carried out an expert survey and used secondary indicators to generate the metrics. The expert survey was carried out from May 2019 until May 2021 that evaluated 109 countries in 4 pillars: data governance, capability, availability, and use and impact of data. The GDB website enables users to [access online tools and visualizations](#) to present results and showcases [124 open databases](#) divided by thematic modules, country, and region, to review the full questionnaires and information gathered by the country researchers, including direct links to the primary sources.

What is the Public Finance (PF) Module?

The Public Finance (PF) Module results from the collaboration between GIFT and GDB. It aims to establish a baseline for governments' collection, management, and reporting of Public Financial data. The PF Module database contains information from 109 countries, 9,560 data points with 259 specific examples of public finance legal frameworks, and 760 datasets of public finance information worldwide. All the data of the PF Module was collected through 40

questions, each of them feeding a particular pillar: “governance” and “availability.” The following table explains the approach of each indicator for the assessment.

Governance	Availability
<p style="text-align: center;">Evaluate the existence and comprehensiveness of regulatory frameworks that mandate structured information disclosure requirements.</p> <p style="text-align: center;">13 questions</p> <p style="text-align: center;">Evaluates legal frameworks favoring the publication of 5 key budget documents.</p> <p><i>Documents/Data: Executive’s Budget Proposal, Enacted Budget, In-Year Reports, Year-End Report, and Budget execution legal frameworks requiring publication in their most disaggregated version</i></p> <p>The evaluation considers the following:</p> <ul style="list-style-type: none"> •There are laws that require the collection, publication, and discussion of structured budget information. •There are laws that require the publication of open data. <ul style="list-style-type: none"> •Existence of an auditing/verification process. •Budget information is timely updated •There are no significant exceptions to collecting and publishing budget information. 	<p style="text-align: center;">Evaluate the level of openness and public access to structured, machine-readable information.</p> <p style="text-align: center;">27 questions</p> <p style="text-align: center;">Evaluates the availability of 2 key-budget documents, 4 budget classifications, and 6 data disaggregation.</p> <p><i>Documents/Data: Executive’s Budget Proposal, Budget Amendments, Enacted Budget, Spending, Extrabudgetary Funds, Spending of Public Corporations, Existence of administrative, economic, functional, and programmatic classifications</i></p> <p>The evaluation considers the following:</p> <ul style="list-style-type: none"> •All budget documents are available on economic, administrative, and functional classifications according to international standards. •Data is open, free, timely, historical, and machine-readable. •Considers disaggregation by cross-cutting themes or SDGs, with identifiers linking budget information to performance indicators and/or investment projects.

With this guide...

Any activist, academic, student, public servant, or interested person will unlock the power of the GDB Public Finance Module and understand how governments are approaching public finance data worldwide. By following this guide, you will be able to access the Public Finance Module database; build the global rankings from the PF Module global scores, and for the scores of each indicator, know what your country needs to improve (legal frameworks or data availability); access the full evaluation of any country and identify the highest and lowest scoring questions; finally, you will be able to review the results of all countries on a specific question to take a look on better practices, regional and global trends in legal frameworks and data publication.

You can go further into your analysis, complementing the PF Module data with the information of other tools, such as the [Open Budget Survey 2021](#). Furthermore, the insights from this guide can exponentially grow if we include public participation. The GIFT network has the enriching experience of the [#BetterBudgetDataquest](#) for Sustainable Development and

[#RallyFromHome](#) on Public Infrastructure Data that pushes for the collaboration between the government and the public to improve the tools, data, and use of public finance information.

Who can use this information?

- **Officials at all levels of government** (ministries of finance, line ministries, subnational governments) who aim to access data for evidence-based decision making, who want to identify quantifiable windows of opportunity in public financial management, and monitor the effectiveness of public policies, as well as to be inspired by international practice to take action today.
- **Legislators** to explore windows of opportunity on laws, norms, and official guides to guarantee the publication of open fiscal data.
- **Journalists** looking for sources of information on public financial data, legal frameworks, and fiscal policy trends, as well as to make comparative analyses between countries.
- **Developers, data scientists, and data enthusiasts** looking for a new challenge in organizing, extracting, and interpreting data, creating visualizations, or identifying trends with social impact.
- **Civil society organizations** that carry out the timely analyses required to make effective proposals for improvements in legal frameworks and monitor the government's allocation of resources to hold them accountable, offer alternatives, and communicate their findings to the public.
- **Academia and students** as a basis for their analyses on public finance legal frameworks, data publication, and worldwide transparency and spending decisions. Detect trends and windows of opportunity to build innovative research and address the challenges worldwide.
- **The public** can access specific laws, databases, and documents to build an informed public opinion, engage with their governments in the budget cycle, and participate in budget decision-making.

Accessing the PF Module Database

Before you continue reading this document, we encourage you to familiarize yourself with the [Main Site of the Public Finance Module](#), in which you can find the questions assessed in each indicator. Also, you can have first-hand interaction with the released database through the [“Results” page](#). Lastly, take a close look at the [database documentation here](#).

Now we are ready to go!

It is important to consider that this guide will be based on using the database with *Microsoft Excel* and *Python 3 (IDE: Spyder 5.1.5)*. You can access the [filtered databases here](#).

Step 1

The first step is to access the [Global Data Barometer Website \(https://globaldatabarometer.org\)](https://globaldatabarometer.org). The website requires you to accept/deny cookies.



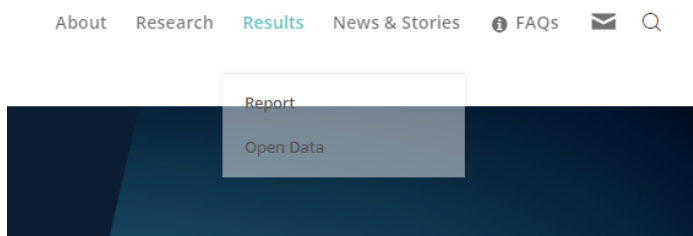
Data for public good

The Barometer is a multi-dimensional and multi-layered study that assessed the state of data for public good in 109 countries. An expert survey was conducted from May 2019 – May 2021 to create a new global benchmark that looks at data governance, capability, availability, and use and impact of data for public good. You may explore and view the data, through its core (e.g. governance and capability) or thematic modules (e.g. climate action, land, public procurement) as well as on a country-level. Learn more about the data structure [here](#).



Step 2

Next, access the top-right menu and select the " Results " option, then click on the [“Open Data”](#) option. This option will drive you to a new webpage.



Step 3

On this web page, go to the section “Data by Module,” located in the bottom-left area. Then click on the option “Public Finance”.

The database will be automatically downloaded as a **CSV (comma-separated values) file**.



Data by Module

Choose a module to download the dataset and explore it in-depthly.

- ▶ Capabilities
- ▶ Climate action
- ▶ Company information
- ▶ Governance
- ▶ Land
- ▶ Political integrity
- ▶ Procurement
- ▶ Public finance

Data by Country

Choose a country to download all the data collected.

- ▶ Africa
- ▶ Latin America and the Caribbean
- ▶ Eastern Europe and Central Asia
- ▶ EU, UK, North America, Israel, Australia and New Zealand
- ▶ South and East Asia
- ▶ Middle East and North Africa

Data by Region

Choose a region to download all the data of the countries involved.

- ▶ Africa
- ▶ Eastern Europe and Central Asia
- ▶ EU, UK, North America, Israel, Australia and New Zealand
- ▶ Latin America and the Caribbean
- ▶ Middle East and North Africa
- ▶ South and East Asia

Step 4

Finally, open the CSV file with Microsoft Excel (you can also open it with your open-sourced spreadsheet parser or data processor of choice). We recommend saving it as an XLS file (excel spreadsheet file), so you can save your progress.

You can access the database through your preferred IDE and programming language. This time, we will use Python and the library pandas with the IDE *Spyder* (5.1.5).

```
import pandas as pd
pfmodule_dataframe = pd.read_csv('gdb_pfmodule.csv')
```

iso3	country	pillar	module	indicator_id	indicator_na	indicator_tty	variable_narquestion	hierarchy_le	data_type	response	response_va	normalized_weight	score	paren	
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT To what exte	1	response				41.97	G.PF.f	
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT To what exte	1	justification	The primary obligation to publish data on public finances comes			0.6	G.PF.f	
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT Existence	2	response			1	0.6	G.PF.f	
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT Are there lav	4	response	They exist ar	2	1		G.PF.f	
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT 1,2>Please pr	4	supporting	Yes, the primary obligation to publish data on public finances cor				G.PF.f	
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT Do relevant	4	response	There is no r	0	0		G.PF.f	
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT Elements	2	response			100	59.95	G.PF.f	
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT Provisions fc	3	response			50	37.45	G.PF.f	
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT Summary re	4	response	Partially	1	0.5	8.5	4.25	G.PF.f
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT 1>Please ind	4	supporting	The appendixes to the annual budget law provide the summary c				G.PF.f	
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT Expenditure	4	response	No	0	0	8.3	0	G.PF.f
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT The rules/gu	4	response	Yes	2	1	8.3	8.3	G.PF.f
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT 2>Please ind	4	supporting	The law on				G.PF.f	
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT The rules/gu	4	response	Yes	2	1	8.3	8.3	G.PF.f
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT 2>Please ind	4	supporting	The law on				G.PF.f	
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT The rules/gu	4	response	Yes	2	1	8.3	8.3	G.PF.f
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT 2>Please ind	4	supporting	The law on				G.PF.f	
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT Provisions fc	3	response			20		G.PF.f	
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT The rules/gu	4	response	Yes	2	1	10	10	G.PF.f
XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT 2>Please ind	4	supporting	The law on public finances management and accountability requ				G.PF.f	

Which are the highest and lowest scores?

You were successful in downloading the [Public Finance Module Database!](#) Now it is time to get down to work. The first task is to build the country ranking for the global scores of the PF Module. Next, you will produce the country ranking with the availability and governance indicators scores.

Task 1: PF Module World Rank

Step 1

The first step is getting each country's PF Module score. You can do this by filtering the column "hierarchy_level" through the "0" value.

After applying the filter, you can see the PF Module score for each country in the column "score."

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	iso3	country	pillar	module	indicator	indicator	indicator	variable	question	hierarchy	data_type	response	response	normalize	weight	score	pare
9453	AGO	Angola		PUBLIC FINANCE			Module			0						47.268375	
9454	ALB	Albania		PUBLIC FINANCE			Module			0						38.251875	
9455	ARE	United Arab Emirates		PUBLIC FINANCE			Module			0						14.6839	
9456	ARG	Argentina		PUBLIC FINANCE			Module			0						66.54465	
9457	ARM	Armenia		PUBLIC FINANCE			Module			0						88.274	
9458	AUS	Australia		PUBLIC FINANCE			Module			0						69.845375	
9459	AZE	Azerbaijan		PUBLIC FINANCE			Module			0						38.391975	
9460	BEN	Benin		PUBLIC FINANCE			Module			0						29.84715	
9461	BFA	Burkina Faso		PUBLIC FINANCE			Module			0						30.46615	
9462	BGD	Bangladesh		PUBLIC FINANCE			Module			0						29.678	
9463	BGR	Bulgaria		PUBLIC FINANCE			Module			0						80.240375	
9464	BHR	Bahrain		PUBLIC FINANCE			Module			0						14.2725	
9465	BHS	Bahamas		PUBLIC FINANCE			Module			0						24.41895	
9466	BLR	Belarus		PUBLIC FINANCE			Module			0						37.1235	
9467	BLZ	Belize		PUBLIC FINANCE			Module			0						16.1325	
9468	BOL	Bolivia (Plurinational Stat		PUBLIC FINANCE			Module			0						2.69115	
9469	BRA	Brazil		PUBLIC FINANCE			Module			0						71.44875	
9470	BWA	Botswana		PUBLIC FINANCE			Module			0						19.550925	
9471	CAN	Canada		PUBLIC FINANCE			Module			0						84.033	
9472	CHL	Chile		PUBLIC FINANCE			Module			0						63.66	
9473	CHN	China		PUBLIC FINANCE			Module			0						35.826	
9474	CIV	Côte d'Ivoire		PUBLIC FINANCE			Module			0						44.958875	

Step 2

To order your list of countries from the highest score to the lowest score, you will need to arrange the column "score" values from highest to lowest (Descending).

You now have an ordered list showing each country's highest and lowest scores. [In this spreadsheet](#), you can access the extract of the database you created in the sheet Task 1 PF Rank^[1].

You can execute the following code lines to achieve Task 1:

```
###Task 1: PF Module World Rank
pfmodule_ranking = pfmodule_dataframe[pfmodule_dataframe["hierarchy_level"]
                                     == 0]
pfmodule_ranking_sorted = pfmodule_ranking.sort_values("score",
                                                         ascending=False)
```

As a result, you will have the following data frame:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	iso3	country	pillar	module	indicator	indicator	indicator	variable	question	hierarchy	data_type	response	response	normalize	weight	score	parent
9453	FRA	France		PUBLIC FINANCE			Module				0					93.8125	
9454	ZAF	South Africa		PUBLIC FINANCE			Module				0					93.475	
9455	MEX	Mexico		PUBLIC FINANCE			Module				0					93.42075	
9456	ARM	Armenia		PUBLIC FINANCE			Module				0					88.274	
9457	DEU	Germany		PUBLIC FINANCE			Module				0					87.11	
9458	KOR	Republic of Korea		PUBLIC FINANCE			Module				0					84.6297	
9459	CAN	Canada		PUBLIC FINANCE			Module				0					84.033	
9460	USA	United States of America		PUBLIC FINANCE			Module				0					82.71585	
9461	IDN	Indonesia		PUBLIC FINANCE			Module				0					80.9442	
9462	BGR	Bulgaria		PUBLIC FINANCE			Module				0					80.240375	
9463	CZE	Czechia		PUBLIC FINANCE			Module				0					78.988	
9464	RUS	Russian Federation		PUBLIC FINANCE			Module				0					78.623125	
9465	EST	Estonia		PUBLIC FINANCE			Module				0					76.8505	
9466	PER	Peru		PUBLIC FINANCE			Module				0					76.73325	
9467	GTM	Guatemala		PUBLIC FINANCE			Module				0					74.9375	
9468	PRY	Paraguay		PUBLIC FINANCE			Module				0					74.588125	
9469	NZL	New Zealand		PUBLIC FINANCE			Module				0					74.06875	
9470	ITA	Italy		PUBLIC FINANCE			Module				0					72.6775	
9471	HRV	Croatia		PUBLIC FINANCE			Module				0					72.559825	
9472	MYS	Malaysia		PUBLIC FINANCE			Module				0					72.351	
9473	HND	Honduras		PUBLIC FINANCE			Module				0					71.46105	
9474	BRA	Brazil		PUBLIC FINANCE			Module				0					71.44875	

How can you interpret this information?

The PF Module World Rank enables you to:

- Compare the full set of countries based on their score on the PF Module.
- Based on a quantitative evaluation, understand your countries' practices regarding public finance, and assess whether those are fulfilling international standards and how advanced they are.
- Know which countries have advanced practices and use those as points of reference to work for, push, request, and communicate better practices for your country.

Task 2: Availability Indicator World Rank

Step 1

First, you need to access the final scores for the availability indicator. To do so, filter the column "indicator_name" and select the " Availability (PF): Budget and spend data " option.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	iso3	country	pillar	module	indicator	indicator	indicator	variable	question	hierarchy	data_type	response	response	normalize	weight	score	parent
32	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	To what exte	1	response						46.86	A.PF.É
33	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	To what exte	1	justification	The budget and spending information (budget execution) is avail					1	A.PF.É
34	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	Existence	2	response				1			A.PF.É
35	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	Is this data a	4	response	Data is avail	2					A.PF.É
36	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	1,2;Please pr	4	supporting	https://mf.rks-gov.net/Page.aspx?id=1,29						A.PF.É
37	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	Elements	2	response					100	46.86	A.PF.É
38	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	Kinds of data	3	response					20	17.16	A.PF.É
39	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	There is stru	4	response	Yes	2		1	2.84	2.84	A.PF.É
40	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	There is stru	4	response	No	0	0		2.84	0	A.PF.É
41	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	There is stru	4	response	Yes	2		1	2.9	2.9	A.PF.É
42	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	There is stru	4	response	Yes	2		1	2.9	2.9	A.PF.É
43	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	There is stru	4	response	Yes	2		1	2.84	2.84	A.PF.É
44	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	There is stru	4	response	Yes	2		1	2.84	2.84	A.PF.É
45	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	There is stru	4	response	Yes	2		1	2.84	2.84	A.PF.É
46	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	Data fields a	3	response					20	5	A.PF.É
47	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	Budget entri	4	response	No	0	0		2.5	0	A.PF.É
48	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	Budget entri	4	response	Yes	2		1	2.5	2.5	A.PF.É
49	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	Budget entri	4	response	No	0	0		2.5	0	A.PF.É
50	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	Budget entri	4	response	No	0	0		2.5	0	A.PF.É
51	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	Information	4	response	No	0	0		2.5	0	A.PF.É
52	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	Data is disag	4	response	No	0	0		2.5	0	A.PF.É
53	XXX	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary		A.PF.BUDGE	The data con	4	response	No	0	0		2.5	0	A.PF.É

Then filter the column "hierarchy_level" by the level "1".

1	iso3	country	pillar	module	indicator	indicator	indicator	variable	question	hierarchy	data_type	response	response	normalized	weight	score	paren
32	XXK	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						46.86	A.PF.€
33	XXK	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	justification		The budget and spending information (budget execution) is avail					A.PF.€
105	BHS	Bahamas	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						31.2	A.PF.€
106	BHS	Bahamas	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	justification		The					A.PF.€
107	BHS	Bahamas	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	1	1	example		[The Annual Budget](https://www.bahamasbudget.gov.bs/)					A.PF.€
178	BLZ	Belize	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						12.15	A.PF.€
179	BLZ	Belize	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	justification		Belize					A.PF.€
250	DOM	Dominican R	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						78.15	A.PF.€
251	DOM	Dominican R	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	justification		DIGEPRES is					A.PF.€
332	GUY	Guyana	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						16.56	A.PF.€
333	GUY	Guyana	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	justification		Reports and policies reviewed does not state that the governme					A.PF.€
396	HTI	Haiti	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						44.499	A.PF.€
397	HTI	Haiti	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	justification		central government only					A.PF.€
398	HTI	Haiti	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	1	1	example		[MEF data page](http://www.mef.gouv.ht/index.php?page=Derri					A.PF.€
478	JAM	Jamaica	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						55.2	A.PF.€
478	JAM	Jamaica	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	justification		The					A.PF.€
562	LCA	Saint Lucia	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						0	A.PF.€
563	LCA	Saint Lucia	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	justification		There used					A.PF.€
627	TTO	Trinidad and	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						56.86	A.PF.€
628	TTO	Trinidad and	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	justification		A					A.PF.€
629	TTO	Trinidad and	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	1	1	example		[2021 Estimates of Expenditure](https://www.finance.gov.tt/wp					A.PF.€
630	TTO	Trinidad and	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	2	1	example		[Statutory Boards Revenue and Expenditure](https://www.finan					A.PF.€

And finally, filter the column “score” by all cells with values (avoiding empty values).

1	iso3	country	pillar	module	indicator	indicator	indicator	variable	question	hierarchy	data_type	response	response	normalized	weight	score	paren
32	XXK	Kosovo	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						46.86	A.PF.€
105	BHS	Bahamas	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						31.2	A.PF.€
178	BLZ	Belize	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						12.15	A.PF.€
250	DOM	Dominican R	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						78.15	A.PF.€
332	GUY	Guyana	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						16.56	A.PF.€
396	HTI	Haiti	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						44.499	A.PF.€
478	JAM	Jamaica	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						55.2	A.PF.€
562	LCA	Saint Lucia	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						0	A.PF.€
627	TTO	Trinidad and	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						56.86	A.PF.€
719	GEO	Georgia	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						70.62	A.PF.€
800	OMN	Oman	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						45.9	A.PF.€
871	PSE	State of Pale	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						16.065	A.PF.€
949	EGY	Egypt	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						36.19	A.PF.€
1038	JOR	Jordan	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						19.51	A.PF.€
1119	DNK	Denmark	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						87.5	A.PF.€
1219	EST	Estonia	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						73.66	A.PF.€
1302	FIN	Finland	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						65.403	A.PF.€
1394	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						88.75	A.PF.€
1491	DEU	Germany	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						82.7	A.PF.€
1571	IRL	Ireland	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						42.049	A.PF.€
1658	ITA	Italy	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						77.65	A.PF.€
1748	LVA	Latvia	Availability	PUBLIC FINA A.PF.BUDGE	Availability	Primary	A.PF.BUDGE	To what exte	1	response						81.48	A.PF.€

Thanks to these filters, you can see the score for the availability indicator in the column “score”.

Step 2

Now, to obtain the ordered list of countries, arrange the column “score” from highest to lowest. Now, you have an ordered list showing each country's availability indicator score ordered from highest to lowest. You can access the extract of the database you created in the sheet Task 2 Availability Rank^[2] in [this database](#).

You can execute the following code lines to achieve Task 2:


```
availability_ranking =
pfmodule_dataframe[(pfmodule_dataframe["hierarchy_level"] == 1) \
& (pfmodule_dataframe["indicator_name"] ==
"Availability (PF): Budget and spend data")]
```

```
availability_ranking_sorted = availability_ranking.sort_values("score",
ascending=False)
availability_ranking_df =
availability_ranking_sorted.dropna(subset=["score"])
```

As a result, you will have the following data frame:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	iso3	country	pillar	module	indicator	indicator_name	indicator	variable	question	hierarchy	data_type	response	response_weight	normalized_weight	score	parent	
32	ZAF	South Africa	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						100	A.PF
105	MEX	Mexico	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						98.58	A.PF
178	NZL	New Zealand	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						89.2	A.PF
250	FRA	France	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						88.75	A.PF
332	DNK	Denmark	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						87.5	A.PF
396	THA	Thailand	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						84.19	A.PF
478	GTM	Guatemala	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						83.15	A.PF
562	DEU	Germany	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						82.7	A.PF
627	LVA	Latvia	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						81.48	A.PF
719	RUS	Russian Fed	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						81.43	A.PF
800	USA	United State	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						80.847	A.PF
871	SWE	Sweden	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						80.82	A.PF
949	HKG	China, Hong	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						80.04	A.PF
1038	PHL	Philippines	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						79.74	A.PF
1119	TWN	Taiwan	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						79.4	A.PF
1219	ARG	Argentina	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						79.263	A.PF
1302	ARM	Armenia	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						78.68	A.PF
1394	MDA	Republic of	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						78.41	A.PF
1491	URY	Uruguay	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						78.38	A.PF
1571	DOM	Dominican R	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						78.15	A.PF
1658	CHL	Chile	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						78.15	A.PF
1748	ITA	Italy	Availability	PUBLIC FINA	A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	To what exte	1	response						77.65	A.PF

Task 3: Governance Indicator World Rank

Step 1

First, you need to access the final scores for the governance indicator. To do so, filter the column "indicator_name" and select the "Governance (PF): Public finance data" option.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	iso3	country	pillar	module	indicator	indicator_name	indicator	variable	question	hierarchy	data_type	response	response_weight	normalized_weight	score	parent	
1	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	To what exte	1	response					41.97	G.PF.F
2	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	To what exte	1	justification	The primary obligation to publish data on public finances comes					G.PF.F
3	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	Existence	2	response				1	0.6	G.PF.F
4	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	Are there lav	4	response	They exist ar	2	1			G.PF.F
5	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	1,2;Please pi	4	supporting	Yes, the primary obligation to publish data on public finances cor					G.PF.F
6	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	Do relevant	4	response	There is no r	0	0			G.PF.F
7	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	Elements	2	response				100	59.95	G.PF.F
8	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	Provisions fc	3	response				50	37.45	G.PF.F
9	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	Summary req	4	response	Partially	1	0.5	8.5	4.25	G.PF.F
10	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	1;Please indi	4	supporting	The appendixes to the annual budget law provide the summary c					G.PF.F
11	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	Expenditure	4	response	No	0	0	8.3	0	G.PF.F
12	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	The rules/gu	4	response	Yes	2	1	8.3	8.3	G.PF.F
13	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	2;Please indi	4	supporting	The law on					G.PF.F
14	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	The rules/gu	4	response	Yes	2	1	8.3	8.3	G.PF.F
15	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	2;Please indi	4	supporting	The law on					G.PF.F
16	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	The rules/gu	4	response	Yes	2	1	8.3	8.3	G.PF.F
17	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	2;Please indi	4	supporting	The law on					G.PF.F
18	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	2;Please indi	4	supporting	The law on					G.PF.F
19	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	The rules/gu	4	response	Yes	2	1	8.3	8.3	G.PF.F
20	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	2;Please indi	4	supporting	The law on					G.PF.F
21	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	Provisions fc	3	response				20		G.PF.F
22	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	The rules/gu	4	response	Yes	2	1	10	10	G.PF.F
23	XXX	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT	Governance	Primary	G.PF.PUB-FIT	2;Please indi	4	supporting	The law on public finances management and accountability requ					G.PF.F

Then filter the column "hierarchy_level" by the level "1".

iso3	country	pillar	module	indicator	indicator	indicator	variable	question	hierarchy	data_type	response	response	normalized	weight	score	parent
1	iso3															
2	XXK	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				41.97	G.PF.f
3	XXK	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	justification	The primary obligation to publish data on public finances comes				G.PF.f
73	BHS	Bahamas	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				16.131	G.PF.f
74	BHS	Bahamas	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	justification	The FAA				G.PF.f
75	BHS	Bahamas	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT	1		1	example	[Financial Administration and Audit Act, 2010](http://laws.bahar				G.PF.f
76	BHS	Bahamas	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT	2		1	example	[Public Finance Management Act, 2021](http://laws.bahamas.gov				G.PF.f
77	BHS	Bahamas	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT	3		1	example	[Public Debt Management Act, 2021](http://laws.bahamas.gov.b				G.PF.f
152	BLZ	Belize	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				21	G.PF.f
153	BLZ	Belize	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	justification	The main				G.PF.f
219	DOM	Dominican R	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				49.9	G.PF.f
220	DOM	Dominican R	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	justification	The General				G.PF.f
221	DOM	Dominican R	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT	1		1	example	[Law No. 423-06](https://www.digepres.gob.do/transparencia/w				G.PF.f
222	DOM	Dominican R	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT	2		1	example	[Law No. 101-79](https://www.digepres.gob.do/transparencia/w				G.PF.f
309	GUY	Guyana	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				0	G.PF.f
310	GUY	Guyana	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	justification	The various Acts do not require publication of structured data.				G.PF.f
374	HTI	Haiti	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				0	G.PF.f
375	HTI	Haiti	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	justification	The Ministry of Economy of Finance (MEF) is responsible to publi				G.PF.f
449	JAM	Jamaica	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				28.47	G.PF.f
450	JAM	Jamaica	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	justification	The				G.PF.f
451	JAM	Jamaica	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT	1		1	example	[Financial Administration and Audit - amend](https://2021-files				G.PF.f
452	JAM	Jamaica	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT	2		1	example	[Financial Administration and Audit Act (1959)](https://2021-file				G.PF.f
534	LCA	Saint Lucia	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				34.1	G.PF.f

And finally, filter the column “score” by all cells with values (avoiding empty values).

iso3	country	pillar	module	indicator	indicator	indicator	variable	question	hierarchy	data_type	response	response	normalized	weight	score	parent
2	XXK	Kosovo	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				41.97	G.PF.f
73	BHS	Bahamas	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				16.131	G.PF.f
152	BLZ	Belize	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				21	G.PF.f
219	DOM	Dominican R	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				49.9	G.PF.f
309	GUY	Guyana	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				0	G.PF.f
374	HTI	Haiti	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				0	G.PF.f
449	JAM	Jamaica	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				28.47	G.PF.f
534	LCA	Saint Lucia	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				34.1	G.PF.f
600	TTO	Trinidad and	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				0	G.PF.f
686	GEO	Georgia	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				58.71	G.PF.f
776	OMN	Oman	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				3	G.PF.f
846	PSE	State of Pale	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				0	G.PF.f
916	EGY	Egypt	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				64.79	G.PF.f
1005	JOR	Jordan	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				38.2925	G.PF.f
1087	DNK	Denmark	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				49.555	G.PF.f
1180	EST	Estonia	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				80.75	G.PF.f
1267	FIN	Finland	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				57.938125	G.PF.f
1356	FR	France	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				100	G.PF.f
1456	DEU	Germany	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				92.5	G.PF.f
1547	IRL	Ireland	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				0	G.PF.f
1625	ITA	Italy	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				66.6	G.PF.f
1723	LVA	Latvia	Governance	PUBLIC FINA	G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT To what exte			1	response				9	G.PF.f

Step 2

Now, to obtain the ordered list of countries, arrange the column “score” from highest to lowest (descending):

Now, you have an ordered list showing each country's governance indicator score from highest to lowest. You can access the extract of the database you created in the sheet Task 3

Governance Rank^[3] in [this database](#).

You can execute the following code lines to achieve Task 3:

```
###Task 3: Governance Indicator World Rank
governance_ranking =
  pfmodule_dataframe[(pfmodule_dataframe["hierarchy_level"] == 1) \
    & (pfmodule_dataframe["indicator_name"] ==
      "Governance (PF): Public finance data")]
governance_ranking_sorted = governance_ranking.sort_values("score",
  ascending=False)
governance_ranking_df = governance_ranking_sorted.dropna(subset=["score"])
```

As a result, you will have the following data frame:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	iso3	country	pillar	module	indicator	indicator	indicator	variable	question	hierarchy	data_type	response	response	normalized	weight	score
1	FRA	France	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					100 G.PF
73	ARM	Armenia	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					100 G.PF
152	KOR	Republic of Korea	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					100 G.PF
219	CAN	Canada	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					95 G.PF
309	IDN	Indonesia	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					95 G.PF
374	DEU	Germany	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					92.5 G.PF
449	BGR	Bulgaria	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					91.0575 G.PF
534	MLT	Malta	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					91.0575 G.PF
600	PAN	Panama	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					87.875 G.PF
696	BRA	Brazil	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					87.55 G.PF
776	MEX	Mexico	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					87.115 G.PF
846	KAZ	Kazakhstan	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					85.5 G.PF
916	ZAF	South Africa	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					85.5 G.PF
1005	LBR	Liberia	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					85.5 G.PF
1087	CZE	Czechia	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					85.5 G.PF
1180	HRV	Croatia	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					85 G.PF
1267	USA	United States	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					85 G.PF
1336	GHA	Ghana	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					82.365 G.PF
1456	EST	Estonia	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					80.75 G.PF
1547	PER	Peru	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					79.2 G.PF
1625	UKR	Ukraine	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					78.35 G.PF
1723	RWA	Rwanda	Governance	PUBLIC FINA	G.PF.PUB-FII	Governance	Primary	G.PF.PUB-FII	To what exte	1	response					77.615 G.PF

How can you interpret this information?

The PF Module World Rank gave you the big picture. Having a separate ranking for each indicator will allow you to:

- Differentiate the two components of the PF Module score: availability and governance.
- Distinguish which countries have better practices for publishing information and which for devising legal frameworks.
- It allows you to compare both scores for a specific country and see which indicator has a broader window for improvement and which policies would benefit your country more. If the availability score is lower, the country must improve publishing practices and open data tools. On the other side, if the governance indicator is lower, the country can benefit from enhanced guidelines and norms related to the publication of public finance data.

How can you access the full questionnaire of a country?

It is time for you to go into the granular details of the country evaluation and access the full answers for a specific country. To do so, review each indicator questionnaire separately. This time, we will use France's country questionnaire (highest overall PF module score) as an example of the steps to replicate for any other country.

Task 4: Accessing the full Availability Questionnaire of a Country

Step 1

You first need to apply some filters to your database. This time, filter the column "country" by "France", the column "pillar" by "availability", and finally the column "hierarchy_level" by "4".

Step 2

To review each question, you will be using the columns "question", "data type", and "response". The column "question" will indicate which question was evaluated by the researcher as a full question statement. Next, the "data type" column will indicate whether the answer was a "response" type (indicating the final evaluation of the researcher) or if it was a

“supporting” answer (additional information provided by the researcher to evaluate the country). Finally, the column “response” will show the researcher’s answer.

For example, you find that the question “Is this data available online in any form?” for France has both a “response” and “supporting” data type. The “response” answer was “Data is available from the government, or because of government actions”. The “supporting” answer provided by the researcher is a set of links where you can get public finance data.

You can execute the following code lines to achieve Task 4:

```
###Task 4: Accessing the full Availability Questionnaire of a Country

full_qa_france = pfmodule_dataframe[(pfmodule_dataframe["hierarchy_level"]
                                     == 4) \
                                     & (pfmodule_dataframe["pillar"] == "Availability")
                                     & (pfmodule_dataframe["country"] == "France") ]
```

As a result, you will have the next data frame:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
1	iso3	country	pillar	module	indicator	indicator	indicator	variable	question	hierarchy	data_type	response	response	normalize	weight	score	pare
1400	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	Is this data a	4	response	Data is avail	2	1				A.PF	
1401	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	1,2;Please pr	4	supporting	- Ministry of						A.PF	
1404	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	There is stru	4	response	Yes	2	1	2.84	2.84	A.PF		
1405	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	1,2;hf budget	4	supporting	- Ministry of					A.PF		
1406	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	There is stru	4	response	Yes	2	1	2.84	2.84	A.PF		
1407	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	1,2;hf budget	4	supporting	- Annual					A.PF		
1408	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	There is stru	4	response	Yes	2	1	2.9	2.9	A.PF		
1409	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	1,2;hf budget	4	supporting	- Budget					A.PF		
1410	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	There is stru	4	response	Yes	2	1	2.9	2.9	A.PF		
1411	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	1,2;hf budget	4	supporting	Budget Gouv Portal: https://www.budget.gouv.fr/budget-etat					A.PF		
1412	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	There is stru	4	response	Yes	2	1	2.84	2.84	A.PF		
1413	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	1,2;hf budget	4	supporting	https://www.economie.gouv.fr/cedef/chiffres-cles-budget-etat					A.PF		
1414	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	There is stru	4	response	Yes	2	1	2.84	2.84	A.PF		
1415	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	1,2;hf budget	4	supporting	https://data					A.PF		
1416	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	There is stru	4	response	Yes	2	1	2.84	2.84	A.PF		
1417	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	1,2;hf budget	4	supporting	https://www.budget.gouv.fr/budget-etat					A.PF		
1419	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	Budget entri	4	response	Yes	2	1	2.5	2.5	A.PF		
1420	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	1,2;hf budget	4	supporting	the information in administrative classification is here https://w					A.PF		
1421	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	Budget entri	4	response	No	0	0	2.5	0	A.PF		
1422	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	Budget entri	4	response	Yes	2	1	2.5	2.5	A.PF		
1423	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	1,2;hf budget	4	supporting	The information is provided here https://www.budget.gouv.fr/b					A.PF		
1424	FRA	France	Availability	PUBLIC FINA A.PF.BUDGE	Availability (Primary	A.PF.BUDGE	Budget entri	4	response	Partially	1	0.5	2.5	1.25	A.PF		

Task 5: Accessing the full Governance Questionnaire of a Country

Step 1

As we reviewed previously for the availability questionnaire, you first need to apply filters to your database. This time, you will filter the column “country” by “France”, the column “pillar” by “governance”, and finally the column “hierarchy_level” by “4”.

Step 2

Finally, you can repeat the same review process you did for the availability questionnaire. For example, for the question “Are there laws, policies, or regulations requiring collection or publication of this information in any form?” the researcher provided a “response” data type answer which states “They exist and are operational”, and the supporting data type answer includes the law number, article(s) supporting this information.

You can execute the following code lines to achieve Task 5:

```
###Task 5: Accessing the full Governance Questionnaire of a Country
full_qg_france = pfmodule_dataframe[(pfmodule_dataframe["hierarchy_level"]
                                     == 4) \
                                     & (pfmodule_dataframe["pillar"] == "Governance") \
                                     & (pfmodule_dataframe["country"] == "France") ]
```

As a result, you will have the following data frame:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
1	iso3	country	pillar	module	indicator	indicator	indicator	variable	question	hierarchy	data_type	response	response	normalized	weight	score	pare
1364	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT Are there lav	4	response	They exist ar	2	1						G.PF
1365	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT 1,2;Please pr	4	supporting	The article								G.PF
1366	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT Do relevant i	4	response	Requiremen	3	1						G.PF
1367	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT 1,2,3;Please	4	supporting	The article								G.PF
1370	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT Summary req	4	response	Yes	2	1	8.5			8.5	G.PF	
1371	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT 2;Please indi	4	supporting	The article								G.PF
1372	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT Expenditure	4	response	Yes	2	1	8.3			8.3	G.PF	
1373	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT 2;Please indi	4	supporting	The article								G.PF
1374	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT The rules/gu	4	response	Yes	2	1	8.3			8.3	G.PF	
1375	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT 2;Please indi	4	supporting	The article								G.PF
1376	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT The rules/gu	4	response	Yes	2	1	8.3			8.3	G.PF	
1377	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT 2;Please indi	4	supporting	The article								G.PF
1378	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT The rules/gu	4	response	Yes	2	1	8.3			8.3	G.PF	
1379	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT 2;Please indi	4	supporting	The article								G.PF
1380	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT The rules/gu	4	response	Yes	2	1	8.3			8.3	G.PF	
1381	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT 2;Please indi	4	supporting	The article								G.PF
1383	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT The rules/gu	4	response	Yes	2	1	10			10	G.PF	
1384	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT 2;Please indi	4	supporting	The article								G.PF
1385	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT The framew	4	response	Yes	2	1	10			10	G.PF	
1386	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT 2;Please brie	4	supporting	ETALAB: the								G.PF
1388	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT The rules/gu	4	response	Yes	2	1	15			15	G.PF	
1389	FRA	France	Governance	PUBLIC FINA G.PF.PUB-FIT Governance	Primary	G.PF.PUB-FIT 2;Please Indi	4	supporting	The article								G.PF

How can you interpret this information?

- Accessing this granular level allows you to know WHAT the score was, what the evaluated elements are, and WHERE the evaluated laws or databases/information are.
- It helps you to know which elements a country can improve to get higher scores in both indicators, improving its overall PF Module score.
- It also helps you compare and look for inspiration and comparative perspective. You can access the questionnaire of any country, review their score, and access their public databases and laws.

How can you access the answers of all countries on a specific question?

If you want to compare the responses of all countries to a particular question, you need to use the columns “pillar” and “variable.” We will use the question “Data is disaggregated by cross-cutting programs, or issues such as SDGs, climate action, gender budgeting, etc.,” to exemplify this process. This step will let you know, for example, **which countries publish data by crosscutting prioritization**, at least partially, and get access to their responses. The next table has all available variables and their corresponding question to facilitate retrieving specific information for each questionnaire:

Availability Questionnaire

Topic	Variable Name	Question
Existence and comprehensiveness of online data	A.PF.BUDGETSPEND.a.ONLINE	Is this data available online in any form?
	A.PF.BUDGETSPEND.c.EXTENT	How comprehensive is the data assessed?
Key budget documents	A.PF.BUDGETSPEND.e.e1.PROPOSED	There is structured data available on the executive budget proposal in gross terms, including spending on annual and multi-annual investment projects.
	A.PF.BUDGETSPEND.e.e1.APPROVED	There is structured data available on the approved or enacted budget in gross terms, including spending on annual and multi-annual investment projects.
Publication of disaggregated data	A.PF.BUDGETSPEND.e.e1.AMENDED	There is structured data available on amended budgets (when applicable) or amendments to the enacted budget.
	A.PF.BUDGETSPEND.e.e1.SGA	There is structured data about government budget execution or spending, in gross terms and on an accrual basis, including spending in annual and multi-annual investment projects.
	A.PF.BUDGETSPEND.e.e1.EXTRASPENDING	There is structured data about the government's extrabudgetary funds spending, in gross terms and on an accrual basis.

Publication of data under international classifications	A.PF.BUDGETSPEND.e.e1.SOCIALSECURITY	There is structured data about the government's social security spending, in gross terms and on an accrual basis.
	A.PF.BUDGETSPEND.e.e1.PUBCORP	There is structured data about public corporations' spending, in gross terms and on an accrual basis.
	A.PF.BUDGETSPEND.e.e2.TRANSACTION	Information about individual financial transactions or expenditures is available at the most disaggregated level of the economic classification level.
	A.PF.BUDGETSPEND.e.e2.CROSSCUTTING	Data is disaggregated by cross-cutting programs, or issues such as SDGs, climate action, gender budgeting, etc.,
	A.PF.BUDGETSPEND.e.e2.ADMIN	Budget entries have administrative classifications to an internationally agreed standard.
	A.PF.BUDGETSPEND.e.e2.ECON	Budget entries have economic classifications to an internationally agreed standard.
	A.PF.BUDGETSPEND.e.e2.FUNC	Budget entries have functional classifications to an internationally agreed standard.
	A.PF.BUDGETSPEND.e.e2.PROGRAM	Budget entries have program classifications according to an internationally agreed standard.
	Data and performance identifiers.	A.PF.BUDGETSPEND.e.e2.COMMONID

How is data published?	A.PF.BUDGETSPEND.e.e2.PROJECT	The data contains identifiers that can be used to connect budget data with data on major projects (e.g., infrastructure construction) and procurement processes.
	A.PF.BUDGETSPEND.e.e3.FREE	Dataset is available free of charge.
	A.PF.BUDGETSPEND.e.e3.LICENSE	Data is openly licensed.
	A.PF.BUDGETSPEND.e.e3.LANG	Data is available in all the country's official or national languages. If the country has no official or national languages, data is available in the major languages of the country.
	A.PF.BUDGETSPEND.e.e3.TOOLS	There are accessible and open official tools available to help users explore data.
	A.PF.BUDGETSPEND.e.e3.TIMELY	Data is timely and updated.
	A.PF.BUDGETSPEND.e.e3.HISTORICAL	Historical data is available that allows users to track change over time.
	A.PF.BUDGETSPEND.e.e3.MACHINE_READABLE	Data is provided in machine-readable format(s)
	A.PF.BUDGETSPEND.e.e3.BULK	The machine-readable dataset is available as a whole
	A.PF.BUDGETSPEND.e.eb.MISSINGDATA	This information is missing required data.
A.PF.BUDGETSPEND.e.eb.COVIDAFFECTED	The availability of this data has been affected by government response to COVID-19.	

Governance Questionnaire

Topic	Variable Name	Question
Existence of frameworks requiring the collection and publication of open data.	G.PF.PUB-FINANCE.a.EXIST	Are there laws, policies, or regulations requiring collection or publication of this information in any form?
	G.PF.PUB-FINANCE.a.DATARULES	Do relevant laws, policies, regulations, or guidance discuss the publication of open data?
Legal framework for the publication of budget documents.	G.PF.PUB-FINANCE.e.e1.SUMMARY	Summary reports must be provided as structured data.
	G.PF.PUB-FINANCE.e.e1.EXECBUDGET	The rules/guidance require executive budget proposal information to be provided as structured data.
	G.PF.PUB-FINANCE.e.e1.ENACTED	The rules/guidance require the approved or enacted budget to be provided as structured data.
	G.PF.PUB-FINANCE.e.e1.INYEAR	The rules/guidance require in-year reports as structured data.
	G.PF.PUB-FINANCE.e.e1.YER	The rules/guidance require year-end reports as structured data.
	G.PF.PUB-FINANCE.e.e1.TRANSACTIONS	Expenditure information at the most disaggregated level of the economic classification must be provided as structured data.
	G.PF.PUB-FINANCE.e.e2.AGENCY	The rules/guidance empower an agency or official to ensure the accurate and timely collection and publication of required data.
Legal framework for validation and auditing processes	G.PF.PUB-FINANCE.e.e2.VERIFICATION	The framework requires a verification process.
	G.PF.PUB-FINANCE.e.e3.TIMELY	The rules/guidance require that data is regularly updated.
Requirements for the publication of data.	G.PF.PUB-FINANCE.e.e3.STRUCTURED	The rules/guidance support the collection of structured data.
	G.PF.PUB-FINANCE.c.EXTENT	How comprehensive is the coverage of laws, regulations, policies, or guidance assessed for this question?

Task 6: Comparing countries

Step 1

Apply the filter “availability” to the “pillar” column; next, filter the column “hierarchy_level” by “4”, to continue, filter the column “data type” by “response”. Finally, filter the column “variable” by “A.PF.BUDGETSPEND.e.e2.CROSSCUTTING”

Step 2:

In the column “response,” you can look at the answers of all the researchers for each country. If you want more details about the evaluation, you can filter the column “data type” by “supporting”.

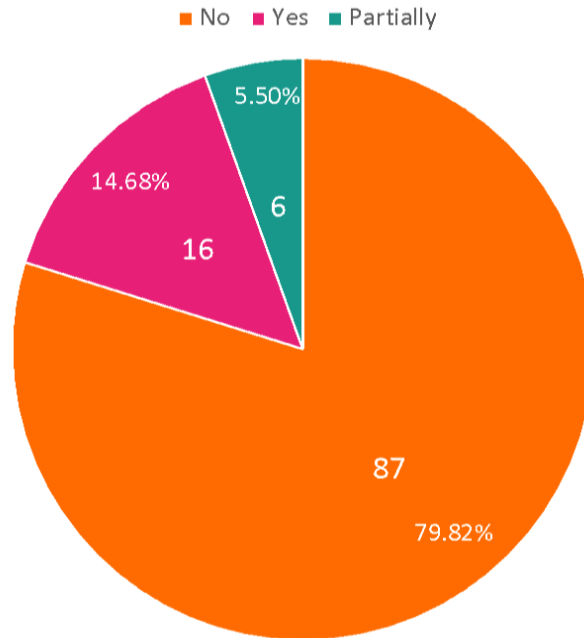
You can execute the following code lines to achieve Task 6:

```
###Task 6: Comparing countries
comparing_question =
pfmodule_dataframe[(pfmodule_dataframe["hierarchy_level"] == 4) \
& (pfmodule_dataframe["pillar"] == "Availability") \
& (pfmodule_dataframe["data_type"] == "response") \
& (pfmodule_dataframe["variable_name"] ==
"A.PF.BUDGETSPEND.e.e2.CROSSCUTTING") ]
```

As a result, you will have the following data frame:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
1	iso3	country	pillar	module	indicator	indicator	indicator	variable	question	hierarchy	data_type	response	response	normalize	weight	score	pare
52	XKX	Kosovo	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
130	BHS	Bahamas	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
199	BLZ	Belize	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
282	DOM	Dominican R	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
353	GUY	Guyana	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
424	HTI	Haiti	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
509	JAM	Jamaica	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
582	LCA	Saint Lucia	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
662	TTO	Trinidad and	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
748	GEO	Georgia	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	Yes	2	1	2.5	2.5 A.PF	
820	OMN	Oman	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
894	PSE	State of Pale	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
981	EGY	Egypt	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
1065	JOR	Jordan	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
1152	DNK	Denmark	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
1241	EST	Estonia	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
1329	FIN	Finland	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
1428	FRA	France	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
1519	DEU	Germany	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
1599	IRL	Ireland	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
1695	ITA	Italy	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF
1780	LVA	Latvia	Availability	PUBLIC FINA	A.PF.BUDGE	Availability	(Primary	A.PF.BUDGE	Data is disag	4	response	No		0	0	2.5	0 A.PF

As you get the information on which countries do publish this information, at least to a partial extent, you can build visualizations to understand this data better and make a list of countries publishing, at least partially, this information. The graphic below shows the countries’ responses to the question, “Data is disaggregated by cross-cutting programs, or issues such as SDGs, climate action, gender budgeting, etc.?”



We can see that 22 countries publish under some degree disaggregated data by cross-cutting programs. Also, we can make these lists.

Countries that publish information:

Argentina, Bangladesh, Benin, Gambia, Georgia, Kenya, Malaysia, Mexico, Morocco, Nepal, Russian Federation, South Africa, Spain, Togo, Uganda, and Uruguay.

Countries that publish partial information:

Botswana, China-Hong Kong Special Administrative Region, Paraguay, Taiwan, United States of America, and Viet Nam.

Finally, you can look at the practices of each country. For example, you can look at the case of Argentina, which publishes disaggregated open data by gender:

Open data website of Argentina and search by "gender". The information is available at:

<https://www.presupuestoabierto.gob.ar/sici/datos-abiertos#>

Argentina's gender disaggregation database [extract]. Available here: <https://www.presupuestoabierto.gob.ar/sici/datos-abiertos#>

Argentina's gender disaggregation database [extract]. Available here: <https://www.presupuestoabierto.gob.ar/sici/datos-abiertos#>

How can you interpret this information?

- It allows you to compare countries on specific questions, identifying the countries with the **advanced practices** regarding the publication of Public Finance data and legal frameworks.

- It helps you see the window of opportunities worldwide through frequency analysis of responses.

Final Remarks

This guide showed you how to retrieve scores and arrange countries according to their PF module score, its availability indicator, and governance indicator results. Now, you can access the granular details of the GDB-PF module questionnaire, compare countries' results and practices, and access great examples of advanced practices in both public finance data publication and legal frameworks. Remember that the article [“Advocating for accurate, timely, and trustworthy fiscal information”](#) is a helpful guide through global trends to quick-start your research, and to identify further paths of action to guarantee that public finance data works for the public good.

Now it's your turn! Access the public finance database, build your analysis, and share it with us through social media.

Are you a member of the government's public finance space or a specialized civil society organization working on this topic? Would you like to see your country increase in this score? Contact us!

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[1] The spreadsheet shows partial information from the database for easy reference. We added the column “world rank” as a guide for readers, the world rank was created manually based on Excel ordering options.

[2] The spreadsheet shows partial information from the database for convenience. We added the column “world rank” as a guide for readers, the world rank was created manually based on Excel ordering options.

[3] The spreadsheet shows partial information from the database for convenience. We added the column “world rank” as a guide for readers, the world rank was created manually based on Excel ordering options.