Topics for Today

1.) The Instruments of Monetary Policy
2.) The Goals of Monetary Policy
   - “Inflation Targeting”
3.) Practical Difficulties in the Conduct of Monetary Policy
4.) Rules vs. Discretion
   - The Potential “Time Inconsistency” of Mon. Policy
   - Reputation + Credibility
   - Repeated Games + Trigger Strategies
5.) The Taylor Rule
The Instruments of Monetary Policy

- The Bank of Canada influences financial market conditions in 2 main ways:
  1. Open-Market Operations (Buying & Selling Govt. Bonds)
  2. Setting the “target overnight rate” among chartered banks

```
0.5% -- target
```

- When the Bank of Canada lends funds it increases the Monetary Base
- When the Bank of Canada absorbs funds it decreases the Monetary Base
- Therefore, the Bank of Canada can influence the Monetary Base by shifting the target overnight rate and its associated bonds.
Figure 14.2
Short-term interest rates, 1994–2006

The figure shows monthly averages of the target overnight interest rate, the prime rate, and the interest rate on one-year mortgages during the period 1994–2006. Changes in the target overnight rate lead to similar changes in the interest rates administered by banks on loans and mortgages. This is a key way in which monetary policy influences the economy.

Source: Adapted from Statistics Canada, CANSIM II series v39079, v122495, and v122520.
The Goals of Monetary Policy

- Why does the Bank of Canada attempt to influence financial market conditions? What is it trying to achieve?

- Since 1991, Canada has followed a formal "inflation targeting" monetary policy strategy. According to this strategy, the primary goal of the Bank of Canada is a low and stable inflation rate (defined to be in the (1% to 3%) range.

- As long as inflation remains within the target band, the Bank of Canada is free (indeed, is expected to) take actions that attempt to stabilize output and employment.
Pros & Cons of Inflation Targeting

1. Demand Shocks

Inflation Targeting stabilizes output when there are AD shocks

2. Supply Shocks

Inflation Targeting destabilizes output when there are AS shocks
Practical Difficulties in the Conduct of Monetary Policy

1.) Information/Data Lags

2.) Lags in the effects of monetary policy
   \[\Rightarrow\] actions must be based on forecasts

3.) Uncertainty about how monetary policy affects the economy ("model uncertainty").

4.) Expectational Feedback. (Expectations concerning future policy influence outcomes today).
Assumptions

1. The Central Bank values low unemployment and low inflation

2. Firms value low inflation and unemployment to be equal to the Natural Rate

Central Bank Payoffs

CB receives 1 if $\Pi = 0$ and 0 if $\Pi > 0$
CB receives 1 if $u < u^n$, 0 if $u = u^n$, -1 if $u > u^n$

Firms' Payoffs

Firms receive 1 if $\Pi = 0$ and 0 if $\Pi > 0$
Firms receive 2 if $u = u^n$ and 0 if $u \neq u^n$
The essence of the strategic interaction between firms and the CB is summarized by the following payoff matrix.

<table>
<thead>
<tr>
<th>CB Choice</th>
<th>Raise M</th>
<th>Don't Raise M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase M</td>
<td>2 0</td>
<td>2 0</td>
</tr>
<tr>
<td>Don't Increase M</td>
<td>2 2</td>
<td>3 1</td>
</tr>
</tbody>
</table>

**Firms' Choice**

- **Equil. w/o commitment**
- **Equil. w/ commitment**

Assuming the CB cannot commit, and firms set prices before the CB sets M, what is the Nash Equilibrium?

What if the CB can commit?