Other Types of Associations

- Basic association rules have several limitations

- Deviations from the expected probability are more interesting

  - E.g. if many people purchase bread, and many people purchase cereal, quite a few would be expected to purchase both

  - We are interested in positive as well as negative correlations between sets of items

    - Positive correlation: co-occurrence is higher than predicted

    - Negative correlation: co-occurrence is lower than predicted

- Sequence associations / correlations

  - E.g. whenever bonds go up, stock prices go down in 2 days

- Deviations from temporal patterns

  - E.g. deviation from a steady growth

  - E.g. sales of winter wear go down in summer

    - Not surprising, part of a known pattern.

    - Look for deviation from value predicted using past patterns