Economic Policy, Y2020

Lecturer: Ivan Monich, PhD, https://www.monich.pro/

Week & date	Topic & Indicative Content	
Week 01 September 07, 08	**Introduction class.** What is an Economic Policy Economic policy is a course of action that is intended to influence or control the behavior of the economy. Economic policies are typically implemented and administered by the government. Examples of economic policies include decisions made about government spending and taxation, about the redistribution of income from rich to poor, and about the supply of money. The goals of economic policy may vary depending on the political and economic situation, but they often include economic growth, full employment, price stability, and international trade. Economic policy can be divided into two main types: fiscal policy, which deals with government budget and taxation, and monetary policy, which deals with money supply and interest rates. Economic policy • Types of economic policy • Macroeconomic stabilization policy • Tools and goals • Selecting tools and goals • Demand-side vs. supply-side tools • Discretionary policy vs policy rules • Economic policy through history • The first fiscal policy • Business cycles • Evidence-based policy	
Week 02 September 14, 15	Why It Matters: Money and Banking Monetary Policy Why explain the role of money and banking in an economy? We introduce money and the financial side of the economy. In an important sense, this module is similar to the one on budgets and fiscal policy. In this module, we start with practical stuff: • What is money? • What are banks? • How does credit work? • What is the difference between a credit card and a debit card? Introduction to Defining Money What you'll learn to do: define money, explain the functions of money, and define liquidity. Defining Money by Its Functions LEARNING OBJECTIVES: • Explain the functions of money • Contrast commodity money and fiat money Functions of Money. Money is anything that can serve all of these functions— it is a • medium of exchange, • a store of value, • a unit of account, and • a standard of deferred payment.	

Commodity versus Fiat Money

GLOSSARY

barter: literally, trading one good or service for another, without using money

commodity money: an item that is used as money, but which also has value from its use as something other than money

commodity-backed currencies: dollar bills or other currencies values were backed up by gold or another commodity

double coincidence of wants: a situation in which two people each want some good or service that the other person can provide

fiat money: something used as money, but which has no intrinsic value besides that

medium of exchange: whatever is widely accepted as a method of payment

money: whatever serves society in four functions: as a medium of exchange, a store of value, a unit of account, and a standard of deferred payment.

standard of deferred payment: money must also be acceptable to make purchases today that will be paid in the future

store of value: something that serves as a way of preserving economic value that one can spend or consume in the future

unit of account: the common way in which we measure market values in an economy

GLOSSARY

coins and currency in circulation: the coins and bills that circulate in an economy that are not held by the U.S Treasury, at the Federal Reserve Bank, or in bank vaults

credit card: immediately transfers money from the credit card company's checking account to the seller, and at the end of the month the user owes the money to the credit card company; a credit card is a short-term loan

debit card:like a check, is an instruction to the user's bank to transfer money directly and immediately from your bank account to the seller

demand deposit:checkable deposit in banks that is available by making a cash withdrawal or writing a check

liquidity: how quickly and easily an asset can be converted to a means of payment to make a purchase

M1 money supply: a narrow definition of the money supply that includes currency and checking accounts in banks, and to a lesser degree, traveler's checks.

M2 money supply: a definition of the money supply that includes everything in M1, but also adds savings deposits, money market funds, and certificates of deposit

money market fund: the deposits of many investors are pooled together and invested in a safe way like short-term government bonds

savings deposit:bank account where you cannot withdraw money by writing a check, but can withdraw the money at a bank—or can transfer it easily to a checking account

smart card: stores a certain value of money on a card and then one can use the card to make purchases

time deposit: account that the depositor has committed to leaving in the bank for a certain period of time, in exchange for a higher rate of interest; also called certificate of deposit

Measuring Money: Currency, M1, and M2

At the end of **August 2022**, M1 in the United States was $20.5 trillion, while M2 was $21.7 trillion

Mar-22	20820.2	21855.7
	M1	M2

Visit this page to get the updated data https://www.federalreserve.gov/RELEASES/h6/current/default.htm#t2tg1

Week 03
September 21, 22

LEARNING OBJECTIVES
• Define and explain credit

Week 04
September 28, 29

Introduction to Financial Markets. What you'll learn to do: describe the role financial markets play in an economy

Financial Markets and Assets

An **IOU**, also known as an "I owe you, " is a document or informal agreement that acknowledges a debt that one person owes to another. It is typically used in situations where a person borrows money or an item from someone else, and promises to repay the debt at a later date. **IOUs** can take many forms, from a written document that spells out the terms of the loan, to a verbal agreement between two parties.

LEARNING OUTCOMES Describe financial markets and assets, including securities. Individuals can either consume or save their income. It should be noted that business investment in physical capital is the primary way they grow. All financial assets are called securities. Equities (i.e. stocks) give savers ownership in a company in return for dividends (a regular payment from the company) and/or capital gains (e.g. when you sell the stock at a profit). Bonds are a type of debt. All forms of debt are IOUs, where a saver lends money to a borrower in return for an interest payment.

Borrowing: Banks and Bonds

Corporate Stock

Dividends & capital gain

GLOSSARY

bills: short term (less than one year) debt instruments

bond: a financial contract through which a borrower like a corporation, a city or state, or the federal government agrees to repay the amount that it borrowed and also a rate of interest over a period of time in the future; usually long-term (greater than 10 year) debt instruments

bondholder: someone who owns bonds and receives the interest payments

capital gain: a financial gain from buying an asset, like a share of stock or a house, and later selling it at a higher price

corporation: a business owned by shareholders who have limited liability for the company's debt yet a share of the company's profits; may be private or public and may or may not have publicly-traded stock

dividend: a direct payment from a firm to its shareholders

equities or stocks: ownership in a private company (unlike debt which conveys no ownership)

financial markets: marketplace where money is invested and borrowed, or in other words, where securities are traded

initial public offering (IPO): original sale of stock by a corporation

mutual funds: funds that buy a range of stocks or bonds from different companies, thus allowing an investor an easy way to diversify

notes: intermediate term (1-10 year) debt instruments

private company: a firm owned by the people who run it on a day-to-day basis

public company: a firm that has sold stock to the public, which in turn investors then can buy and sell

securities: synonym for financial assets, or a certificate or other financial instrument that has monetary value and can be traded. These can be debt securities like bonds or equity securities like stocks.

shareholders: people who own at least some shares of stock in a firm

shares: a firm's stock, divided into individual portions

sole proprietorship: a company run by an individual as opposed to a group

stock: a specific firm's claim on partial ownership

Treasury bond: a bond issued by the federal government through the U.S. Department of the Treasury

venture capital: financial investments in new companies that are still relatively small in size, but that have potential to grow substantially

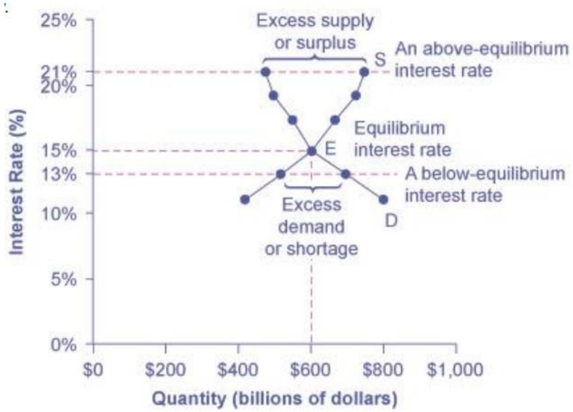
Financial Markets, Supply and Demand, and Interest

LEARNING OBJECTIVES

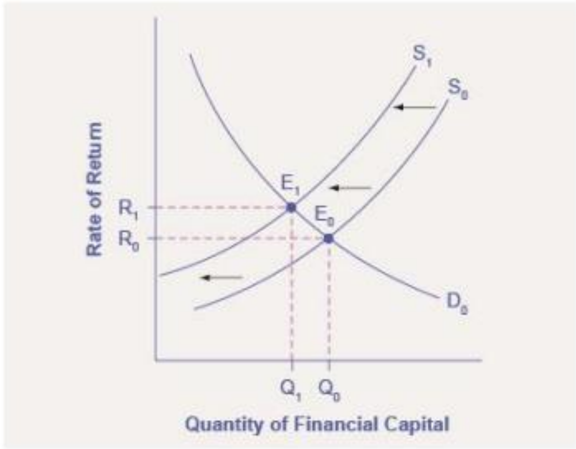
• Describe types of financial markets and how they are linked • Explain how market forces determine interest rates in financial markets In this section, we will explore these two features, that asset prices or rates of return are determined by supply and demand, and that all financial markets are linked. These features will help us understand later how monetary policy works.

Who Demands and Who Supplies in Financial Markets?

Financial markets can be analyzed by using the theories of supply and demand. Those who save money (or make financial investments, which is the same thing), whether individuals or businesses, are on the supply side of the financial market. Those who borrow money are on the demand side of the financial market. The simplest example of a rate of return is an interest rate.



Shifts in Demand and Supply in Financial Markets



GLOSSARY

interest rate: the "price" of borrowing in the financial market; a rate of return on an investment

intertemporal decision making: the study of how people make choices about what and how much to do at various points in time; when choices at one time influence the possibilities available at other points in time

Introduction to Banking

What you'll learn to do: explain what a bank does. A nation's banking system consists of commercial banks and similar financial institutions, and a central bank, which regulates commercial banks and the availability of credit. In the United States, the central bank is called the Federal Reserve System.

In this section, you will examine the role of banks and understand the purpose they serve in the economy.

The Commercial Banking System

LEARNING OBJECTIVES • Explain how banks act as intermediaries between savers and borrowers • Differentiate between banks and credit unions

Banks as Financial Intermediaries

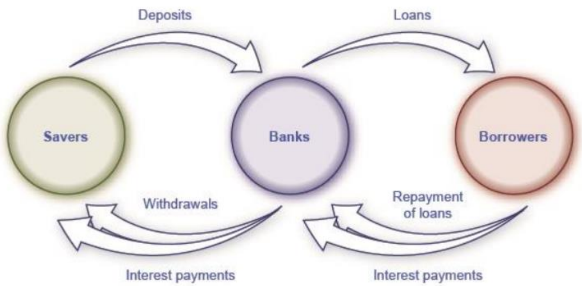


Figure 1. Banks as Financial Intermediaries. Banks act as financial intermediaries because they stand between savers and borrowers. Savers place deposits with banks, and then receive interest payments and withdraw money. Borrowers receive loans from banks and repay the loans with interest. In turn, banks return money to savers in the form of withdrawals, which also include interest payments from banks to savers.

GLOSSARY

checking account: a bank account that typically pays little or no interest, but that gives easy access to money, either by writing a check or by using a "debit card"

credit union: a nonprofit financial institution that its members own and run

debit card: a card that lets the person make purchases, and the financial institution immediately deducts cost from that person's checking account

depository institution: institution that accepts money deposits and then uses these to make loans

financial intermediary: an institution that operates between a saver with financial assets to invest and an entity who will borrow those assets and pay a rate of return

payments system: system by which buyers and sellers exchange money for goods, services and financial capital.

savings account: a bank account that pays an interest rate, but withdrawing money typically requires a trip to the bank or an automatic teller machine

transaction costs: the costs associated with finding a lender or a borrower for money

Banking Assets and Liabilities LEARNING OBJECTIVES • Describe a bank's assets and liabilities in a T-account • Analyze the causes of bankruptcy and recessions A balance sheet is an accounting tool that lists assets and liabilities. An asset is something of value that is owned and can be used to produce something.

Week 05
Holiday week
October 08

Week 06
October 12, 13

Week 07
October 19, 20

Why It Matters: Monetary Policy
Introduction to the Federal Reserve.
What you'll learn to do: explain the structure, functions, and responsibilities of the Federal Reserve System.

Banks, Loan Finance, and the Payments System LEARNING OBJECTIVES • Explain the key role of banks in bringing lenders and borrowers together, and in facilitating the payments system • Explain how the nature of banks makes them susceptible to bank runs

GLOSSARY

financial contagion:
when fears that one bank is insolvent spread to fears that other banks are insolvent; can cause bank runs to occur at multiple banks

illiquidity:
when the demand for cash by depositors exceeds the bank's available reserves

insolvency:
when the value of a bank's assets is less than the value of its liabilities; i.e. bankrupt

The Federal Reserve System and Central Banks LEARNING OBJECTIVES • Explain the structure and organization of the U.S. Federal Reserve • Discuss how central banks impact monetary policy, promote financial stability, and provide banking services

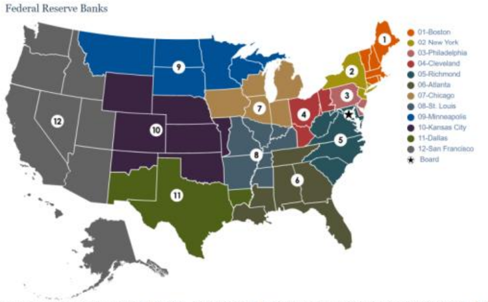
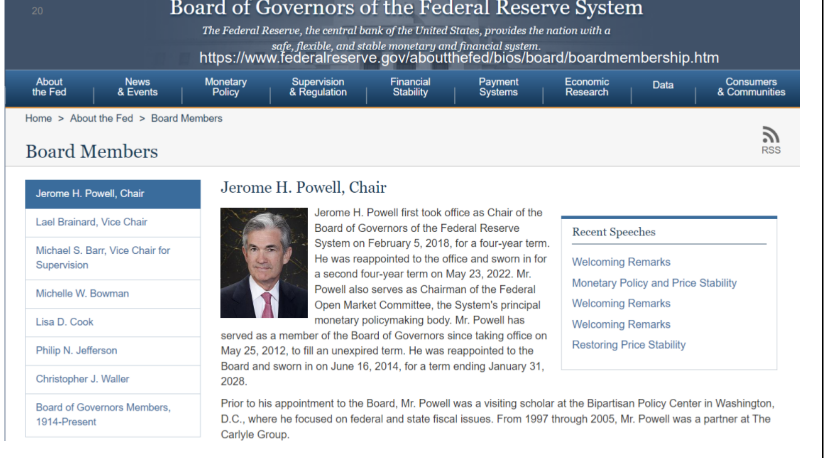


Figure 1. The Twelve Federal Reserve Districts. There are twelve regional Federal Reserve banks, each with its district.



What Does a Central Bank Do?
The Federal Reserve, like most central banks, is designed to perform three important functions:
1. To provide banking services to commercial banks and other depository institutions, and to provide banking services to the federal government.

2. To promote stability of the financial system
3. To conduct monetary policy

GLOSSARY

central bank:

institution which conducts a nation's monetary policy and regulates its banking system

Federal Reserve:

the central bank of the United States run by a 7-member Board of Governors in conjunction with 12 regional Federal Reserve banks

GLOSSARY

bank capital requirements minimum percentage (of assets): a bank's capital must exceed to stay in operation

bank run: when depositors fear their bank is insolvent, they will "run" to withdraw their deposits; because of fractional reserve banking, bank runs can turn solvent banks insolvent

deposit insurance: program which insures commercial bank depositors up to $250,000 per bank in the U.S.

lender of last resort: role of the Fed to provide loans to distressed banks when the banks can't obtain credit from anywhere else

Bank Regulation
LEARNING OBJECTIVES
• Explain bank supervision and measures taken to reduce the risk of bank insolvency (including reserve requirements, bank capital requirements, and restrictions on investments)
• Explain how deposit insurance and lender of last resort are two strategies to protect against bank runs

Introduction to Monetary Policy What you'll learn to do: describe monetary policy and the Fed's three main policy tools.
LEARNING OBJECTIVES • Describe monetary policy and the Fed's three main policy tools • Explain and demonstrate how the central bank executes monetary policy by changing the discount rate • Explain and demonstrate how the central bank executes monetary policy through changing reserve requirements

How a Central Bank Executes Monetary Policy

Monetary policy operates through a complex mechanism, but the basic idea is simple. The Fed supplies (or withdraws) reserves to the banking system, which affects the availability of credit generally.

A central bank has three traditional tools to implement monetary policy in the economy:

- Changing the discount rate, which is the interest rate charged by the central bank on the loans that it gives to other commercial banks. What is the discount rate here in China?
- Changing reserve requirements, which determine what level of reserves a bank is legally required to hold
- Open market operations, which involves buying and selling government bonds with banks

GLOSSARY

discount rate: the interest rate charged by the central bank on the loans that it gives to other commercial banks

federal funds rate: the interest rate on overnight, interbank loans.

open market operations: the central bank selling or buying Treasury bonds to influence the quantity of money and the level of interest rates

reserve requirement: the percentage amount of its total deposits that a bank is legally obligated to either hold as cash in their vault or deposit with the central bank

Economic Stimulus: Monetary & Fiscal Policy Explained

https://www.youtube.com/watch?v=m9gRqxK0FKE

Monetary Policy–How banks are creating Money.

https://www.youtube.com/watch?v=JG5c8nhR3LE

Monetary Policy and Open Market Operations

LEARNING OUTCOMES

• Explain and demonstrate how the central bank executes monetary policy through open market operations

The most commonly used tool of monetary policy in the U.S. is open market operations. Open market operations take place when the central bank sells or buys U.S. Treasury securities in order to influence the quantity of bank reserves and the level of interest rates. When the Fed conducts open market operations, it targets the federal funds rate, since that interest rate reflects credit conditions in financial markets very well.

USING THE MONEY MULTIPLIER FORMULA

How much did the Fed's $20 million open market purchase of bonds increase the money supply? We can use the following formula to find out, recalling that since the reserve requirement is 10%, the money multiplier is 10:

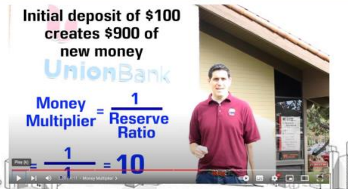
$$\text{Change in the Money Supply} = \text{Money Multiplier} \times \text{Amount of Fed's Bond Purchase}$$

Or in other words,

$$\text{Change in the Money Supply} = \text{Money Multiplier} \times \text{Change in Bank Reserves}$$

so,

$$\text{Change in the Money Supply} = 10 \times 20 \text{ million} = 200 \text{ million}$$



GLOSSARY

open market operations: the central bank selling or buying Treasury securities to influence the quantity of money and the level of interest rates

open market purchase: the central bank buys Treasure securities to increase bank reserves and lower interest rates

open market sale: the central bank sells Treasure securities to decrease bank reserves and raise interest rates

Introduction to Monetary Policy and Economic Outcomes

Introduction to Monetary Policy and Economic Outcomes

What you'll learn to do: explain how monetary policy affects GDP and the interest rates

Expansionary and contractionary monetary policies affect the broader economy, by influencing interest rates, aggregate demand, real GDP and the price level. In this section, we will take a look at the mechanisms by which monetary policy plays out.

https://www.istockphoto.com/photo/bull-and-bear-in-london-gm481498493-37446806

Monetary Policy and Interest Rates

LEARNING OBJECTIVES • Contrast expansionary monetary policy and contractionary monetary policy • Explain how monetary policy impacts interest rates • Explain how monetary policy tools (changes to the reserve requirement, discount rate, or open market operations) affect the money market

Expansionary and Contractionary Policies

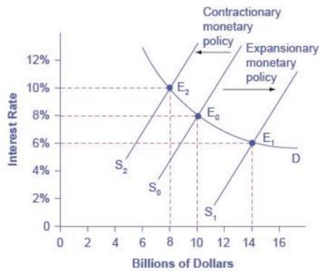


Figure 1. Monetary Policy and Interest Rates. The original equilibrium occurs at E_0. An expansionary monetary policy will shift the supply of loanable funds to the right from the original supply curve (S_0) to the new supply curve (S_1) and to a new equilibrium of E_1, reducing the interest rate from 8% to 6%. A contractionary monetary policy will shift the supply of loanable funds to the left from the original supply curve (S_0) to the new supply (S_2), and raise the interest rate from 8% to 10%.

GLOSSARY

capital market:

the markets for long term financial assets

contractionary (or tight) monetary policy:

a monetary policy that reduces the supply of money and increases interest rates

expansionary (or loose) monetary policy:

a monetary policy that increases the supply of money and reduces interest rate

federal funds rate

the interest rate at which one bank lends funds to another bank overnight

market for loanable funds

a broad view of financial markets, including equities, bonds, bank accounts, credit, and all other financial assets

money market:

the markets for short term financial assets

prime rate:

the interest rate banks charge their very best corporate customers, borrowers with the strongest credit ratings

Monetary Policy and Aggregate Demand

LEARNING OBJECTIVES

• Explain and show how monetary policy impacts aggregate demand

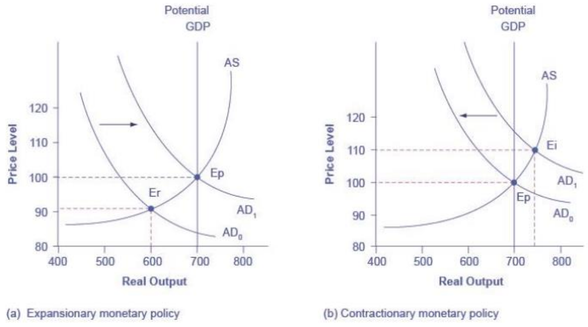


Figure 1. Expansionary or Contractionary Monetary Policy. (a) The economy is originally in a recession with the equilibrium output and price level shown at Er. Expansionary monetary policy will reduce interest rates and shift aggregate demand to the right from AD_0 to AD_1, leading to the new equilibrium (Ep) at the potential GDP level of output with a relatively small rise in the price level. (b) The economy is originally producing above the potential GDP level of output at the equilibrium Ei and is experiencing pressures for an inflationary rise in the price level. Contractionary monetary policy will shift aggregate demand to the left from AD_0 to AD_1, thus leading to a new equilibrium (Ep) at the potential GDP level of output.

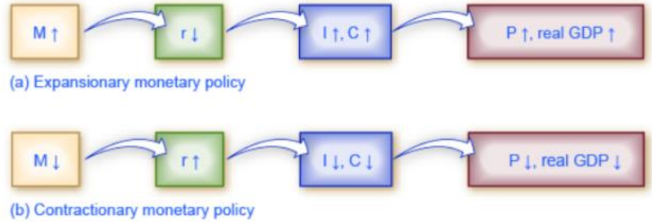
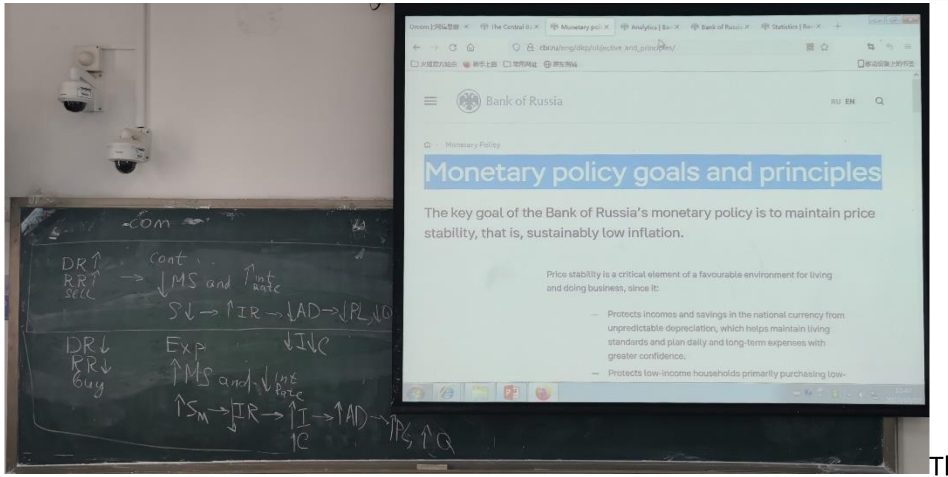


Figure 2. The Pathways of Monetary Policy. (a) In expansionary monetary policy the central bank causes the supply of money and loanable funds to increase, which lowers the interest rate, stimulating additional borrowing for investment and consumption, and shifting aggregate demand right. The result is a higher price level and, at least in the short run, higher real GDP. (b) In contractionary monetary policy, the central bank causes the supply of money and credit in the economy to decrease, which raises the interest rate, discouraging borrowing for investment and consumption, and shifting aggregate demand left. The result is a lower price level and, at least in the short run, lower real GDP.



The sequence of the impact chain.

Federal Reserve Actions and Quantitative Easing LEARNING OBJECTIVES • Evaluate Federal Reserve decisions over the last forty years • Explain the significance of quantitative easing (QE)

Federal Reserve Actions Over Last Four Decades

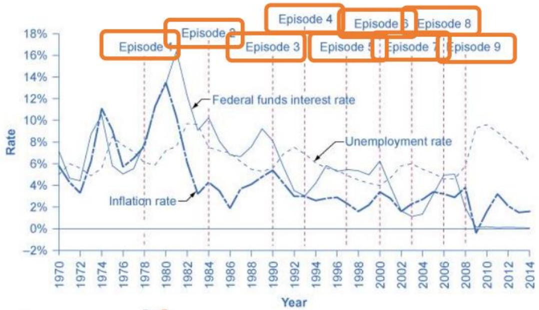


Figure 1. Monetary Policy, Unemployment, and Inflation. Through the episodes shown here, the Federal Reserve typically reacted to higher inflation with a contractionary monetary policy and a higher interest rate, and reacted to higher unemployment with an expansionary monetary policy and a lower interest rate.

GLOSSARY

countercyclical:
moving in the opposite direction of the business cycle of economic downturns and upswings

federal funds rate:
the interest rate at which one bank lends funds to another bank overnight

quantitative easing (QE):
the purchase of long-term government and private mortgage-backed securities by central banks to make credit available in hopes of stimulating aggregate demand

Policy Applications

Why apply fiscal and monetary policies in macroeconomic situations? The module really ties together everything we've learned about macroeconomics. In earlier modules we introduced the concepts of fiscal and monetary policy. In this module, we examine the two types of policy in more detail, incorporating all the pros and cons of the real world. By extension, we will be evaluating the policy prescriptions of Keynesian and neoclassical economics. As you work through this module, use the following questions to guide your thinking:

• Under what circumstances do fiscal and monetary policy work well, or not so well, in managing the economy?
• For the activist Keynesians, what are the limits to fiscal and monetary policy that you would endorse, and why?
• For the laissez-faire neoclassicals, what is the minimalist fiscal and monetary policy that makes sense, and why?
• How is macroeconomic policy is the real world more complicated than in theory?

Introduction to Keynesian and Neoclassical Policy Prescriptions

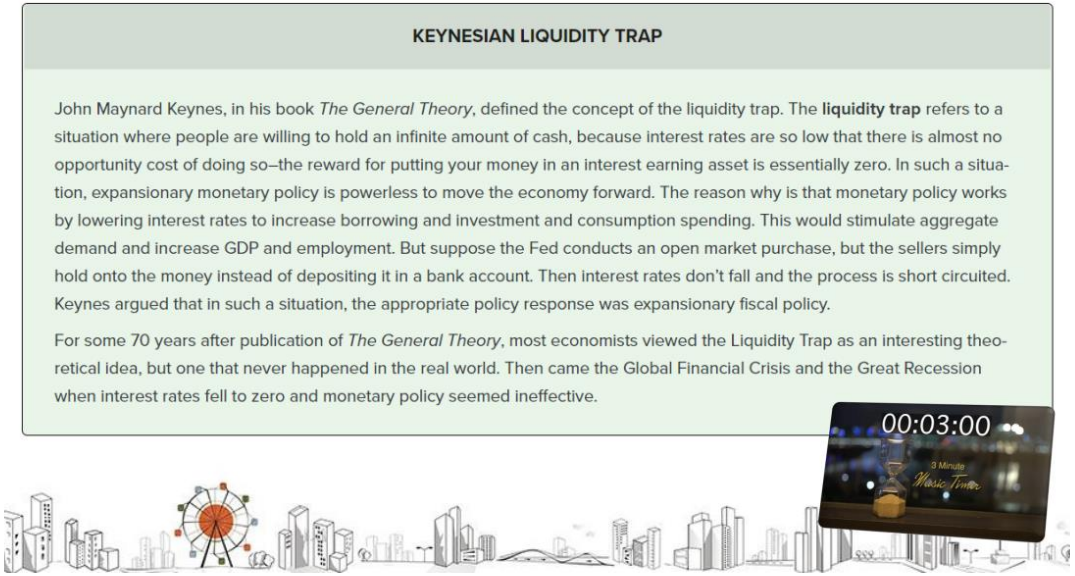
What you'll learn to do: compare viewpoints on government spending and taxes between the Keynesian and Neoclassical perspectives.

In previous modules, we've learned about both the Keynesian and Neoclassical perspectives on the macro economy. Neoclassicals take a laissez-faire approach to macro policy. They believe that the economy is self-correcting, and doesn't need government intervention. Indeed, we will see that Neoclassicals believe that government intervention is counterproductive. Keynesians take a more active approach. They believe that the economy takes too long to correct itself and that government has a responsibility to speed things up and minimize the adverse effects of unemployment, inflation and other economic problems.

Reviewing the Neoclassical Perspective

Neoclassical economics covers several distinct schools of thought, including traditional neoclassical economics, supply side economics, and new classical economics. Each of these schools of thought shares a number of key beliefs, which makes them neoclassical. The first belief is that the macro economy is selfcorrecting, or that there is no need for government intervention. The second belief, for reasons to be discussed shortly, is that government "fine tuning" of the economy either through fiscal or monetary policy would be unwise and ineffective.

Reviewing the Keynesian Perspective


KEYNESIAN LIQUIDITY TRAP

John Maynard Keynes, in his book *The General Theory*, defined the concept of the liquidity trap. The **liquidity trap** refers to a situation where people are willing to hold an infinite amount of cash, because interest rates are so low that there is almost no opportunity cost of doing so–the reward for putting your money in an interest earning asset is essentially zero. In such a situation, expansionary monetary policy is powerless to move the economy forward. The reason why is that monetary policy works by lowering interest rates to increase borrowing and investment and consumption spending. This would stimulate aggregate demand and increase GDP and employment. But suppose the Fed conducts an open market purchase, but the sellers simply hold onto the money instead of depositing it in a bank account. Then interest rates don't fall and the process is short circuited. Keynes argued that in such a situation, the appropriate policy response was expansionary fiscal policy.

For some 70 years after publication of *The General Theory*, most economists viewed the Liquidity Trap as an interesting theoretical idea, but one that never happened in the real world. Then came the Global Financial Crisis and the Great Recession when interest rates fell to zero and monetary policy seemed ineffective.

liquidity trap: Keynesian idea that when interest rates are very low, people are willing to hold cash, rather than put it into financial markets, eliminating the ability for expansionary monetary policy to work

Introduction to the Phillips Curve

What you'll learn to do: explain the reasoning behind the theory of the Phillips Curve and why it may not hold. The Phillips Curve is a key part of Keynesian economics, at least the Keynesian economics of the 1960s. In this section, you'll learn what makes the Phillips curve Keynesian, and why neoclassicals believe it may not hold in the long run. This speaks to the effectiveness of demand management policies, which is a major subject of this module.

Week 08
October 26, 27

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Assignment for the course Economic policy is to select a country and analyze its central bank's monetary policy. You should prepare a 5-minute presentation You should use reliable sources of information, such as official reports, academic papers, or reputable media outlets. You should also cite your sources properly and avoid plagiarism. Your presentation should be clear, concise, and professional.

The objectives of academic writing are to help students develop the skills and strategies necessary to produce clear, coherent, and effective texts in various academic contexts. It covers topics such as organizing and developing ideas, using appropriate language and style, citing and referencing sources, and revising and editing drafts, students should be able to write with confidence, accuracy, and coherence for different academic purposes and audiences.

Task Academic writing. Write an email to me in which you justify your choice of country for the analysis of its central bank's monetary policy. Briefly explain the main features and challenges of the country's economic situation and how they relate to the policy objectives and instruments of the central bank (optional). Explain why you want to choose this country as an example (mandatory). Use a professional tone and cite relevant sources to support your arguments if needed. The main objective of the task is to get the skills in academic communication.

252

Assignment for the course Economic policy is to select a country and analyze its central bank's monetary policy. You should prepare a 5-minute presentation You should use reliable sources of information, such as official reports, academic papers, or reputable media outlets. You should also cite your sources properly and avoid plagiarism. Your presentation should be clear, concise, and professional.

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Email address: IvanMonich@TJFSU.edu.cn, deadline is 11:40 (Beijing time)

Week 09
November 02, 03

Why It Matters: Fiscal Policy

- People often complain about taxes, but what proportion of tax revenue comes from individuals, what proportion comes from corporations, and what proportion comes from foreigners? What proportion of tax revenue is based on income?
- What proportion is based on property?
- What proportion is based on our purchases?
- How much of the federal budget is spent on "welfare" type expenditures?

Introduction to Budgets and Taxes

https://www.govinfo.gov/app/details/BUDGET-2024-TAB/

Federal Taxes

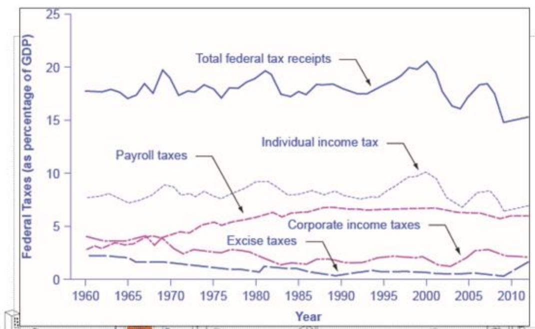

Figure 1. Federal tax revenues have been about 17–20% of GDP during most periods in recent decades. The primary sources of federal taxes are individual income taxes and the payroll taxes that finance Social Security and Medicare. Corporate income taxes and social insurance taxes provide smaller shares of revenue. (Source: Economic Report of the President, 2015. Table B-21, https://www.whitehouse.gov/administration/eop/cea/economic-report-of-the-President/2015)

Budget deficit and surpluses

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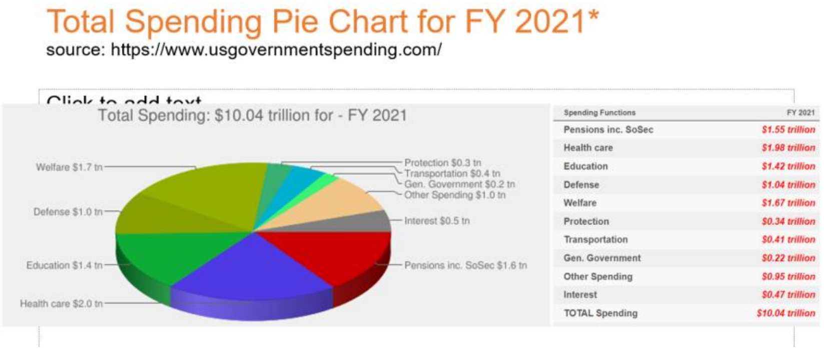

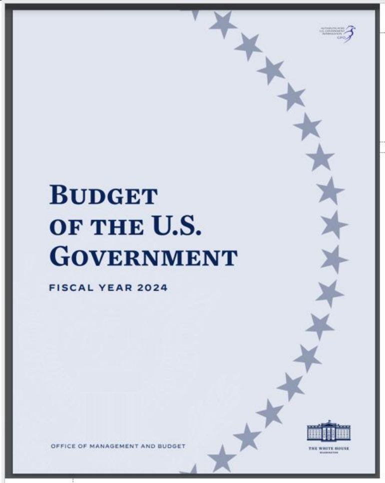

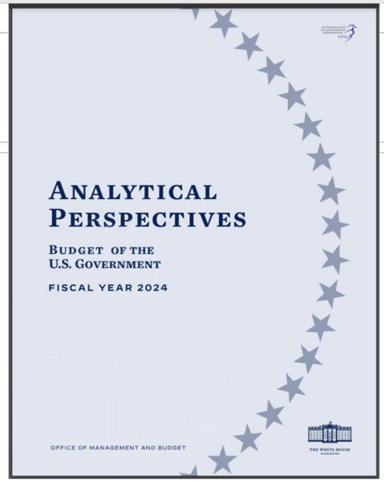

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November 09, 10</td><td></td></tr>
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November 16, 17</td><td>-</td></tr>
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November 23, 24</td><td>-</td></tr>
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November 30
December 01</td><td>-</td></tr>
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<tr><td>Week 18
January 07, 08</td><td>Review of the studied materials</td></tr>
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