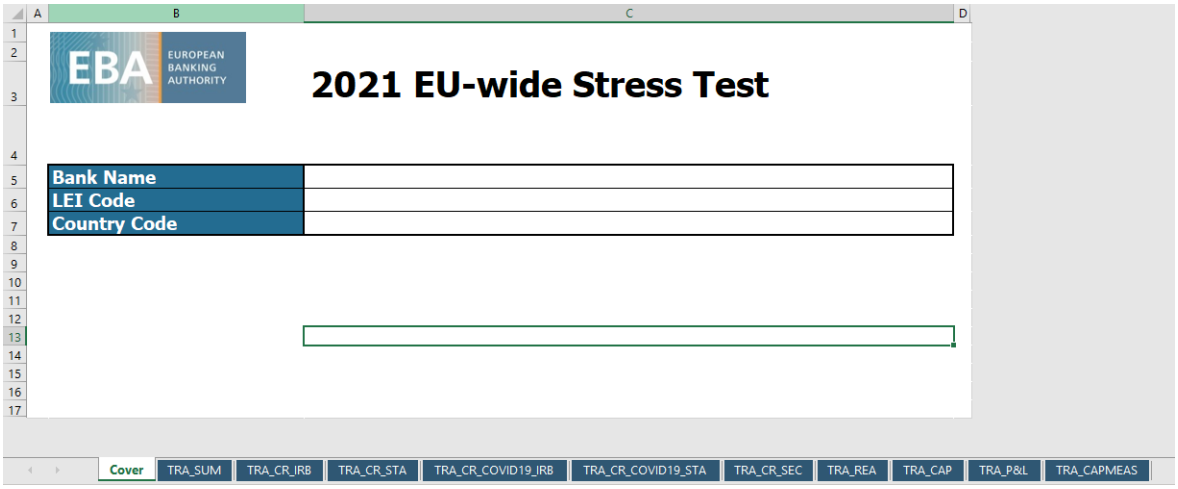
The EBA Stress Test data set

Guide for data exploitation

As a result of the 2021 EU-wide Stress Test Exercise, the EBA has published bank-by-bank data contained in 10 Transparency templates for a sample of 50 banks.



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

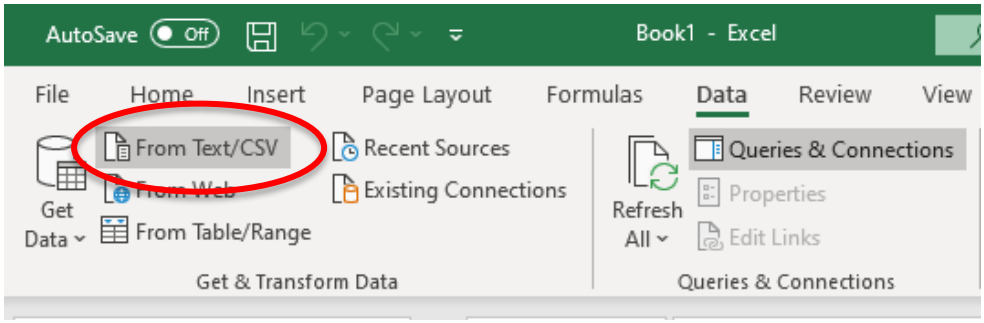
Along with the CSV, users will find the data dictionary table and the metadata tables that are needed for understanding the database structure of each file (the databases have a different structure) as well as for setting up the queries to extract the data.

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.

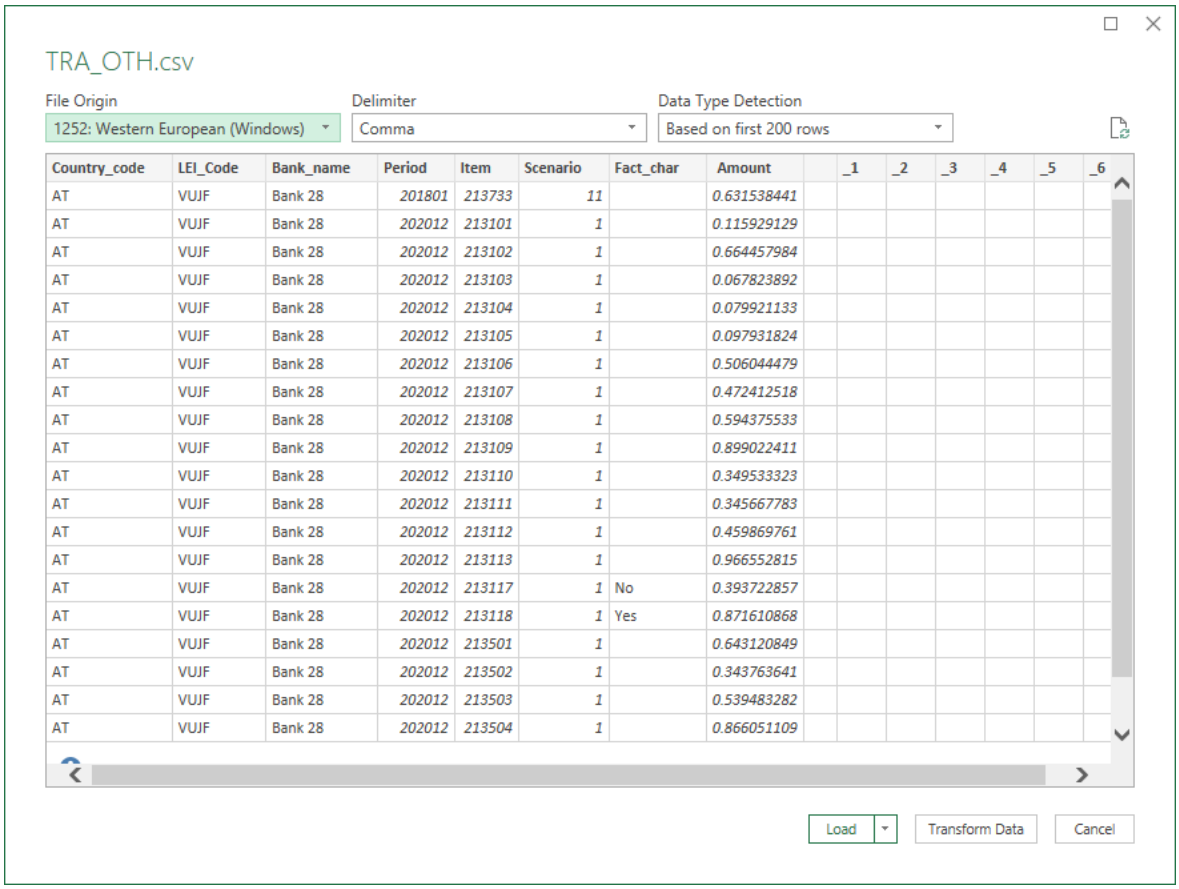
Please notice that the CSVs have been developed using English (UK) settings, therefore User's System and MS Excel language settings in English (UK) are required for a correct formatting of the data, with specific reference to the setting of the decimal separator.

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:

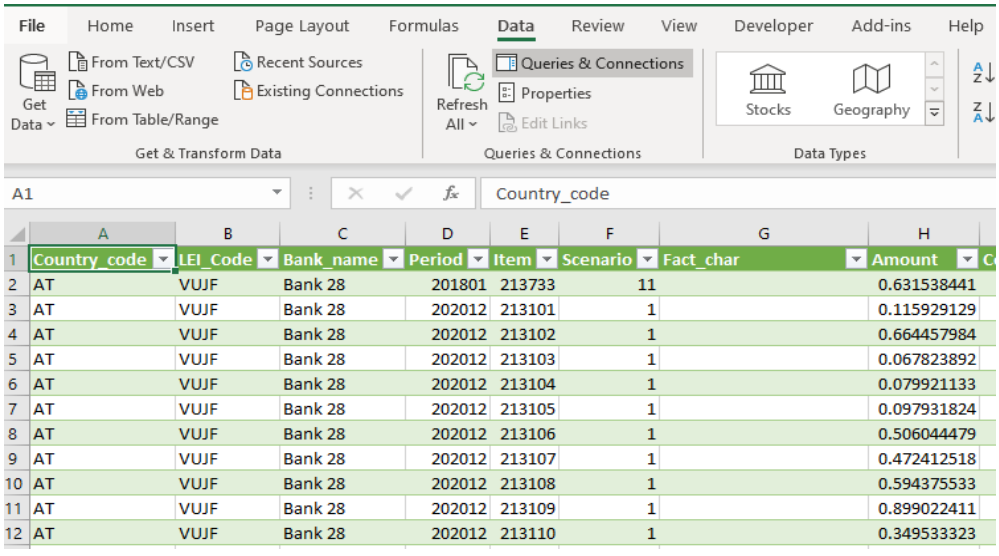


ii) Load the data



Country_code	LEI_Code	Bank_name	Period	Item	Scenario	Fact_char	Amount	_1	_2	_3	_4	_5	_6
AT	VUJF	Bank 28	201801	213733	11		0.631538441						
AT	VUJF	Bank 28	202012	213101	1		0.115929129						
AT	VUJF	Bank 28	202012	213102	1		0.664457984						
AT	VUJF	Bank 28	202012	213103	1		0.067823892						
AT	VUJF	Bank 28	202012	213104	1		0.079921133						
AT	VUJF	Bank 28	202012	213105	1		0.097931824						
AT	VUJF	Bank 28	202012	213106	1		0.506044479						
AT	VUJF	Bank 28	202012	213107	1		0.472412518						
AT	VUJF	Bank 28	202012	213108	1		0.594375533						
AT	VUJF	Bank 28	202012	213109	1		0.899022411						
AT	VUJF	Bank 28	202012	213110	1		0.349533323						
AT	VUJF	Bank 28	202012	213111	1		0.345667783						
AT	VUJF	Bank 28	202012	213112	1		0.459869761						
AT	VUJF	Bank 28	202012	213113	1		0.966552815						
AT	VUJF	Bank 28	202012	213117	1	No	0.393722857						
AT	VUJF	Bank 28	202012	213118	1	Yes	0.871610868						
AT	VUJF	Bank 28	202012	213501	1		0.643120849						
AT	VUJF	Bank 28	202012	213502	1		0.343763641						
AT	VUJF	Bank 28	202012	213503	1		0.539483282						
AT	VUJF	Bank 28	202012	213504	1		0.866051109						

iii) The database structure turns to be the following:



	A	B	C	D	E	F	G	H
1	Country_code	LEI_Code	Bank_name	Period	Item	Scenario	Fact_char	Amount
2	AT	VUJF	Bank 28	201801	213733	11		0.631538441
3	AT	VUJF	Bank 28	202012	213101	1		0.115929129
4	AT	VUJF	Bank 28	202012	213102	1		0.664457984
5	AT	VUJF	Bank 28	202012	213103	1		0.067823892
6	AT	VUJF	Bank 28	202012	213104	1		0.079921133
7	AT	VUJF	Bank 28	202012	213105	1		0.097931824
8	AT	VUJF	Bank 28	202012	213106	1		0.506044479
9	AT	VUJF	Bank 28	202012	213107	1		0.472412518
10	AT	VUJF	Bank 28	202012	213108	1		0.594375533
11	AT	VUJF	Bank 28	202012	213109	1		0.899022411
12	AT	VUJF	Bank 28	202012	213110	1		0.349533323

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
- *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) and/or in the data dictionary file (Data dictionary.xlsx).

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 213767.

	A	B	C	D	E	F
1	Collection	Template No#	Category	Label	Item	DERIVED_TEMPLATE
122	ST2021	TRA_CAP	Transparency - CAP	TOTAL RISK EXPOSURE AMOUNT	213758	TRA_CAP
123	ST2021	TRA_CAP	Transparency - CAP	TOTAL RISK EXPOSURE AMOUNT - Of which: Transitior	213759	TRA_CAP
124	ST2021	TRA_CAP	Transparency - CAP	Adjustments due to IFRS 9 transitional arrangements	213760	TRA_CAP
125	ST2021	TRA_CAP	Transparency - CAP	Common Equity Tier 1 Capital ratio (transitional)	213761	TRA_CAP
126	ST2021	TRA_CAP	Transparency - CAP	Tier 1 Capital ratio (transitional)	213762	TRA_CAP
127	ST2021	TRA_CAP	Transparency - CAP	Total Capital ratio (transitional)	213763	TRA_CAP
128	ST2021	TRA_CAP	Transparency - CAP	COMMON EQUITY TIER 1 CAPITAL (fully loaded)	213764	TRA_CAP
129	ST2021	TRA_CAP	Transparency - CAP	TIER 1 CAPITAL (fully loaded)	213765	TRA_CAP
130	ST2021	TRA_CAP	Transparency - CAP	TOTAL CAPITAL (fully loaded)	213766	TRA_CAP
131	ST2021	TRA_CAP	Transparency - CAP	Common Equity Tier 1 Capital ratio (fully loaded)	213767	TRA_CAP
132	ST2021	TRA_CAP	Transparency - CAP	Tier 1 Capital ratio (fully loaded)	213768	TRA_CAP
133	ST2021	TRA_CAP	Transparency - CAP	Total Capital ratio (fully loaded)	213769	TRA_CAP
134	ST2021	TRA_CAP	Transparency - CAP	Total amount of instruments with mandatory convers	213770	TRA_CAP
135	ST2021	TRA_CAP	Transparency - CAP	Total Additional Tier 1 and Tier 2 instruments eligible	213771	TRA_CAP
136	ST2021	TRA_CAP	Transparency - CAP	Total Additional Tier 1 and Tier 2 instruments eligible	213772	TRA_CAP
137	ST2021	TRA_CAP	Transparency - CAP	Total leverage ratio exposures (transitional)	213773	TRA_CAP
138	ST2021	TRA_CAP	Transparency - CAP	Total leverage ratio exposures (fully loaded)	213774	TRA_CAP
139	ST2021	TRA_CAP	Transparency - CAP	Leverage ratio (transitional)	213775	TRA_CAP

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: