

The EBA Stress Test data set

Guide for data exploitation

As a result of the 2023 EU-wide Stress Test Exercise, the EBA has published bank-by-bank data contained in 10 Transparency templates for a sample of 70 banks.



2023 EU-wide Stress Test

Bank Name	
LEI Code	
Country Code	

The EBA has developed a range of practical tools that aim to facilitate the use of the stress test data. These include interactive visualization tools, as well as the complete stress test dataset in CSV format, which can be imported in any analytical software for analysis purposes.

The stress test dataset is stored in 4 different CSV files and includes all the bank-by-bank data contained in transparency templates. Each CSV file contains a specific stress test data category that reflects the content of one or more transparency templates as shown in the table below:

CSV Name	Stress Test category	Transparency Template
TRA_CRE_STA.csv	Credit risk – Standardised approach	TRA_CR_STA
		TRA_CR_SEC
TRA_CRE_IRB.csv	Credit risk – IRB approach	TRA_CR_IRB
TRA_CRE_COV.csv	Credit Risk - COVID 19	TRA_CR_COVID19_STA
		TRA_CR_COVID19_IRB
TRA_OTH.csv	Summary results, Capital, Risk exposure amount, P&L	TRA_SUM
		TRA_CAP
		TRA_CAPMEAS
		TRA_P&L
		TRA_REA

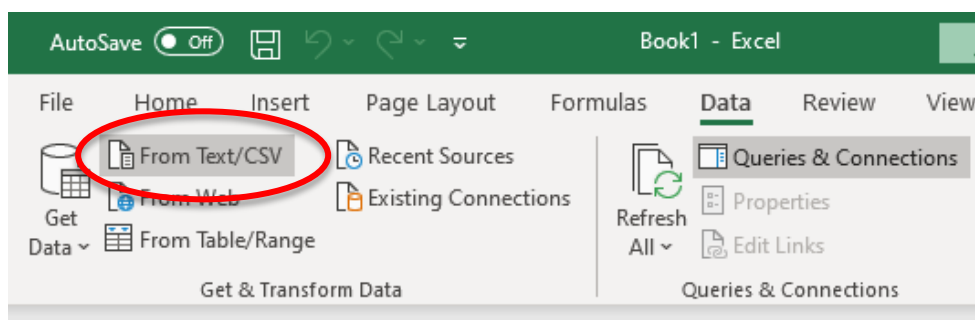
Along with the CSV, users will find the data dictionary table and the metadata tables that are needed for understanding the database structure of each file (the databases have a different structure) as well as for setting up the queries to extract the data.

An example will be useful to understand how to use and query the EBA Stress test database (bear in mind that **the figures below show fake data**). In the example below, the files have been converted into excel files in order to use standard analytical tools embedded in excel.

Please notice that the CSVs have been developed using English (UK) settings, therefore User's System and MS Excel language settings in English (UK) are required for a correct formatting of the data, with specific reference to the setting of the decimal separator.

Capital: CET1 Ratio – fully loaded - for each bank by scenario using a pivot table

- i) Once the CSV file containing data on *Capital* is downloaded (TRA_OTH.csv), we import it in excel using the text import wizard, under the Data tab:



- ii) Load the data:
Please note the File origin needs to be set to 65001:Unicode (UTF-8) to allows a correct visualization of the data

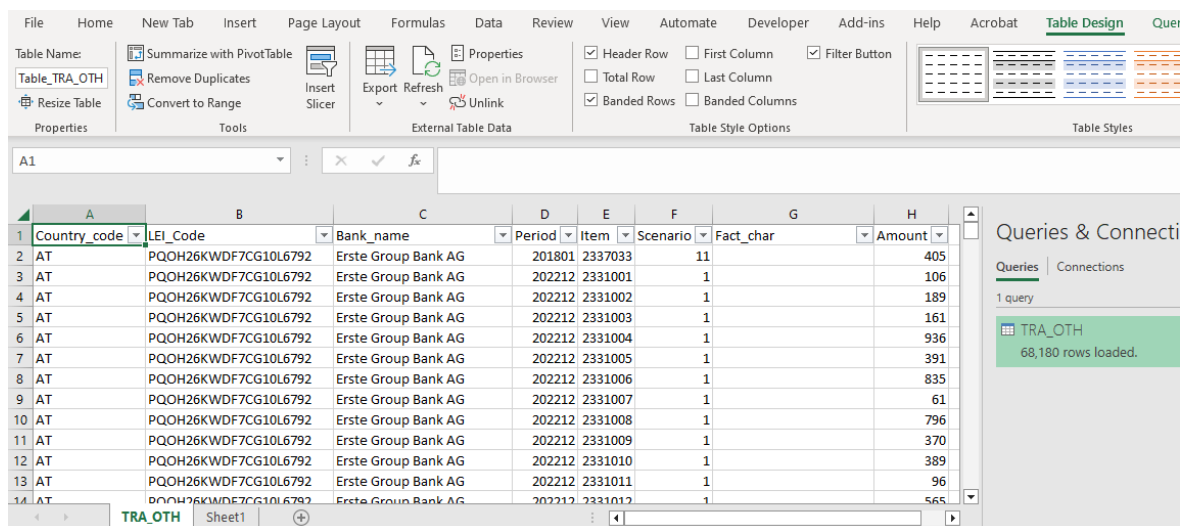
TRA_OTH.csv

File Origin: 65001: Unicode (UTF-8) | Delimiter: Comma | Data Type Detection: Based on first 200 rows

Country_code	LEI_Code	Bank_name	Period	Item	Scenario	Fact_char	Amount
AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	201801	2337033	11		405
AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331001	1		106
AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331002	1		189
AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331003	1		161
AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331004	1		936
AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331005	1		391
AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331006	1		835
AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331007	1		61
AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331008	1		796

Buttons: Load, Transform Data, Cancel

iii) The database structure turns to be the following:



	Country_code	LEI_Code	Bank_name	Period	Item	Scenario	Fact_char	Amount
2	AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	201801	2337033	11		405
3	AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331001	1		106
4	AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331002	1		189
5	AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331003	1		161
6	AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331004	1		936
7	AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331005	1		391
8	AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331006	1		835
9	AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331007	1		61
10	AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331008	1		796
11	AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331009	1		370
12	AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331010	1		389
13	AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331011	1		96
14	AT	PQOH26KWDF7CG10L6792	Erste Group Bank AG	202212	2331012	1		565

iv) The database structure is explained in a metadata file in which you one can find a description of all the values that each column can assume. For *Capital*, the database has 8 columns:

- *Country_code*: code of the country of the Bank
- *LEI_code*: a bank identifier
- *Bank_Name*: name of the bank
- *Period*: time period in the format YYYYMM
- *Item*: code of each variable
- *Scenario*: code of the scenario
- *Fact_char*: value that the string variable assumes
- *Amount*: value that the variable assumes

Users can find decoding information either in the metadata file (Metadata_TR.xlsx), for the dimensions, and/or in the data dictionary file (Data dictionary.xlsx), for the items.

For instance, in the sheet "Scenario" of the Metadata file, one can see that the dimension Scenario can only assume values equal to 0, 1, 11, 2 or 3 and find the corresponding explanation in it.

Scenario	Scenario_description
0	No breakdown by scenario
1	Actual figures
2	Baseline scenario
3	Adverse scenario
11	Restated/Actual figures as of 1/1/2018

- v) For identifying the item code associated with the financial concept “CET1 Ratio – fully loaded”, users can look for the name of the item in the column *Label* of the Data dictionary file and they will find that the item code is 2337067.

	A	B	C	D	E	F	G	H
1	Collectio	Template	Category	Item	Item_ST_20	Item_ST_20	Label	
17	ST2023	TRA_CAP	Transparency - CAP	2337061	213761	183759	Common Equity Tier 1 Capital ratio (transitional)	
18	ST2023	TRA_CAP	Transparency - CAP	2337062	213762	183760	Tier 1 Capital ratio (transitional)	
19	ST2023	TRA_CAP	Transparency - CAP	2337063	213763	183761	Total Capital ratio (transitional)	
20	ST2023	TRA_CAP	Transparency - CAP	2337064	213764	183762	COMMON EQUITY TIER 1 CAPITAL (fully loaded)	
21	ST2023	TRA_CAP	Transparency - CAP	2337065	213765	183763	TIER 1 CAPITAL (fully loaded)	
22	ST2023	TRA_CAP	Transparency - CAP	2337066	213766	183764	TOTAL CAPITAL (fully loaded)	
23	ST2023	TRA_CAP	Transparency - CAP	2337067	213767	183765	Common Equity Tier 1 Capital ratio (fully loaded)	
24	ST2023	TRA_CAP	Transparency - CAP	2337068	213768	183766	Tier 1 Capital ratio (fully loaded)	
25	ST2023	TRA_CAP	Transparency - CAP	2337069	213769	183767	Total Capital ratio (fully loaded)	
26	ST2023	TRA_CAP	Transparency - CAP	2337073	213773	183771	Total leverage ratio exposures (transitional)	
27	ST2023	TRA_CAP	Transparency - CAP	2337074	213774	183772	Total leverage ratio exposures (fully loaded)	
28	ST2023	TRA_CAP	Transparency - CAP	2337075	213775	183773	Leverage ratio (transitional)	
29	ST2023	TRA_CAP	Transparency - CAP	2337076	213776	183774	Leverage ratio (fully loaded)	

- vi) Now we click on “Pivot table” under the Insert tab, select the entire dataset (or a subsample if you already filtered the data you need) as the pivot table range. We set up the pivot table structure, dragging in the box *Row Label* the variable *Bank_name* while in the columns we want the *Period* and the *Scenario*. We drag in the box *Values* the variable *Amount* where the variables’ values are stored and we aggregate them by sum. Finally, via the *Design* tab, we switch off the Subtotals and Grand Totals for both columns and rows.

- vii) Final results, after applying the desired cells format, turns to be the following:



Microsoft Excel interface showing a PivotTable and PivotTable Fields task pane.

PivotTable Fields:

- Choose fields to add to report:
 - Country_code
 - LEI_Code
 - Bank_name
 - Period
 - Item
- Drag fields between areas below:
 - Filters:** Item
 - Columns:** Period, Scenario
 - Rows:** Bank_name
 - Values:** Sum of Amount

Table Data:

Item	202212	202312	202412	202512
Sum of Amount	2337067			
Row Labels	1	2	3	2
bank 1	720	772	348	522
bank 2	192	24	995	79
bank 3	820	354	427	276
bank 4	460	792	961	945
bank 5	922	945	339	283
bank 6	612	215	183	436
bank 7	874	978	512	124
bank 8	844	842	231	534
bank 9	265	93	99	861
bank 10	311	982	495	219
bank 11	782	497	357	248
bank 12	74	618	811	347
bank 13	254	881	795	908
bank 14	486	132	869	26
bank 15	672	865	266	835
bank 16	899	981	890	168
bank 17	477	800	82	343
bank 18	97	147	338	866
...	292	527	768	248