Money, Banking, and Financial Institutions

Chapter 5 : Monetary Policy

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Learning Objectives

1. Describe the goals of monetary policy.
2. Understand how the Bank of Canada uses monetary policy tools to influence the interest rate.
3. Explain the role of monetary targeting in monetary policy.

Introduction and Definition

Definition

▷ **Monetary Policy Definition**

"Monetary policy is the set of measures implemented by a country or monetary authority to influence economic activity through the regulation of its currency."

▷ **Recall from chapter 4:**

- In the long term, increasing money supply only causes inflation.
- In the short term, this is not necessarily the case, it can have an effect on the economy.

The Importance of Understanding Monetary Policy

▷ Understanding the **mechanisms** and **implications** of monetary policy allows one to:

- Anticipate future price and interest rate trends.
- Make informed financial decisions, such as borrowing or selling property.
- Develop effective personal or professional investment strategies.
- Better understand the economic environment relevant to clients.

Role and Goals of the Bank of Canada

Establishment and Mandate

- Established in **1935**.
- Mandate from the *Bank of Canada Act*:

  "To regulate credit and currency in Canada in the national economic interest, maintain the currency's international value, mitigate fluctuations in production, trade, prices, and employment, and foster economic and financial prosperity."

- Focus on preserving the value of the Canadian dollar through low, stable, and predictable inflation.

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- Focus on preserving the value of the Canadian dollar through low, stable, and predictable inflation.
- The BoC has **six monetary policy goals**:
  - Price stability
  - High employment
  - Economic growth
  - Stability of financial markets and institutions
  - Interest-rate stability
  - Foreign exchange market stability

The BoC's Dual Mandate

- In fact, all these policy goals are related to two broad goals: price stability and high employment.
- If the central bank can attain these two goals, it will typically attain its other goals as well.
- So, price stability and high employment are also known as the central bank's **dual mandate**.

Monetary Policy Tools

Monetary Policy Tools

Central banks use three traditional policy tools :

1. **Open Market Operations**: **Buying** or **selling** securities, usually government treasury securities, to influence reserves.

2. **Discount policy**:
   - Discount policy is the policy tool of setting the **discount rate** and the terms of **discount lending**.
   - Discount window is the means by which the central bank makes discount loans to banks. This serves as the channel for meeting the **liquidity needs of banks**.

3. **Reserve Requirements** are central bank regulations requiring banks to hold a fraction of checkable deposits as vault cash or deposits with the central bank. **This is not applicable in Canada.**

Definition : Quantitative Easing is a central bank policy whose goal is to stimulate the economy by buying long-term securities.

Monetary Policy Transmission Mechanism

- Eight times a year, the BoC makes a monetary policy announcement.
- Let us consider the one from October 2024 as below:

  "The Bank of Canada today reduced its target for the overnight rate to 3.75%, *with the Bank Rate at 4% and the deposit rate at* 3.75%."

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- We have seen that the most commonly used tool by the central bank is open market operations, but the announcement is made solely in terms of interest rates.
- **Why?**

Interest Rates

- Two rates are set by the BoC:
  - The official discount rate or Bank's Rate refers to the interest rate charged to commercial banks for borrowing funds from the central bank, typically in the form of short-term loans.
  - The deposit rate is the rate received by banks that leave reserves with the Bank of Canada

- The overnight rate target is a 'target' that the BoC strives to achieve through its **open market operations**.

What is the role of these rates?

- To manage their reserves, banks have the option to:
  - go through the Bank of Canada - receiving the **deposit rate on their reserves** at the BoC, or **borrowing reserves at the discount rate** if necessary, or
  - exchange reserves with other banks, which is the most common.

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- The possibility of exchanging reserves between banks creates an "**interbank market**" for these reserves:
  - the demand comes from the liquidity needs of the banks.
  - the supply comes from banks that have "excess" reserves and from the Bank of Canada.

How Monetary Policy Impacts the Economy (1/3)

- The interest rate determined in the interbank market is the overnight rate.
  - *The BoC has set an overnight financing rate target of 3.75% in October 2024*
- If the overnight financing rate is within the **operational range** (between deposit and ban's rates), banks prefer to exchange reserves between themselves, rather than with the BoC.
- Central bank actions influence the **overnight interest rate**, which affects commercial banks' rates for **households** and **firms**, thereby impacting consumption, investment, and aggregate demand.

How Monetary Policy Impacts the Economy (2/3)

- Effects of an increase in the money supply, or an increase in the purchase of securities, or a decrease in the deposit and discount rates :

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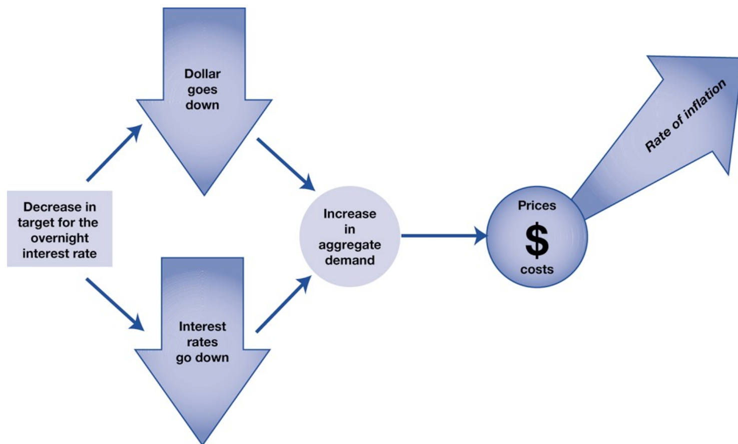
Figure 1: Monetary policy transmission



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How Monetary Policy Impacts the Economy (3/3)

- Effects of a decrease in the money supply, or a decrease in the purchase of securities, or an increase in the deposit and discount rates :

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Figure 2: Monetary policy transmission

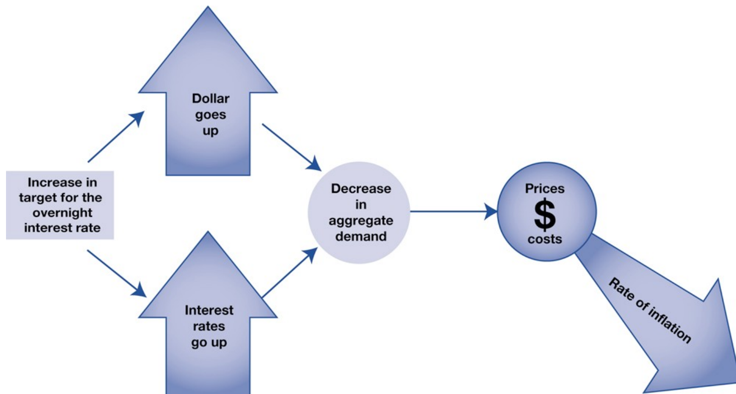

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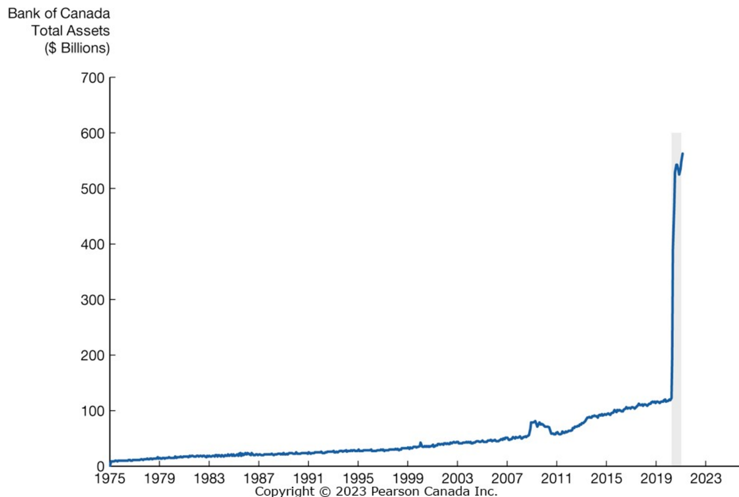
Figure 3: Change in Bank of Canada Balance Sheets



The Complexity of Monetary Policy

- An expansionary policy helps an economy in recession to increase its production (and reduce unemployment), but at the cost of inflationary pressure.
  - The dual objectives of the Bank of Canada Act (controlling inflation and unemployment) are therefore not perfectly compatible.
  - In practice, the Bank of Canada strives to stabilize economic activity while **keeping inflation within the 1% to 3% range**.
- The transmission of monetary policy takes time :
  - The effect on interest rates in the economy is relatively quick.
  - However, the effect on inflation takes longer to materialize (18-24 months), and this delay is variable and harder to predict.

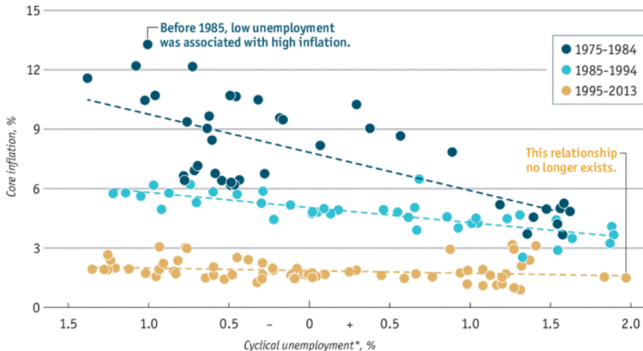
The Phillips Curve

The Phillips Curve

- Phillips (1958, Economica) highlighted an empirical short-term relationship between inflation and unemployment-the two (incompatible) objectives of central bankers.
- This was of great interest to central banks, which hoped to use this relationship in conducting their monetary policy.
- Unfortunately, this relationship proved to be unstable in the following decades.
- However, it allowed economists to better understand the challenges of monetary policy

The Phillips Curve Over Decades

Figure 4: Inflation and cyclical unemployment, average across advaced econmies, quaterly



- The effect of monetary policy depends on:
  - External shocks (e.g., energy prices) that the Bank of Canada does not control.
  - Generated expectations, which it does control.

Expectations: Credibility - Independence - Stability (1/2)

- Economic theory suggests that, at a given level of unemployment, it is easier to keep inflation π low when the inflation anticipated by households and firms π^e is also low.
- This stability would allow:
  - **Workers** to avoid demanding wage increases.
  - **Businesses** to resist the temptation to raise prices.
  - **Investors** to refrain from seeking higher returns on interest-based investments.

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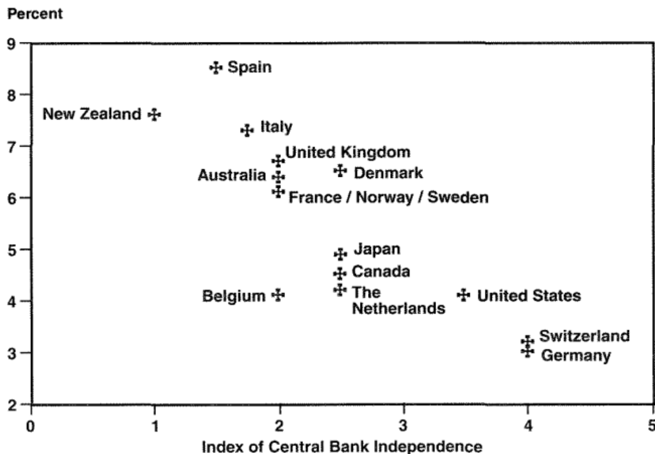
  - **Workers** to avoid demanding wage increases.
  - **Businesses** to resist the temptation to raise prices.
  - **Investors** to refrain from seeking higher returns on interest-based investments.
- The Central Bank can influence the perceptions of economic agents through its behavior.

Expectations: Credibility - Independence - Stability (2/2)

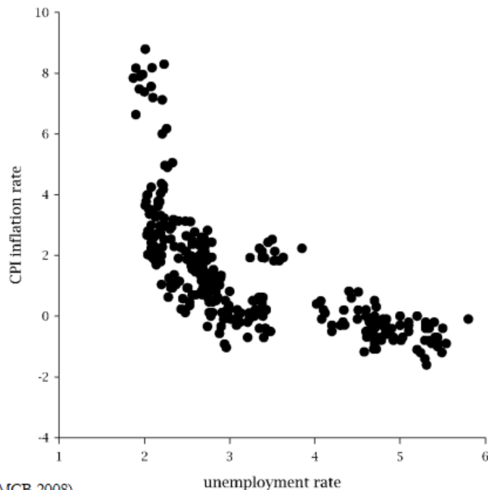
- Inflation expectations are lower when the Central Bank:
  - Is independent of political influences and/or interest groups. This independence allows it to exercise the necessary control to achieve its objectives.
  - Is credible in the eyes of households and firms regarding its ability to control inflation.
  - Adheres to a low inflation target over an extended period (as the Bank of Canada does, for example).

Figure 5: Average inflation rate (1955-1988)



Practical Case: The Phillips Curve in Japan (1/3)

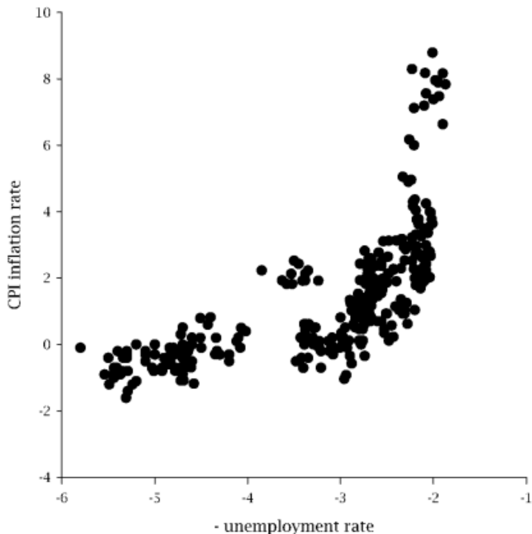
Figure 6: Japan's Inflation and Unemployment Rates (Jan. 1980- Aug. 2005)



(Source: G. Smith, JMCB 2008)

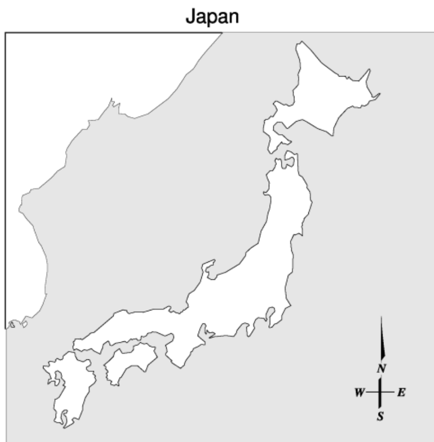
Practical Case: The Phillips Curve in Japan (2/3)

Figure 7: Japan's Inflation and (Minus) Unemployment Rates (Jan. 1980- Aug. 2005)



Practical Case: The Phillips Curve in Japan (3/3)

Figure 8: Average inflation rate (1955-1988)



Takeaway: Key Insights on Monetary Policy

Key Insights on Monetary Policy

- **Monetary policy** plays a critical role in managing inflation and unemployment, though the trade-offs between these two objectives can create challenges, especially during economic crises.
- **Expectations management** is crucial for the success of monetary policy; credible, independent central banks with clear inflation targets can shape the behavior of economic agents and stabilize inflation expectations.
- **External shocks** and unpredictable factors (e.g., energy prices) pose challenges to policymakers, yet central banks can influence domestic inflation through their actions and communication, especially when they manage expectations effectively.
- In real-world scenarios, the **Phillips Curve** may not always apply as expected, highlighting the importance of understanding underlying structural factors, such as demographics or wage dynamics, in shaping the impact of monetary policy.