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Extracting series from the new series database – example on representative exchange rates

Please note that foreign exchange rate data in the series database are revised about 15 minutes after the publication of the rates, meaning around 3:45 pm, in XML format, at: Boi.org.il/PublicApi/GetExchangeRates?asXml=true

Every series in the database is a time series. It is possible to view one observation, a range of dates, or all observations that exist for that series.

This explanation is with regard to the representative exchange rates, but it can be drawn upon for information on how to extract from any series that is accessible in the new series database.

There are two methods for extracting time series:

a. Extraction using API

The URL is comprised of a fixed portion, together with a number of parameters that can be changed according to the user's needs.

1. The fixed portion: https://edge.boi.org.il/FusionEdgeServer/sdmx/v2/data/dataflow/BOI.STATISTICS

2. Parameters:
   - Code for the content field: EXR – exchange rates[1]
   - Version (doesn't change) 1.0
   - Since there are exchange rates that are not necessarily representative rates, it is necessary to choose a parameter that will show that they are representative rates: DATA_TYPE=OF00
   - Date ranges (If this parameter is not added, the default is the entire existing range of dates):
     - Range: startperiod=2008-01-02&endperiod=2008-01-03. Please use only this date format for daily observations.
     - N last observations: lastNObservations=N
   - Data extraction format: format=
     - csv
     - excel-series
     - excel-table
     - sdmx-json
     - Default=xml – do not include the format
   - Data characters (information on additional features of the series)
     - Labels=**id** or **name** or **both**, default id

This extraction will provide data for representative rates only, between certain dates, in CSV format:

[1] If you are interested in extracting series from content fields other than exchange rates, you must first enter the series interface in order to find the content field code. There is an explanation later in this document.

https://edge.boi.gov.il/FusionEdgeServer/sdmx/v2/data/dataflow/BOI.STATISTICS/EXR/1.0/?c%5BDATA_TYPE%5D=OF00&startperiod=2008-01-01&endperiod=2008-01-02&format=csv

If you want only one or two series in CSV format:

https://edge.boi.org.il/FusionEdgeServer/sdmx/v2/data/dataflow/BOI.STATISTICS/EXR/1.0/RER_GBP_ILS?format=csv

https://edge.boi.org.il/FusionEdgeServer/sdmx/v2/data/dataflow/BOI.STATISTICS/EXR/1.0/RER_AUD_ILS,RER_ESP_ILS?format=csv

3. Calculations

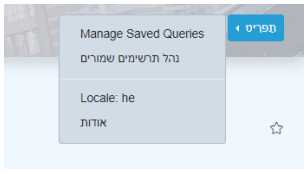
   You can calculate an average by converting the original frequency of the data (in this case daily).
   Normalisefreq=M;mean
   Choose the target frequency, in this case M (monthly), an then choose the type of calculation (in this case average).
   You can choose any lower frequency. For instance, if the data are daily, you can calculate monthly, quarterly, or yearly. If the data is already monthly, you cannot convert it to daily, but only quarterly or yearly.
   Type of calculation:
   Sum, mean, median, min, max, stdddev, stddevsample, var, varsample, count, firstperiod, lastperiod, miperiod

https://edge.boi.org.il/FusionEdgeServer/sdmx/v2/data/dataflow/BOI.STATISTICS/EXR/1.0/RER_GBP_ILS?format=csv&normalisefreq=M;mean

b. Extraction using the series interface:

https://edge.boi.gov.il/FusionDataBrowser

Choose your language:



Choose the exchange rate content field:

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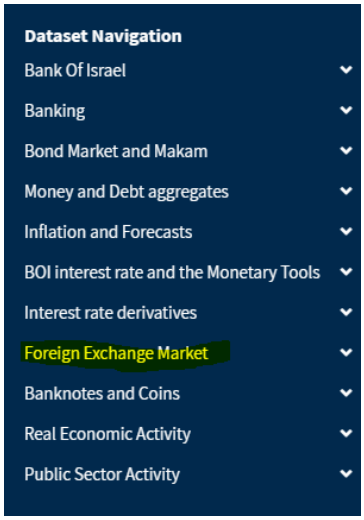
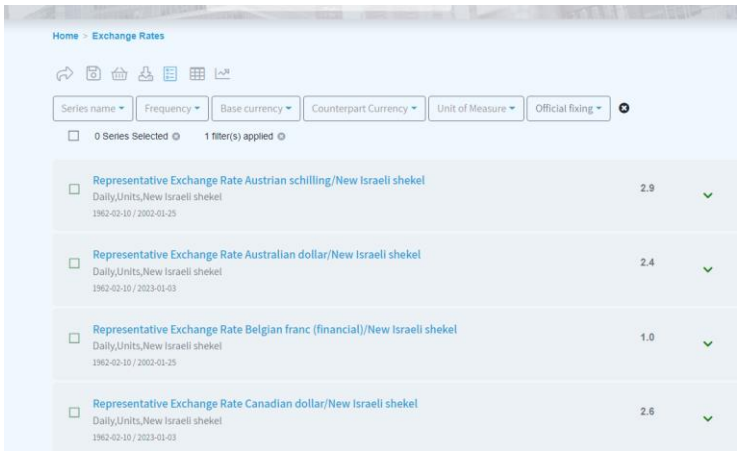
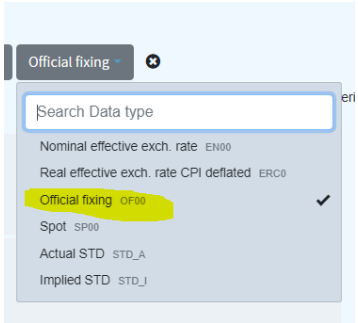


Choose specific series: If nothing is marked, the next action will be taken on all series in the chosen content area.

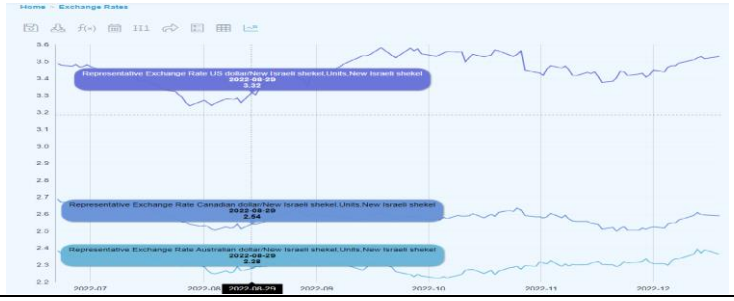


If you want only representative exchange rates, choose the relevant type of data:



a. After marking the series you want, you can take various actions by clicking on the icons at the top of the page.

The following are the functions of the various icons:

	Shares the selected series	
	Saves the selected series (locally on the browser) for rapid loading later on	
	Creates a basket of series for rapid loading later on	
	Exports series in a number of formats (see below)	
	Returns to the list of series	
	Enables viewing of the series as a table	In addition, it opens a submenu that enables various manipulations of the data.
	Enables visualization of the data: 	

b. Exporting series

In order to export, please choose the series you want to export and click on the  icon.

In the screen that opens, please fill in the various parameters for export. In the "format" field, please choose from among the following formats:

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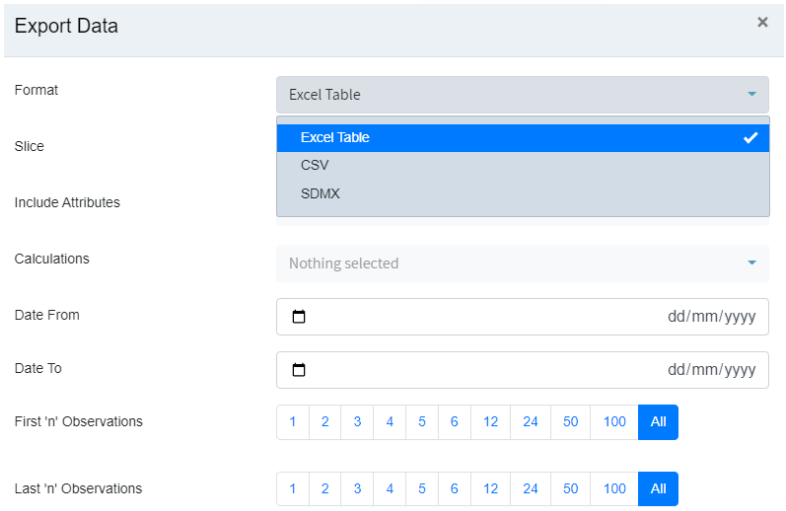
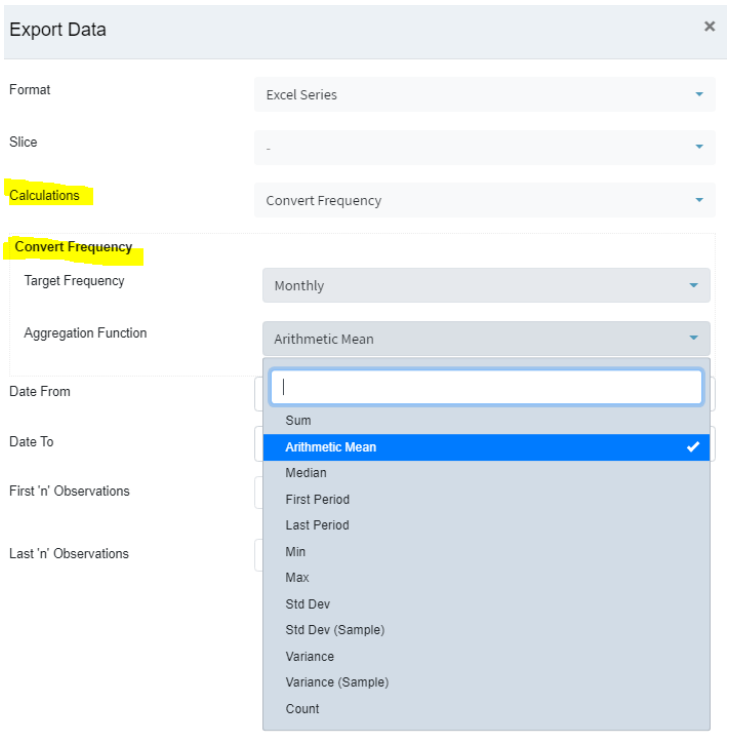


Calculations:



Then click on the  button.

You can obtain the data in PI query format, which you can then embed in your systems, by clicking on the  button.

In the window that opens, you will be able to copy the query that you created and add the required suffix as explained at the beginning of this document.