## Tutorial 9 (for Week 10)

- 1. Review Quiz 9 questions.
- 2. Derive the NPV equation for the price of a finitely lived asset under certainty, assuming that the risk-free rate varies over time (i.e., derive equation (4) on Topic 8). Is  $p_t$  uniquely determined?
- 3. Show that the price sequence as defined by equation (20) satisfies (5), i.e., asset prices determined by the NPV equation with a bubble are compatible with the arbitrage principle.
- 4. Discussion questions:
  - (a) Do you think there is a housing bubble in the Australian housing market?
  - (b) Some view the Pay-as-you-go social security system and the practice of rolling over government debt are like a Ponzi scheme run by the government. Do you agree?