EBA 2021 EU-wide transparency exercise dataset and data visualization tools

For the 2021 EU-wide Transparency Exercise, the EBA published bank-by-bank data contained in 16 transparency templates (on average more than 10 000 data points per bank). This exercise provides detailed data for 120 banks from 25 countries of the European Union (EU-27) and the European Economic Area (EEA). Along with the dataset, the EBA also provides a wide range of interactive tools that allow users to compare and visualise data across time and at a country and a bank-by-bank level.

User guide for the Transparency dataset

The dataset has been released to the wide public in CSV format, which can be imported into any analytical software for analysis purposes. 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.

The transparency exercise dataset is stored in four CSV files. They include all the bank-by-bank data contained in the transparency templates, grouped into specific data categories to reflect the content of one or more transparency templates, as shown in the table below:

CSV file name	Transparency template(s)
Credit risk	Credit Risk_STA, Credit_Risk_IRB, NPE, Forborne Exposure, Breakdown of loans and advances to non-financial corporation (NACE), Collateral valuation - loans and advances, Information on loans and advances subject to legislative and non-legislative moratoria in accordance with EBA Guidelines EBA/GL/2020/02

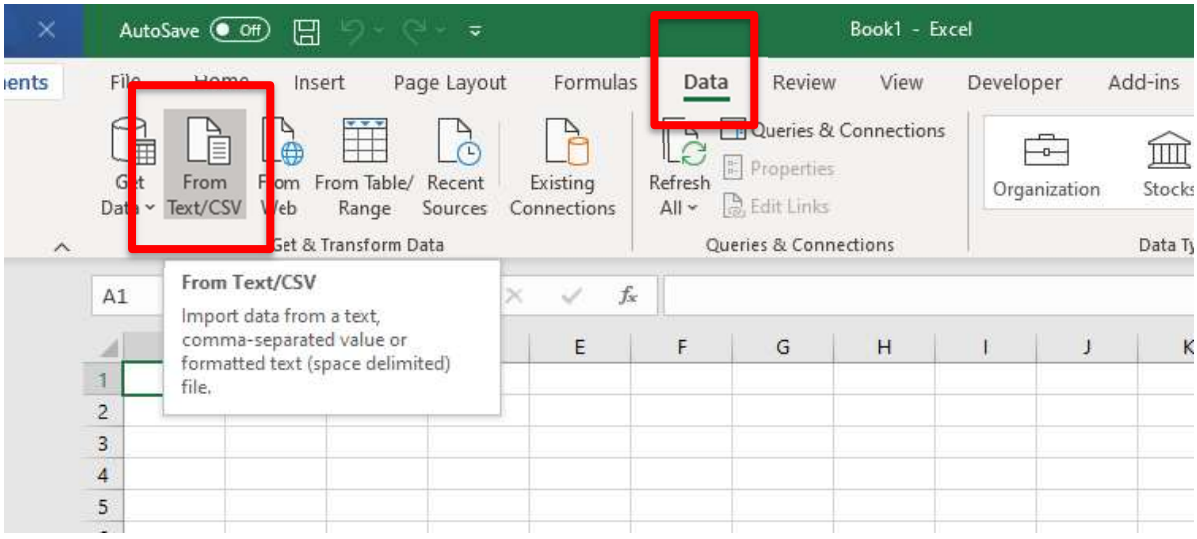
Market risk	Market Risk
Sovereign exposures	Sovereign
Other templates	Key metrics, Capital, Leverage, Risk Exposure Amount, P&L, Assets, Liabilities

With the CSV files, users will find the data dictionary table and the metadata table, which are helpful for understanding the file's database structure (as the four databases have different structures), and for setting up queries for data extraction and management.

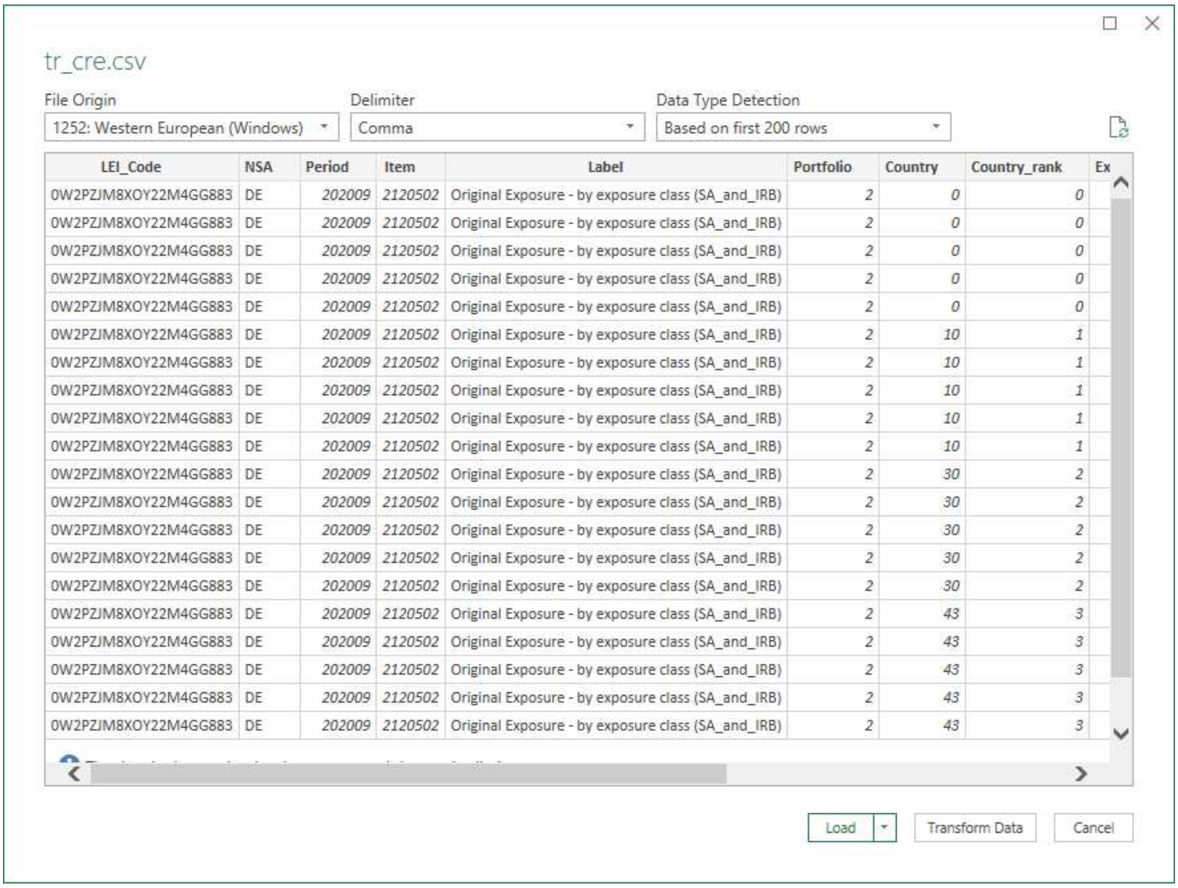
The example below shows how to use and query the EU-wide transparency exercise database. The files are converted into spreadsheets, allowing the use of standard analytical tools embedded in Excel.

A practical example: **Loans and advances subject to legislative and non-legislative moratorium (granted and active) broken down by sectors and by performing status, for the EU aggregate for June 2021**

i) Once you have downloaded the CSV file containing data on loans and advances subject to legislative and non-legislative moratoria (tr_cre.csv), import it into Excel using the Import "From Text/ CSV" command located under the Data tab:

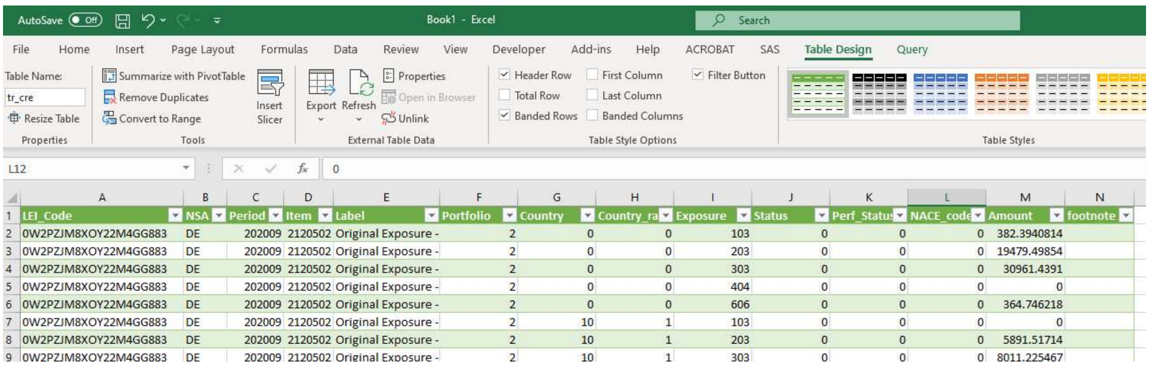


Locate the file and open through the wizard, by clicking on LOAD:



LEI_Code	NSA	Period	Item	Label	Portfolio	Country	Country_rank	Ex
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	0	0	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	0	0	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	0	0	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	0	0	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	0	0	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	10	1	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	10	1	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	10	1	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	10	1	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	10	1	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	30	2	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	30	2	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	30	2	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	30	2	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	30	2	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	43	3	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	43	3	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	43	3	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	43	3	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure - by exposure class (SA_and_IRB)	2	43	3	

ii) The database structure will appear as shown below:



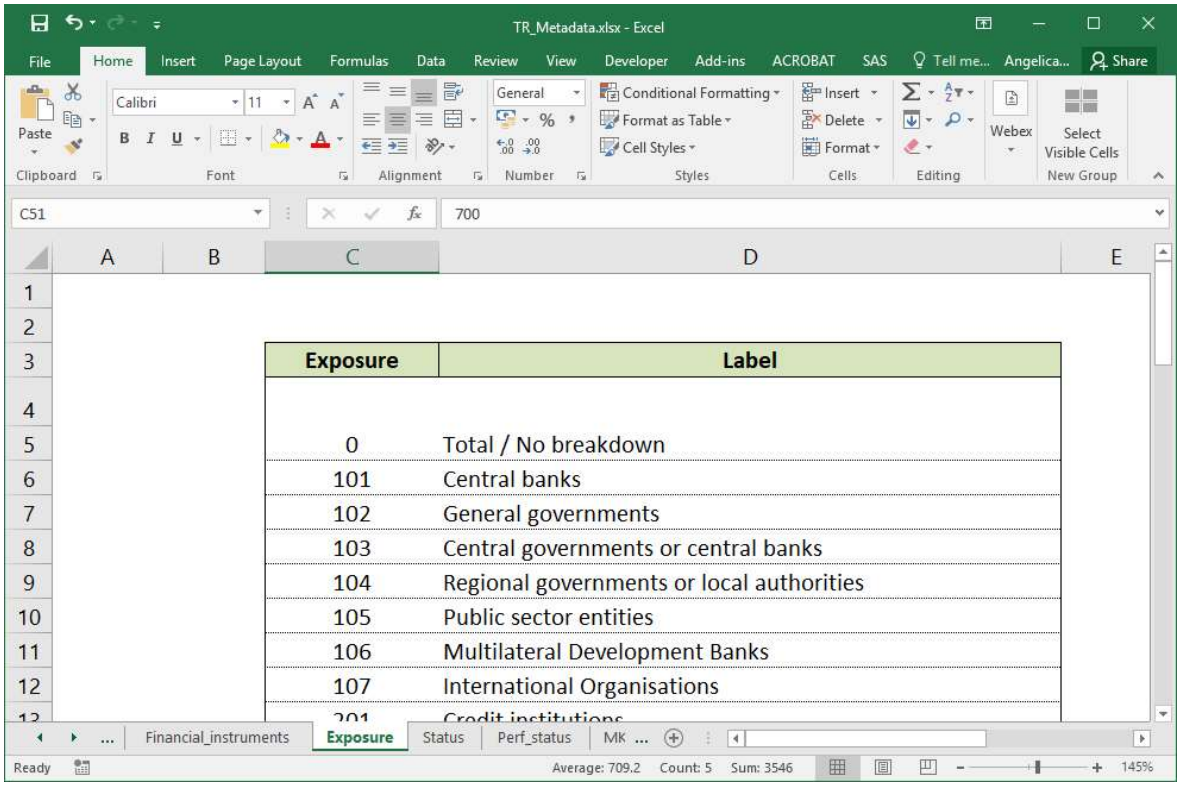
LEI_Code	NSA	Period	Item	Label	Portfolio	Country	Country_ra	Exposure	Status	Perf_Status	NACE_code	Amount	footnote
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure -	2	0	0	103	0	0	0	382.3940814	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure -	2	0	0	203	0	0	0	19479.49854	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure -	2	0	0	303	0	0	0	30961.4391	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure -	2	0	0	404	0	0	0	0	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure -	2	0	0	606	0	0	0	364.746218	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure -	2	10	1	103	0	0	0	0	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure -	2	10	1	203	0	0	0	5891.51714	
0W2PZJM8XOY22M4GG883	DE	202009	2120502	Original Exposure -	2	10	1	303	0	0	0	8011.225467	

iii) The database structure is explained in a metadata file, in which you will find a description of all the values that each column can assume. The dataset tr_cre has the following columns:

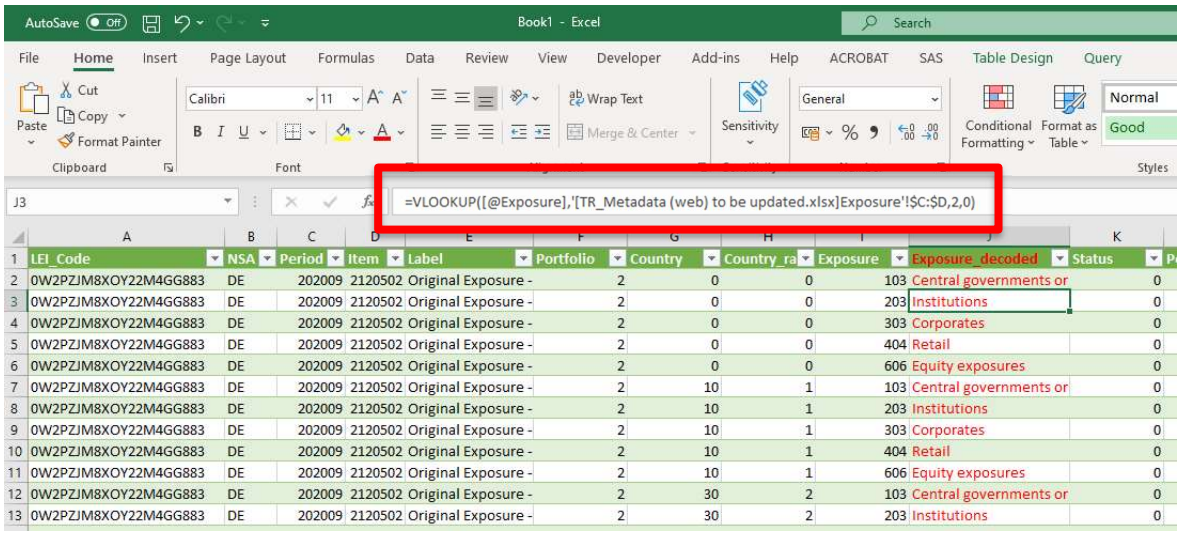
- *NSA*: ISO code of the bank's country;
- *Lei_code*: a bank identifier;
- *Item*: code of each variable;
- *Label*: decodification of the item;
- *Period*: time period (in format YYYYMM, eg: 202103 for March 2021, 202106 for June 2021);
- *Portfolio*: credit risk approach
- *Country*: Country code of the country of the counterparty
- *Country*_rank: Ranking number 1 to 10 of the reported countries of counterparty
- *Exposure*: Sectors of exposure
- *Status*: defaulted or not defaulted status
- *Perf*_Status: performing or not performing status, and subcategories
- *NACE*_codes: business activities according to the NACE (Nomenclature des Activités Économiques dans la Communauté Européenne / Statistical Classification of Economic Activities in the European Union)
- *Amount:* value that the variable assumes;
- *Footnote*: specific bank clarification as disclosed in the bank's PDF, added to all the items of the relevant templates.

Users can find decoding information either in the metadata file (TR_Metadata.xlsx) and/or in the data dictionary file (SDD.xlsx).

For each dimension used in the dataset you will find a dedicated tab in the Metadata file, where the information to decode the specific dimension is included. For instance, in this example we are interested in the Exposure dimension, you can see the values that the dimension assume in the dataset, and find the relevant explanation for this.



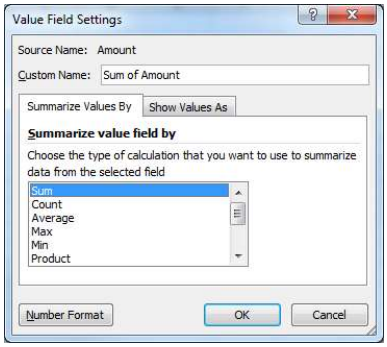
In order to facilitate the data analysis, you can convert the numeric Exposure dimension into the correspondent description, by inserting an Excel function which will read the Metadata file directly into the dataset.



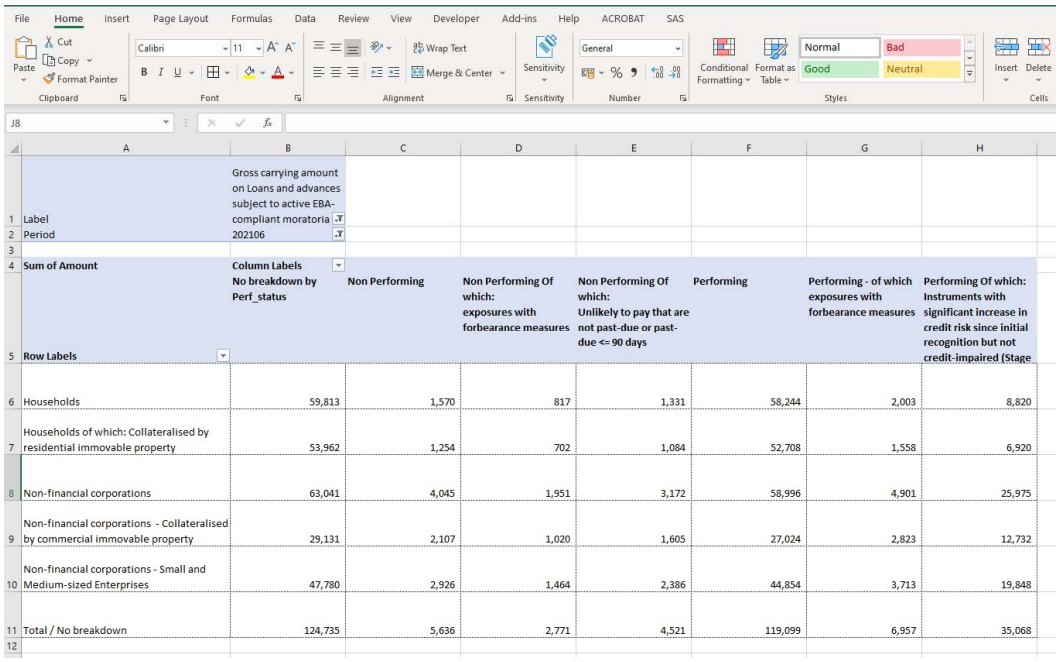
You can do the same for any of the dimension included. In this example it is done for the Perf_status dimension.

iv) Now click on 'Pivot table', under the Insert tab, and select the entire dataset (or a subsample if you have already filtered the data you need) as the pivot table range. Set up the pivot table structure, dragging the variable '**Exposures_decoded**' into the box 'Row Labels' and the variable '**Perf_status_Decoded**' into the box 'Column Labels'.

Drag 'Label' into the box 'FILTERS' to select the item '**Gross carrying amount on Loans and advances subject to active EBA-compliant moratoria**' and show only the information for this item.
Drag period into the box Filter to filter out data for the last quarter only (period=202106).
Finally, you may drag in the box *Values* the variable *Amount*, where the variables' values are stored, and aggregate it by the sum.



v) The final result should be as shown below:



	A	B	C	D	E	F	G	H
1	Label	Gross carrying amount on Loans and advances subject to active EBA-compliant moratoria						
2	Period	202106						
3								
4	**Sum of Amount**	**Column Labels**						
5	**Row Labels**	**No breakdown by Perf_status**	**Non Performing**	**Non Performing Of which: exposures with forbearance measures**	**Non Performing Of which: Unlikely to pay that are not past-due or past-due <= 90 days**	**Performing**	**Performing - of which exposures with forbearance measures**	**Performing Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage**
6	Households	59,813	1,570	817	1,331	58,244	2,003	8,820
7	Households of which: Collateralised by residential immovable property	53,962	1,254	702	1,084	52,708	1,558	6,920
8	Non-financial corporations	63,041	4,045	1,951	3,172	58,996	4,901	25,975
9	Non-financial corporations - Collateralised by commercial immovable property	29,131	2,107	1,020	1,605	27,024	2,823	12,732
10	Non-financial corporations - Small and Medium-sized Enterprises	47,780	2,926	1,464	2,386	44,854	3,713	19,848
11	Total / No breakdown	124,735	5,636	2,771	4,521	119,099	6,957	35,068
12								

User guide for the data visualization tools

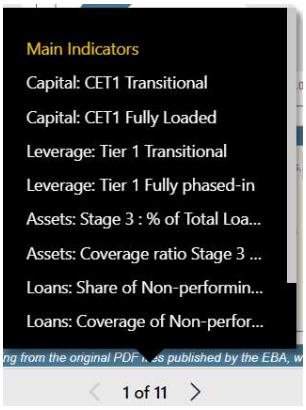
A set of online data visualisation tools have been published at the EBA website, along with the full dataset and the individual banks' results.

Six data visualization tools are available for the users to explore transparency data for the individual banks as well country/EU aggregates:

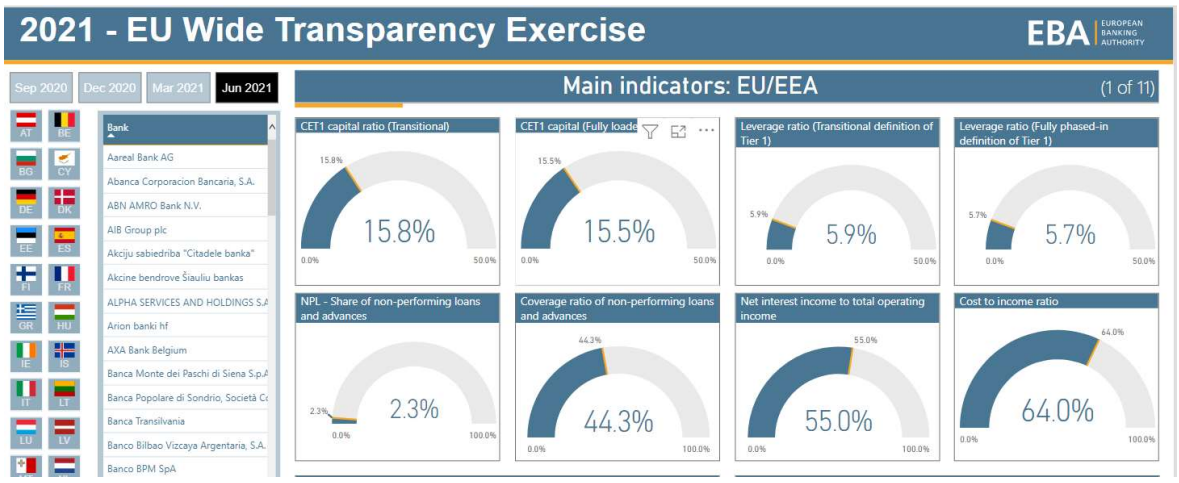
- Overview (Visual exploration tool), including the main EBA Risk Indicators that can be recalculated using the transparency dataset
- Key Metrics, Capital, Leverage, P&L, RWAs, Assets and Liabilities
- NPE and forborne exposures
- NACE
- Sovereign
- Covid-19

The tools are to be open in a browser via links provided at the EBA website.

To navigate between the pages the menu at the bottom can be used, either using the arrows, or by double clicking on it and selecting from the list:

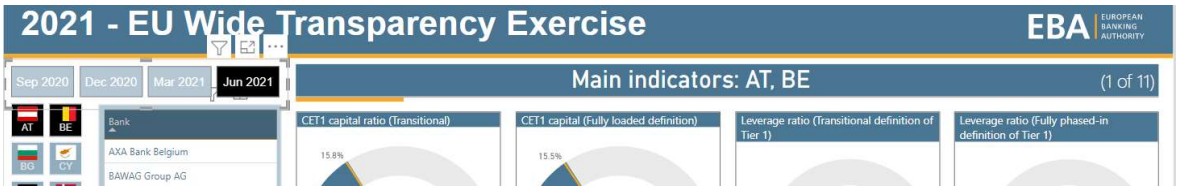


In order to display the figures for a particular country or bank a selection can be made by using the lists (country codes / flags or bank names). The filters will be applied to the data.



It is also possible to show figures aggregated for multiply countries/banks.

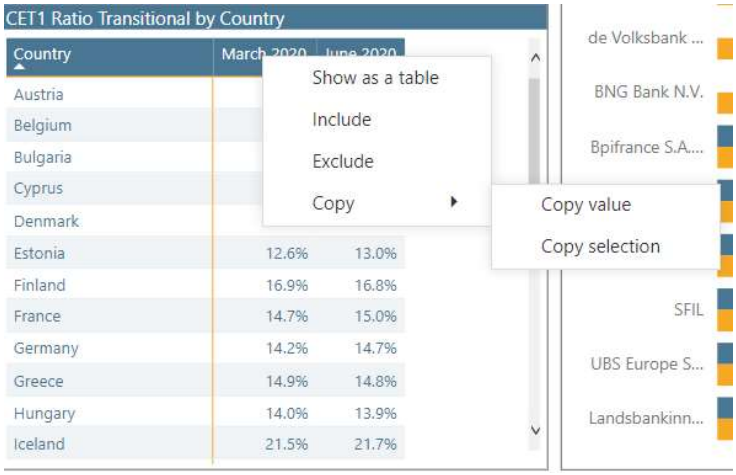
In order to do so, press CTRL + chosen countries/banks:



Transparency data can be explored in the tools directly, but it can be also exported outside.

In order to copy the data from the tables in the tools, users shall follow the steps:

- Click on the header of the chosen column (or select multiply columns by CTRL +) to select the data
- Right click on the header and choose Copy → Copy selection



Copied figures can be pasted to other programs, e.g. Excel, and used for further analysis: