Workspace (Excel & API)
Note 3

Financial Database
BAF 507E

Inmoo Lee

KAIST

Fall (1st half) 2025

Table of Contents

(1) Workspace in Excel

(2) Workspace API

Using Workspace in Excel

Available Functions

- TR: Retrieves real-time, fundamental, and referential data.
  (Starting Workspace version 4.0.36, get time series data along
  with real-time, fundamental and referential data in the same
  TR function.)
- RData: Real time
  - Retrieves both real-time and fundamental data.
- RHistory: Historical
  - Retrieves a list of time series data for an instrument. Time
    series data comes from a historical data source that provides
    prices on a limited range of instruments at regular intervals, for
    example, on a daily, weekly, monthly, and yearly basis

Functions and Field Names

- Syntax (Check help for details)
  - = TR("Universe","Data items","Parameters", Destination Cell , Arguments (1-20))
    - Universe can be either a single instrument or a list
    - Data items can include multiple data items
  - = RData("Instruments", "Fields", "Request", "Refresh", "Display", [Destination Cell])
  - = RHistory ("Instruments", "[Fields]", "Request", "[Refresh]", "[Display]", [Destination Cell])
  - Use "Data Item Browser" to find out the fields names
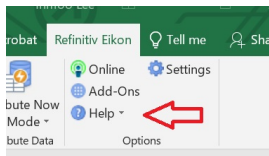
Examples

- Note3W_RHistory2025_Short.xlsx
    - Use Screener to find out the list of stocks in Korea Exchange with PE ratio and Total debt to total equity ratio being lower than or equal to 10 and 100%, respectively, and EBITDA Net Interest Coverage ratio being greater than or equal to 10.
    - Retrieve the prices of those stocks

Excel Templates
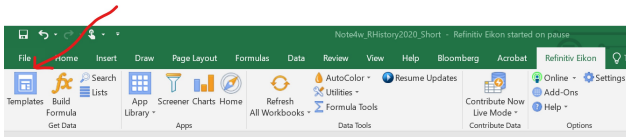
- You can click **Template** toolbar to get the list of templates available.
- You can check how various functions are used in each template.
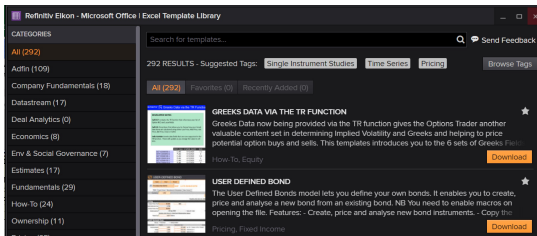
Workspace API

- Application Program Interface (API) is a set of routines and tools for building software applications.
- LSEG Workspace API can be used to have an access to LSEG Workspace directly from a Python program.
- You can use it only when you are logged in to LSEG Workspace and generate an app key from the "APPKEY" Generator. (Choose EIKON Data API and then Click "Register New APP" to create a new APPKEY.)
- Check the following websites for training videos.
  - https://developers.lseg.com/en/api-catalog/eikon/eikon-data-api/tutorials.
  - https://developers.lseg.com/en/api-catalog/eikon/eikon-data-api
  - Please click here to download the reference guide PDF file.
  - To see how you can use Excel and API to get earnings forecast, please check here.

Examples

- FDNote3W2025.ipynb includes codes to screen companies, download the returns of those screened, and calculate the returns of the portfolios composed of screened companies.
- You can find field names from the "DIB" (data item browser) site of an instrument of your choice (e.g., MSFT.O)