Introduction

Data of multivariate time series are widely available on the web. Examples of web sites are:

- Federal Reserve Bank of St. Louis: http://research.stlouisfed.org/fred2/
- A special web at University of Missouri for papers honoring the retirement of Dr. David Findley of U.S. Census Bureau: http://www.stat.missouri.edu/~holans/EV_Data.html
- Course web: http://faculty.chicagobooth/ruey.tsay/teaching/mts/sp2011/

Some examples of time series considered in the lectures are given below:

1. The monthly unemployment rate of three states in the midwest, namely, Illinois, Michigan and Ohio.

2. U.S. quarterly GDP and unemployment rate

3. Quarterly data of West Germany, investment, income and consumption. The data are from Lütkepohl (2005).


6. Monthly US housing series (housing starts and houses sold)


8. Weekly U.S. retail regular gasoline prices and crude oil prices
Figure 1: State unemployment rates: 1976-2009

Figure 2: U.S. bond yields
Figure 3: U.S. GDP and unemployment rate

Figure 4: Investment, Income and Consumption of West Germany
Figure 5: Deciles 1 and 9 returns

Figure 6: ACF of Deciles 1 and 9 returns
Figure 7: Monthly global temperature anomalies: January 1880 to August 2010

Figure 8: Log prices of U.S. weekly regular gasoline prices (dollars per gallon) and crude oil prices (dollars per barrel): January 1997 to September 2010