

## TS Module 22 Student projects interest rates

(The attached PDF file has better formatting.)

- Internet data for time series processes
- Templates for other projects

Review the Excel worksheets and the discussion forum postings on interest rates.

- Post World War II Interest rates fall into three regimes, based on drift and volatility.
- The three regimes reflect macroeconomic policy, both fiscal and monetary.

Fitting an ARIMA model may not work well if the time series pattern changes.

Some time series are stable, such as daily temperature. The same pattern occurs for the past hundred years, with random fluctuations that are modeled by the ARIMA process. Sunspots and other physical or meteorological time series are similar.

Other time series change. Birth rates, divorce rates, crime rates, longevity, travel patterns, interest rates, inflation, GDP, and hundreds of other statistics change with the environment. Examine the time series and see whether you should use a single ARIMA process or two processes for different periods.

Review the templates for other time series projects on the NEAS web sites.

- Time series are shown for several economic indices.
- Thousands of internet sites has extensive time series data for student projects.

You can use the data on the NEAS web site. You will produce a better student project if you spend an hour surfing the internet and finding up-to-date and more complete data.