

# Dealing with dates

EC 103—003

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# Frequencies

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In Macroeconomics, the most common **type** of data used are *time-series data*.

*Time-series data* denote a class of data where one (or more) variables are observed *over time*.

And the **frequency** of the data may change depending on the variable we are studying.

# Frequencies

For instance, Gross Domestic Product (GDP) data are released on a **quarterly** basis.

Unemployment and inflation data are released on a **monthly** basis.

The FED's policy interest rate (federal funds rate) has a **daily** availability.

# Frequencies

Many times, our data are in a frequency **higher** than the one we need.

Fortunately, there are several methods we can use to **aggregate** the data to a *lower* frequency.

For example, converting *inflation* to a quarterly or yearly frequency.

# The FRED Database

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We have used data from the St. Louis FED Economic Database (FRED) several times in class.

Not only does it have great *visualization* tools, but it also allows us to **download** the data.

# The FRED Database

Let us download some series and use some *new* R packages:

- {janitor}
- {lubridate}
- {tsibble}



