

# README: Figures to Show Trends in C&I Lending by Amounts

## Primary Outputs

The primary outputs are:

- Folder: `figures`
- `slide_figures_trends_inC&I_lending_by_amount.pdf`

## Folder and File Descriptions

`slide_figures_trends_inC&I_lending_by_amount.pdf`

A collection of figures. It provides an overview and brief descriptions of each variable, accompanied by corresponding line charts.

### **data**

`data_FINAL_merged_variable_panel_data.csv`

Panel data extracted from the Call Reports, covering single periods on 06/30 for all banks from 2001 to 2024.

`data_for_figures_trends_inC&I_lending_by_amount.csv`

Raw data used for generating the figures.

- Variables are aggregated across all banks for each period.
- According to the Call Report, the unit for all amount-related variables is \$1K.

`data_variable_name_mapping.xlsx`

A mapping table of variable names. (pairing: Variable Code – Variable Name – Detailed Term (as specified in the Call Report) – Source Schedule).

## figure

The `figures` folder contains line charts for each variable.

- Each chart shows variables aggregated across all banks for each period.
- The y-axis label for each chart includes:
  - Variable code (e.g., "[RCON5571]")
  - Full name from the Call Report (e.g., "Outstanding Amount of Loans to U.S. Addressees with Original Amounts  $\leq$  \$100K")
  - Value unit (e.g., "(\$1B)")
- To avoid excessively large values, unit adjustments are made in the charts:
  - Amount-related variables: \$1K (in reports)  $\rightarrow$  \$1B (in charts)  
(e.g., [RCON5571/5573/5575]: Outstanding amount of C&I loans to U.S. addressees in domestic offices)
  - Number-related variables: 1 (in reports)  $\rightarrow$  1M (in charts)  
(e.g., [RCON5570/5572/5574]: Number of C&I loans to U.S. addressees in domestic offices)
- Y-axis is scaled for readability, with the upper limit set as: `variable.max() * 1.1`.

## code

`code_figures_trends_inC&I_lending_by_amount.ipynb`

- Python code for generating line charts, with adjustable parameters for enhancing visualization.
- No need to define absolute paths manually. File paths begin with `"../"` to reference the parent directory of the current folder automatically.

`code_slide`

L<sup>A</sup>T<sub>E</sub>X code for generating slides.