

Monetary Theory and Policy

Chapter 25: Transmission Mechanisms of Monetary Policy

Transmission Mechanisms of Monetary Policy

- Examines whether one variable affects another by using data to build a model that explains the channels through which the variable affects the other.
- **Transmission mechanism**
 - The change in the money supply affects interest rates.
 - Interest rates affect investment spending.
 - Investment spending is a component of aggregate spending (output).

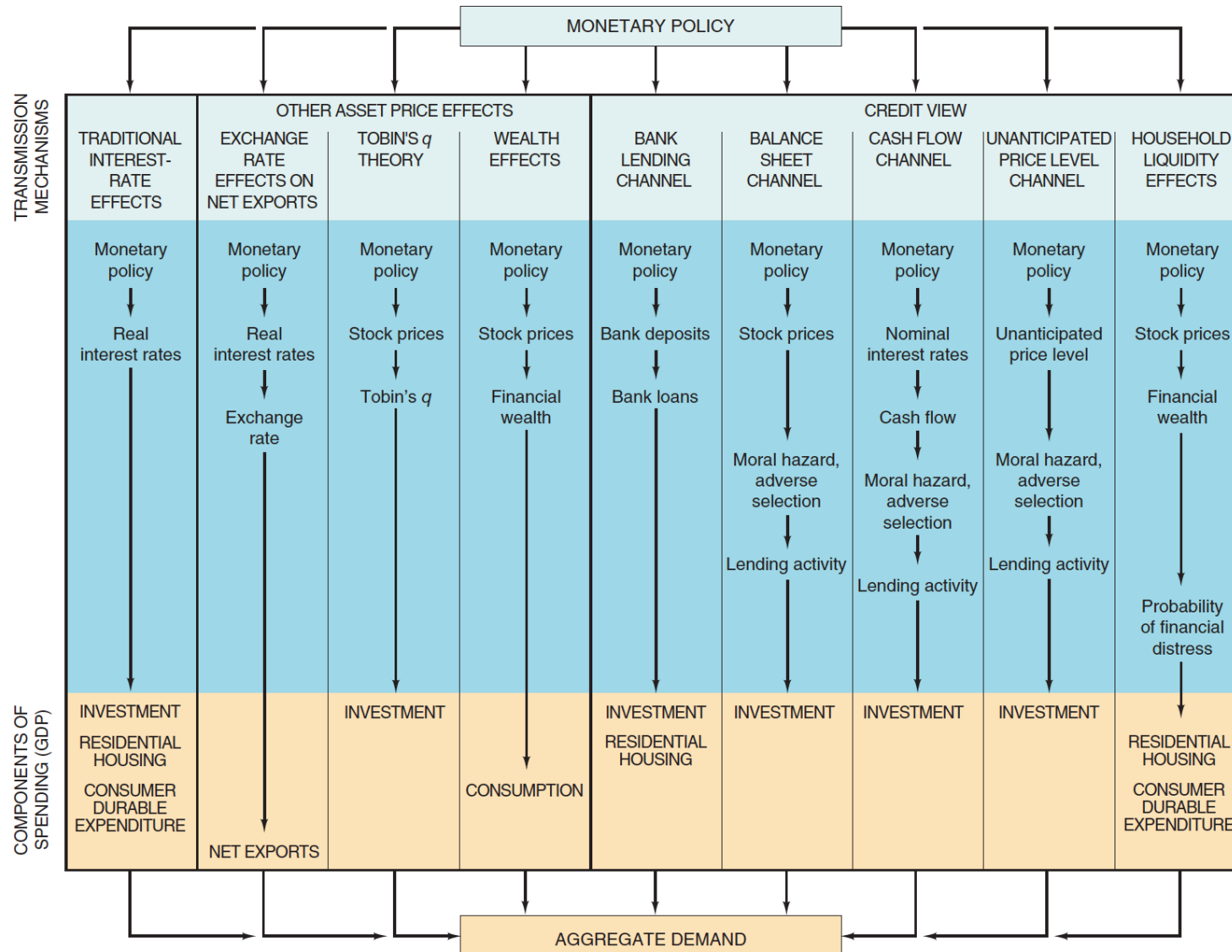
Traditional Interest-Rate Channels

- An important feature of the interest-rate transmission mechanism is its emphasis on the *real* (rather than the nominal) interest rate as the rate that affects consumer and business decisions.
- In addition, it is often the real *long-term* interest rate (not the real short-term interest rate) that is viewed as having the major impact on spending.

Other Asset Price Channels

- In addition to bond prices, two other asset prices receive substantial attention as channels for monetary policy effects:
 - Foreign exchange rates
 - The prices of equities (stocks)

Figure 1 The Link Between Monetary Policy and Aggregate Demand: Monetary Transmission Mechanisms



Tobin' s q Theory

- Tobin' s q Theory explains how monetary policy can affect the economy through its effects on the valuation of equities (stock).
- Defines q as the market value of firms divided by the replacement cost of capital
- If q is high, the market price of firms is high relative to the replacement cost of capital, and new plant and equipment capital is cheap relative to the market value of firms.
- When q is low, firms will not purchase new investment goods because the market value of firms is low relative to the cost of capital.

Wealth Effects

- Franco Modigliani looked at how consumers' balance sheets might affect their spending decisions.
- **Consumption** is spending by consumers on nondurable goods and services.
- An important component of consumers' lifetime resources is their financial wealth, a major component of which is common stocks.
- When stock prices rise, the value of financial wealth increases, thereby increasing the lifetime resources of consumers, and consumption should rise.

Credit View

- Dissatisfaction with the conventional stories that interest-rate effects explain the impact of monetary policy on expenditures on durable assets has led to a new explanation based on the problem of asymmetric information in financial markets that leads to financial frictions.
- This explanation, referred to as the *credit view*, proposes that two types of monetary transmission channels arise as a result of financial frictions in credit markets: those that operate through effects on bank lending and those that operate through effects on firms' and households' balance sheets.

Credit View

- **Bank Lending Channel:** Based on the analysis that demonstrates that banks play a special role in the financial system because they are especially well suited to solve asymmetric information problems in credit markets.
- **Balance Sheet Channel:** Like the bank lending channel, the balance sheet channel arises from the presence of financial frictions in credit markets.

Credit View

- **Cash Flow Channel:** Another balance sheet channel operates by affecting cash flow, the difference between cash receipts and cash expenditures.
- **Unanticipated Price Level Channel:** Another balance sheet channel operates through monetary policy effects on the general price level.

FYI: Consumers' Balance Sheets and the Great Depression

- The years between 1929 and 1933 witnessed the worst deterioration in consumers' balance sheets ever seen in the United States.
- Because of the decline in the price level in that period, the level of real debt consumers owed also increased sharply (by over 20%).
- Consequently, the value of financial assets relative to the amount of debt declined sharply, increasing the likelihood of financial distress.

Household Liquidity Effects

- Another way of looking at how the balance sheet channel may operate through consumers is to consider liquidity effects on consumer durable and housing expenditures.
- If, as a result of a bad income shock, consumers needed to sell their consumer durables or housing to raise money, they would expect a big loss because they could not get the full value of these assets in a distress sale.
- In contrast, if consumers held financial assets (such as money in the bank, stocks, or bonds), they could easily sell them quickly for their full market value and raise the cash.

Why Are Credit Channels Likely to Be Important?

- There are three reasons to believe that credit channels are important monetary transmission mechanisms:
 1. A large body of evidence on the behavior of individual firms supports the view that financial frictions of the type crucial to the operation of credit channels do affect firms' employment and spending decisions.

Why Are Credit Channels Likely to Be Important?

2. There is evidence that small firms (which are more likely to be credit-constrained) are hurt more by tight monetary policy than large firms, which are unlikely to be credit-constrained.
3. The asymmetric information view of credit market imperfections at the core of the credit channel analysis is a theoretical construct that has proved useful in explaining many other important phenomena, such as why many of our financial institutions exist, why our financial system has the structure that it has, and why financial crises are so damaging to the economy.

Application: The Great Recession

- With the advent of the financial crisis in the summer of 2007, the Fed began a very aggressive easing of monetary policy.
- At first, it appeared that the Fed's actions would keep the growth slowdown mild and prevent a recession. However, the economy proved to be weaker than the Fed or private forecasters expected, with the most severe recession in the post-war period beginning in December of 2007.
- Why did the economy become so weak despite this unusually rapid reduction in the Fed's policy instrument?

Application: The Great Recession

- The subprime meltdown led to negative effects on the economy from many of the channels we have outlined.
- The rising level of subprime mortgage defaults, which led to a decline in the value of mortgage-backed securities and CDOs, led to large losses on the balance sheets of financial institutions.

Application: The Great Recession

- With the weaker balance sheets, these financial institutions began to deleverage and cut back on their lending.
- With no one else to collect information and make loans, adverse selection and moral hazard problems increased in credit markets, leading to a slowdown of the economy.
- Credit spreads also went through the roof with the increase in uncertainty from failures of so many financial markets. The decline in the stock market and housing prices also weakened the economy, because it lowered household wealth.

Lessons for Monetary Policy

- **Four basic lessons:**

1. It is dangerous always to associate the easing or the tightening of monetary policy with a fall or a rise in short-term nominal interest rates.
2. Other asset prices besides those on short-term debt instruments contain important information about the stance of monetary policy because they are important elements in various monetary policy transmission mechanisms.

Lessons for Monetary Policy

- **Four basic lessons (cont' d):**

3. Monetary policy can be effective in reviving a weak economy even if short-term interest rates are already near zero.
4. Avoiding unanticipated fluctuations in the price level is an important objective of monetary policy, thus providing a rationale for price stability as the primary long-run goal for monetary policy.

Application: Applying the Monetary Policy Lessons to Japan

- The first lesson suggests that it is dangerous to think that declines in interest rates always mean that monetary policy has been easing.
- The second lesson suggests that monetary policymakers should pay attention to other asset prices in assessing the stance of monetary policy.
- The third lesson indicates that monetary policy can still be effective even if short-term interest rates are near zero.
- The fourth lesson indicates that unanticipated fluctuations in the price level should be avoided.