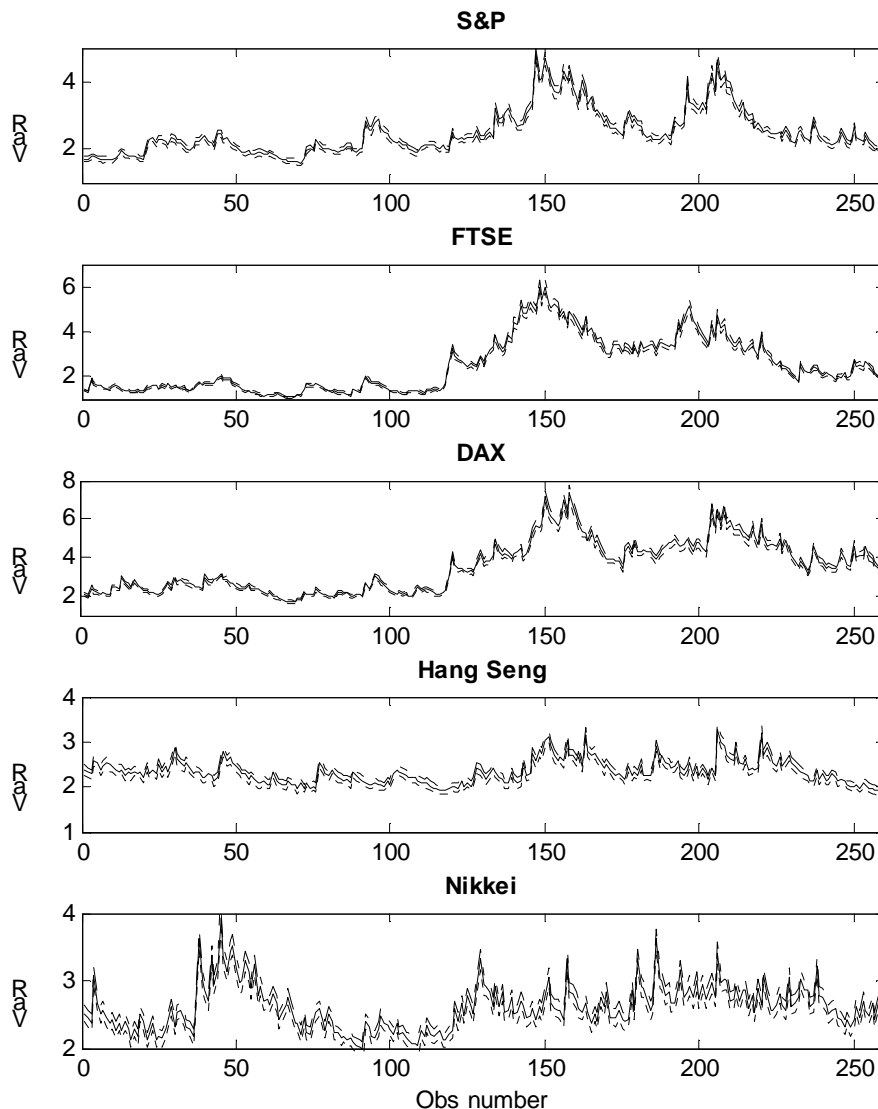


## Asset and Liability Management

The use of market risk measures has become prevalent in ALM as a mechanism to identify the level of risk to be managed. Below is an illustration of a commonly applied risk measure, Value-at-Risk (VaR), for different equity indexes plotted over a number of periods. VaRs were obtained using a GARCH model.

Chart of Daily AR(1)-GARCH (1,1) 95% VaR



Notes: VaRs are obtained for 259 periods. Each plot shows VaR plus 90% confidence bounds

The chart indicates the level of market risk facing a trader in the respective markets (indexes) over time.

However, many other techniques could be used to provide a more comprehensive measure of market risk. In this course you will:

- Understand the level of risk facing the investor and its implications for risk management strategies;
- Compare the levels of risk indicated by different risk measures;
- Identify the relative strengths and weaknesses of these different measures for ALM;
- Learn best methods to obtain the respective risk measures;
- Determine the performance of these measures through backtesting.