

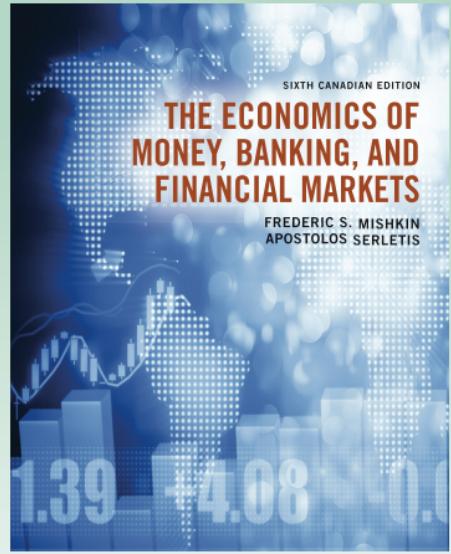
Mishkin/Serletis

# The Economics of Money, Banking, and Financial Markets

Sixth Canadian Edition

## Chapter 1

# Why Study Money, Banking, and Financial Markets?



# Learning Objectives

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Develop an **Economic Way of Thinking**

## **Answer Key Questions:**

Why study financial markets?

Why study financial institutions and banking?

Why study money and monetary policy?

Why study international finance?

How will we study all of these areas?

# Learning Objectives

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By the end of the chapter, we will be able to

- Recognize the importance of financial markets in the economy
- Describe how financial intermediation and financial innovation affect banking and the economy
- Identify the basic links among monetary policy, the business cycle, and economic variables
- Explain the importance of exchange rates in a global economy

# Why Study Financial Markets?

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- **Financial Markets:** channel funds from those who do not have a productive use for them to those that do
- It directly affects our lives, businesses, and economy
- To learn about bond markets, interest rates, and stock markets

# The Bond Market and Interest Rates

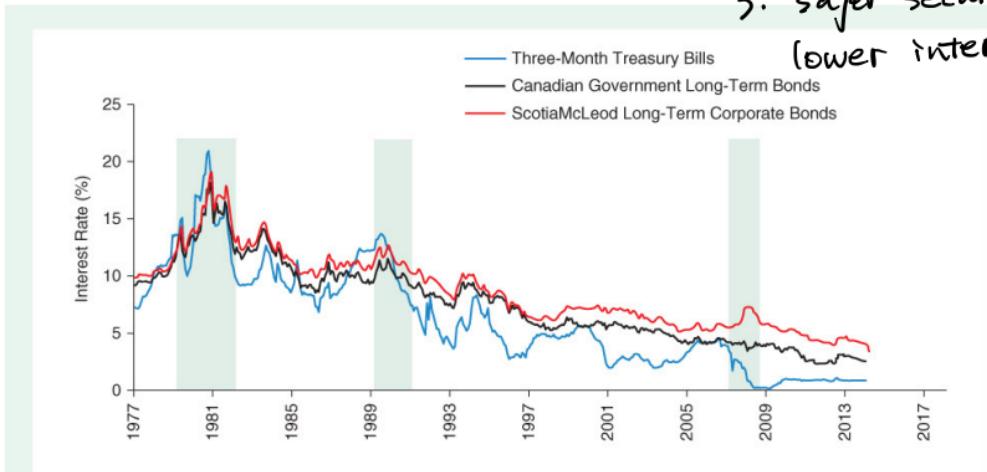
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- A **security** (or a financial instrument) is a claim on the issuer's future income or assets
- A **bond** is a debt security that promises to make payments periodically for a specified period of time
- An **interest rate** is the cost of borrowing or the price paid for the rental of funds
  - *Usually expressed as a percent*
  - *4% interest on \$100 means you must repay \$104 when due*

# Interest Rates on Selected Bonds

1. move together
2. long term → higher interest rate

3. safer securities → lower interest rate



**FIGURE 1-1** Interest Rates on Selected Bonds, 1977–2014

Although different interest rates have a tendency to move in unison, they often differ substantially, and the spreads between them fluctuate.

*Note:* Shaded areas represent recessions.

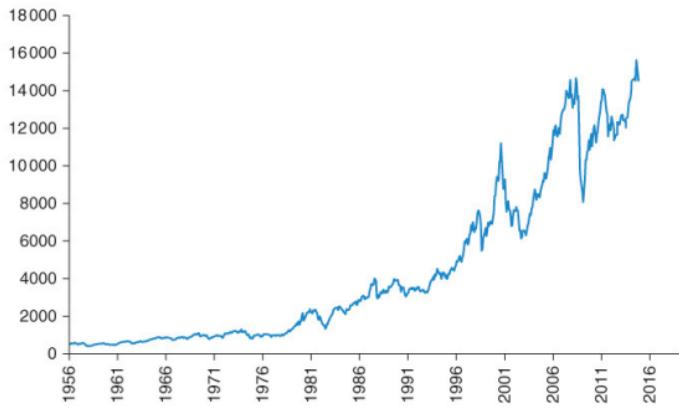
*Source:* Statistics Canada CANSIM series V122531, V122544, and V122518.

# The Stock Market

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- A **stock** is a share of ownership in a corporation
  - *Gives claim to the corporation's earnings and assets*
- A **stock market** is where stocks are bought and sold
- The value of stocks reflects the current value of a company, and expectations of future earnings growth
  - *Big swings in share price are often major news stories*

# Stock Prices



**FIGURE 1-2 Stock Prices as Measured by the S&P/TSX Composite Index, 1956–2014**

Stock prices are extremely volatile.

Source: Statistics Canada CANSIM series V122620.

# Why Study Financial Institutions and Banking?

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- They play a crucial role in the economy
- Banks and other financial institutions are what make financial markets work
- In short: they are the entities that move funds from people who save to people who have productive investment opportunities

# Financial Intermediaries

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- Institutions that borrow funds from people who have saved and then make loans to people who need funds
- **Banks:** Borrow funds by accepting deposits
  - *chartered banks, trust and mortgage loan companies, and credit unions and caisses populaires*
- **Other Financial Institutions:** insurance companies, finance companies, pension funds, mutual funds and investment banks

# Financial Innovation

## Regulation :

- **Innovation** in financial markets is the development of new financial products and services
  - *As with innovation in any sector, it is an important force for good by making the financial system more efficient*
- **E-Finance:** Delivering financial services electronically
- Creative thinking by financial institutions can improve efficiency, increase profits, but can also sometimes result in financial disasters

# Financial Crises

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- **Financial crises:** major disruptions in financial markets
  - *sharp declines in asset prices and the failures of many financial and nonfinancial firms*
- Are a feature of economies throughout history
- Typically followed by severe business cycle downturns
- August 2007, the U.S. experienced a serious crisis
  - *Defaults in subprime residential mortgages*
  - *Major losses in financial institutions, with many failing*

# Why Study Money and Monetary Policy?

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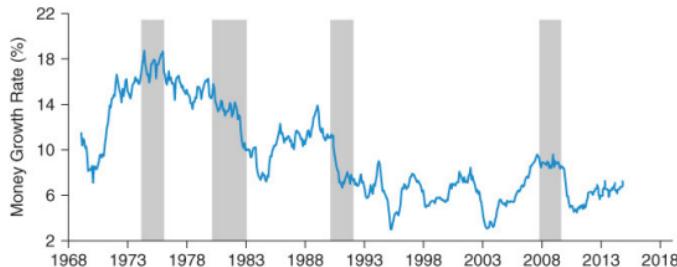
- Money is anything that is generally accepted as payment for goods or services, or to repay debts
- It affects a wide variety of other economic variables:
  - *Business Cycles*
  - *Inflation*
  - *Interest Rates*
- Monetary policy used to influence the economy
  - *Central role of Bank of Canada*

# Money and Business Cycles

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- **Business cycles** are the upward and downward movement of aggregate output in the economy
- Affects the **unemployment rate** (share of labour force that is not employed)  $LF = \text{employed} + \text{unemployed}$ .
- Evidence suggests money plays an important role in generating business cycles

# Money Growth and the Business Cycle



**FIGURE 1-3 Money Growth (M2++ (Gross) Annual Rate) and the Business Cycle in Canada, 1968–2014**

Although money growth has declined before almost every recession, not every decline in the rate of money growth is followed by a recession. Shaded areas represent recessions.

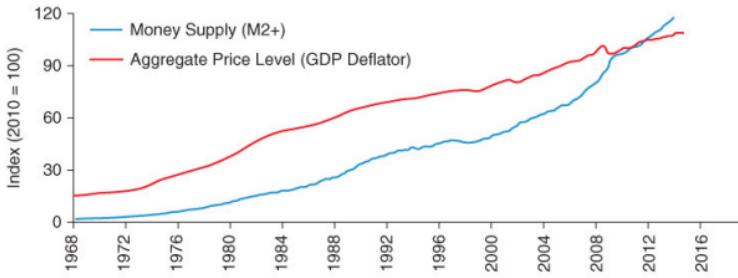
Source: Statistics Canada CANSIM series V41552801.

# Money and Inflation

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- **Aggregate price level** is the average price of goods and services in an economy
- **Inflation** is a broad-based increase in the price level
  - *Affects individuals, businesses, and the government*
  - What explains inflation?
    - *Inflation rate (percentage change of the price level) strongly related to growth rate of the money supply*
    - *This is true both within and across countries*

# Price Level and the Money Supply

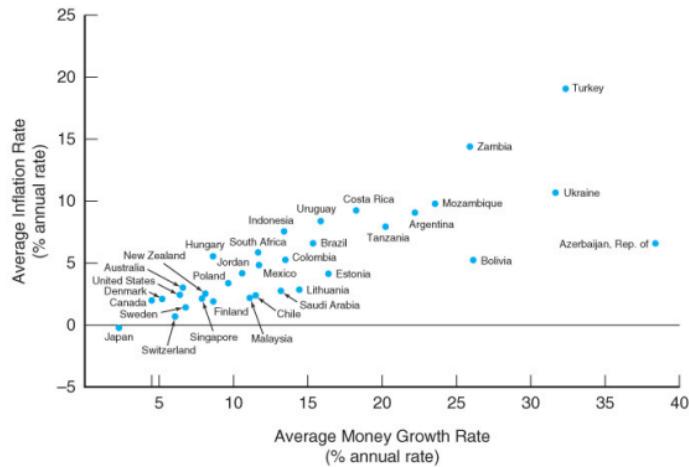


**FIGURE 1-4** Aggregate Price Level and the Money Supply in Canada, 1968–2014

From 1968 to 2014, the price level has increased more than sixfold.

Source: Federal Reserve Bank of St. Louis, FRED database: <http://research.stlouisfed.org/fred2/>.

# Average Inflation Rate Versus Average Rate of Money Growth for Selected Countries, 2000-2010



**FIGURE 1-5** Average Inflation Rate Versus Average Rate of Money Growth for Selected Countries, 2003–2013

A positive association can be seen between the 10-year averages of inflation and the growth rate of the money supply: the countries with the highest inflation rates are also the ones with the highest money growth rates.

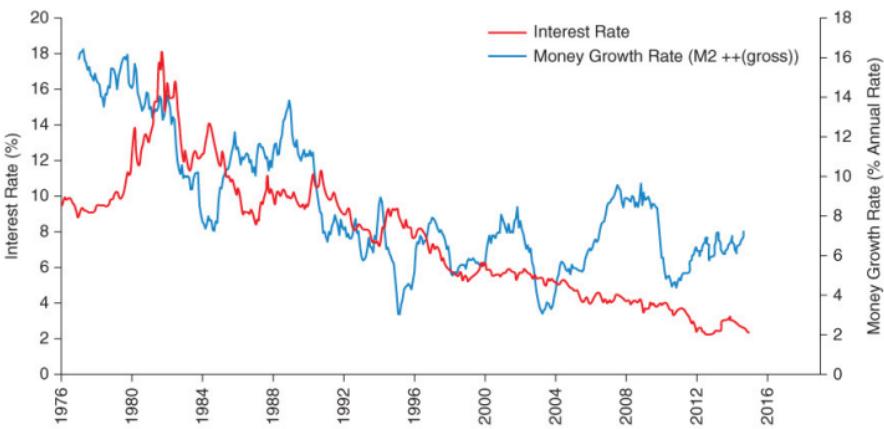
Source: International Financial Statistics. [www.imf.org/external/data.htm](http://www.imf.org/external/data.htm)

# Money and Interest Rates

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- An **interest rate** is the cost of borrowing or the price paid for the rental of funds
  - *Must compensate ~~borrowers~~ for expected inflation lenders.*
- Prior to 1980, the rate of money growth and the interest rate on long-term bonds were closely tied
- Since then, the relationship is less clear but still an important determinant of interest rates

# Money Growth and Interest Rates



**FIGURE 1-6 Money Growth (M2++ (Gross) Annual Rate) and Interest Rates (Long-Term Government of Canada Bonds), 1976–2014**

As the money growth rate fell in the 1980s and 1990s, the long-term bond rate fell with it. However, the relationship between money growth and interest rates has been less clear-cut since 2000.

Source: Statistics Canada CANSIM series V41552801 and V122544.

# Fiscal and Monetary Policy

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- **Monetary policy** involves managing the money supply and interest rates
  - *Conducted by the Bank of Canada using a variety of tools*
- **Fiscal policy** involves setting government expenditures and tax revenue
  - *Conducted by the government (Federal, Provincial)*
  - *Budget deficit is spending in excess of revenue*
  - *Budget surplus is spending less than revenue*

# Government Budget Surplus or Deficit



**FIGURE 1-7** Government Budget Surplus or Deficit as a Percentage of Gross Domestic Product, 1961–2014

The budget deficit, relative to the size of the Canadian economy, has fluctuated a lot over the years, rising to close to 9% of GDP in 1993 and falling subsequently to where there were budget surpluses from 1997 to 2008, only to rise subsequently with budget deficits of over 4% of GDP by 2009.

Source: Statistics Canada CANSIM series V498316, V498326, V498086, V62425528, V62425550, and V62295562.

# Why Study International Finance?

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- Globalization of financial markets has accelerated at a rapid pace in recent years
  - *Financial markets are increasingly integrated*
- Borrowing and lending can cross borders
  - *Canadian companies borrow in foreign markets*
  - *Foreign companies borrow in Canadian markets*
- Financial institutions increasingly international
  - *Operations in many countries*

# Foreign Exchange, The Market and Rates

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- The **foreign exchange market** is where funds are converted from one currency into another
- The **foreign exchange rate** is the price of one currency in terms of another currency
  - *If it takes \$0.80 U.S. dollars to buy \$1 Canadian dollar, then the USD/CAD exchange rate is 0.80*
  - *Appreciation is a rise in the value of the Canadian dollar*
  - *Depreciation is a fall in the value*
- Exchange rates determined in the market

# Exchange Rate of the Canadian Dollar



**FIGURE 1-8 Exchange Rate for the Canadian Dollar, 1971–2014**

The value of the Canadian dollar relative to the United States dollar has fluctuated substantially over the years.

Source: Statistics Canada CANSIM series V37426.

# The International Financial System

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- Tremendous increase in international capital flows has heightened the international financial system's impact on domestic economies
- Later in the course, we will explore
  - *How exchange rate policies (fixed, floating) are important part of monetary policy*
  - *How capital controls affect domestic financial systems*
  - *What is the role of international financial institutions (such as the International Monetary Fund)?*

# How We Will Study Money, Banking, and Financial Markets

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- We will develop an **economic way of thinking**
  - *A simplified approach to the demand for assets*
  - *The concept of equilibrium*
  - *Supply and demand to explain behavior in financial markets*
  - *The search for profits*
  - *An approach to financial structure based on transaction costs and asymmetric information*
  - *Aggregate supply and demand analysis*
- We will use simple models, case studies, applications, and current events in the financial news

# Exploring the Web

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- Statistics Canada: CANSIM database
- Federal Reserve Bank of St. Louis: FRED database
- Bank of Canada website
- MyEconLab

