<table>
<tr><td colspan="3">Economic Policy, Y2020
Lecturer: Ivan Monich, PhD, https://www.monich.pro/</td></tr>
<tr><td>Week & date</td><td colspan="2">Topic & Indicative Content</td></tr>
<tr><td>Week 01
September 07, 08</td><td>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</td><td></td></tr>
<tr><td>Week 02
September 14, 15</td><td colspan="2">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.</td></tr>
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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

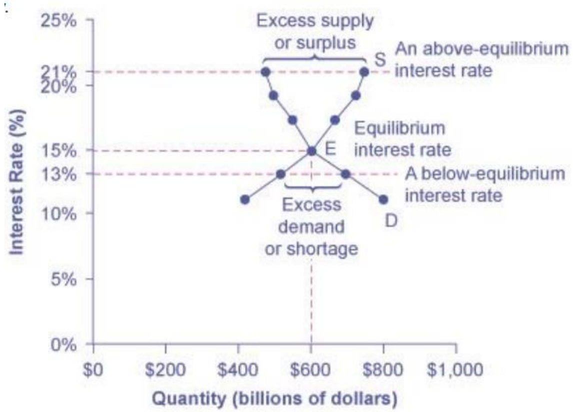
Financial Markets, Supply and Demand, and Interest

LEARNING OBJECTIVES

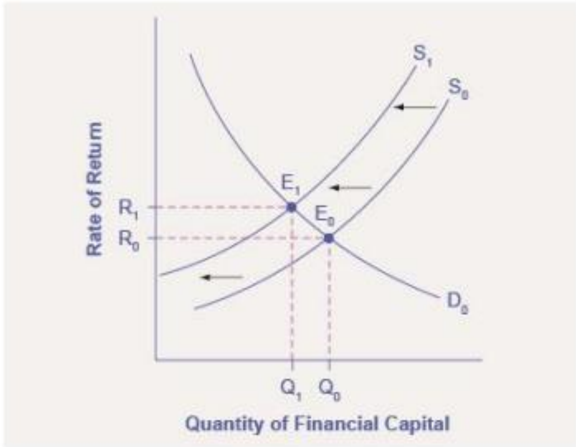
• Describe types of financial markets and how they are linked • Explain how market forces determine interest rates in financial markets In this section, we will explore these two features, that asset prices or rates of return are determined by supply and demand, and that all financial markets are linked.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

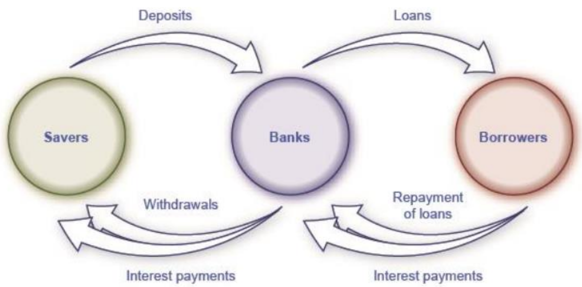


Figure 1. Banks as Financial Intermediaries. Banks act as financial intermediaries because they stand between savers and borrowers. Savers place deposits with banks, and then receive interest payments and withdraw money. Borrowers receive loans from banks and repay the loans with interest. In turn, banks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

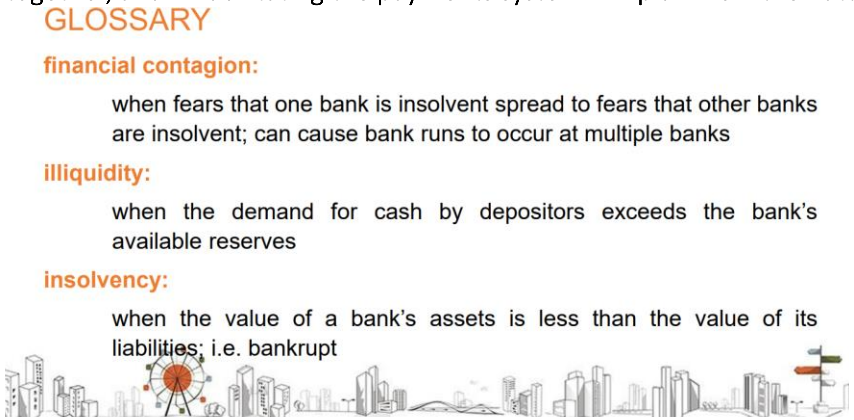
savings account: a bank account that pays an interest rate, but withdrawing money typically requires a trip to the bank or an automatic teller machine

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	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.
Week 06 October 12, 13	
Week 07 October 19, 20	

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:

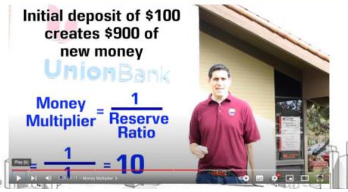
$$\text{Change in the Money Supply} = \text{Money Multiplier} \times \text{Amount of Fed's Bond Purchase}$$

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

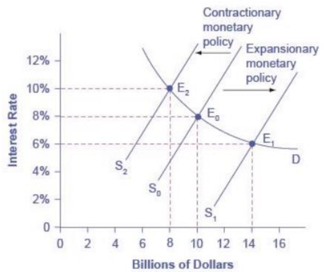


Figure 1. Monetary Policy and Interest Rates. The original equilibrium occurs at E_0. An expansionary monetary policy will shift the supply of loanable funds to the right from the original supply curve (S_0) to the new supply curve (S_1) and to a new equilibrium of E_1, reducing the interest rate from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

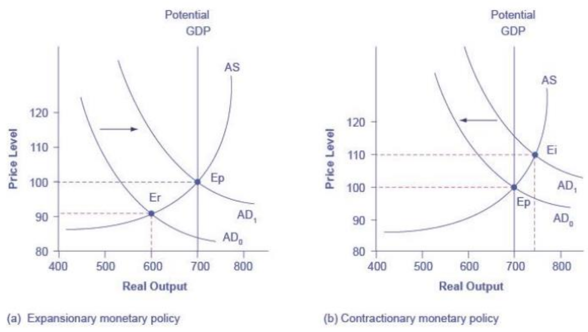


Figure 1. Expansionary or Contractionary Monetary Policy. (a) The economy is originally in a recession with the equilibrium output and price level shown at Er. Expansionary monetary policy will reduce interest rates and shift aggregate demand to the right from AD_0 to AD_1, leading to the new equilibrium (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.

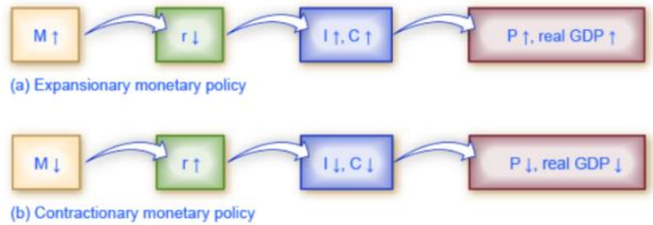
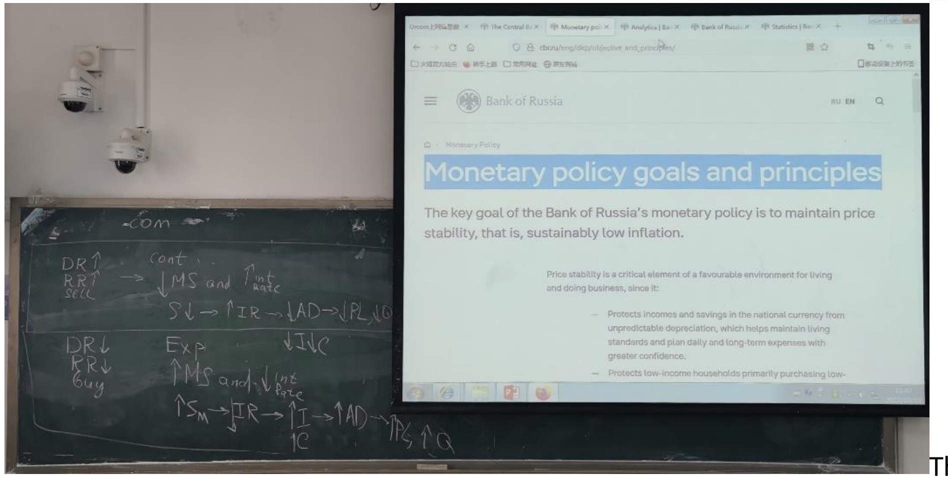


Figure 2. The Pathways of Monetary Policy. (a) In expansionary monetary policy the central bank causes the supply of money and loanable funds to increase, which lowers the interest rate, stimulating additional borrowing for investment and consumption, and shifting aggregate demand right. The result is 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

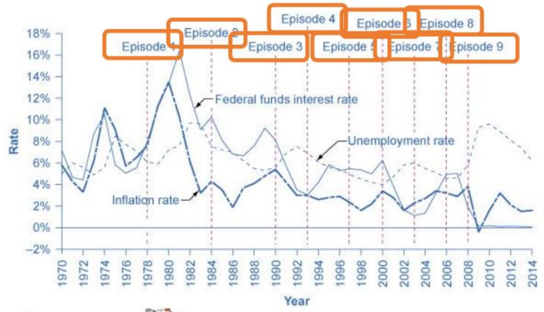


Figure 1. Monetary Policy, Unemployment, and Inflation. Through the episodes shown here, the Federal Reserve typically reacted to higher inflation with a contractionary monetary policy and a higher interest rate, and reacted to higher unemployment with an expansionary monetary policy and a lower interest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

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<td>Week 08
October 26, 27</td>
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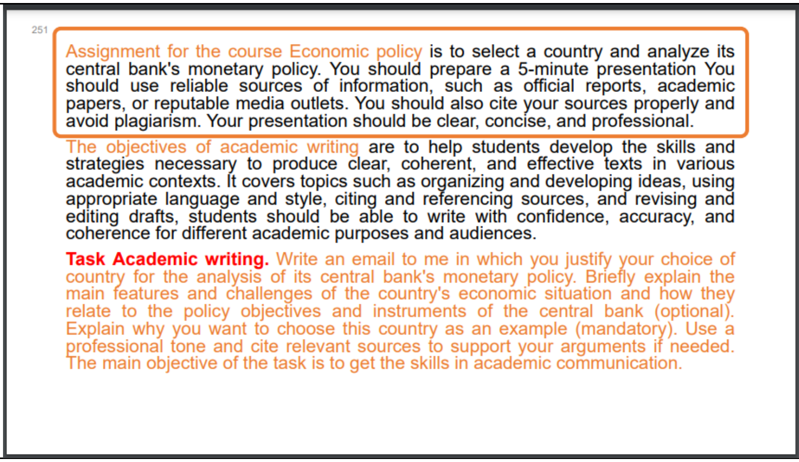

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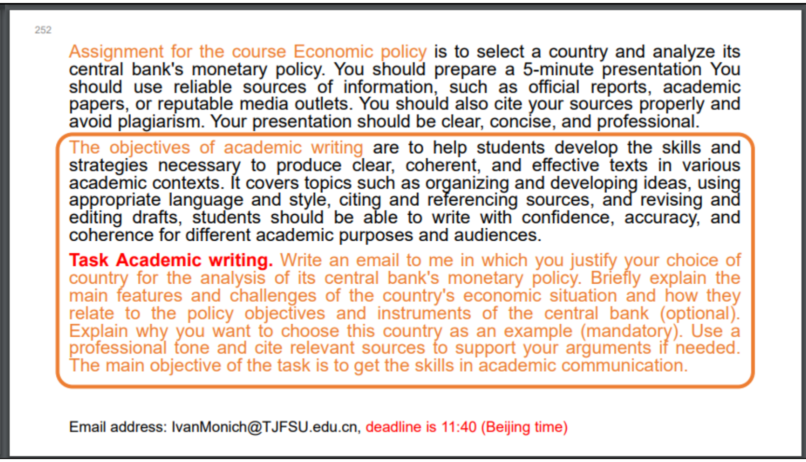
Assignment for the course Economic policy is to select a country and analyze its central bank's monetary policy. You should prepare a 5-minute presentation You should use reliable sources of information, such as official reports, academic papers, or reputable media outlets. You should also cite your 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)
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<td>Week 09
November 02, 03</td>
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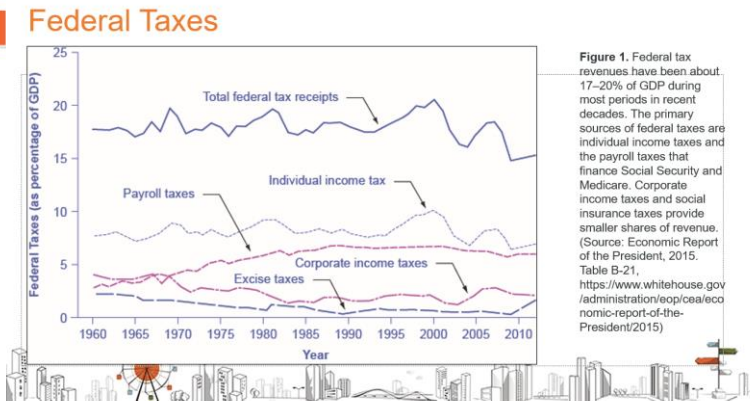
Why It Matters: Fiscal Policy

- 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/



Budget deficit and surpluses
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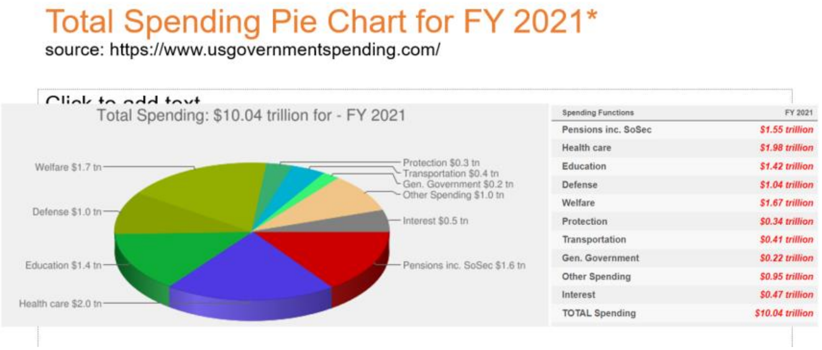
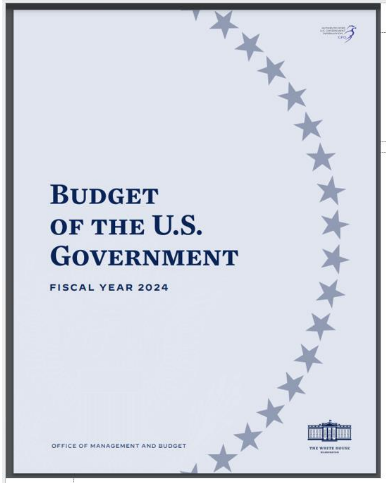
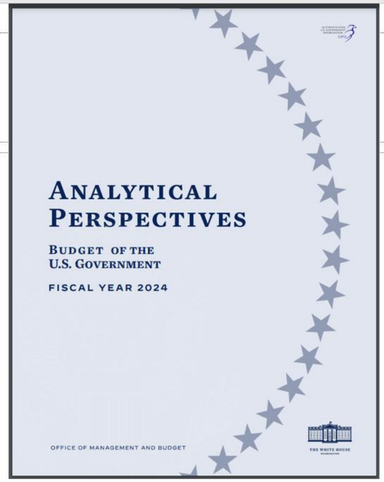
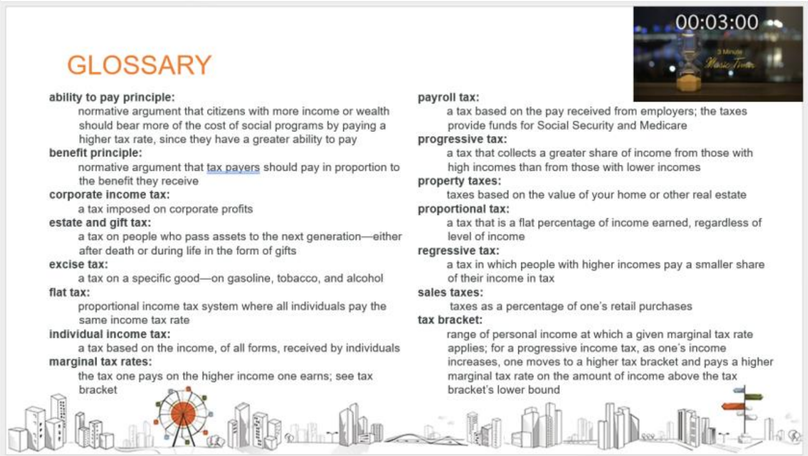
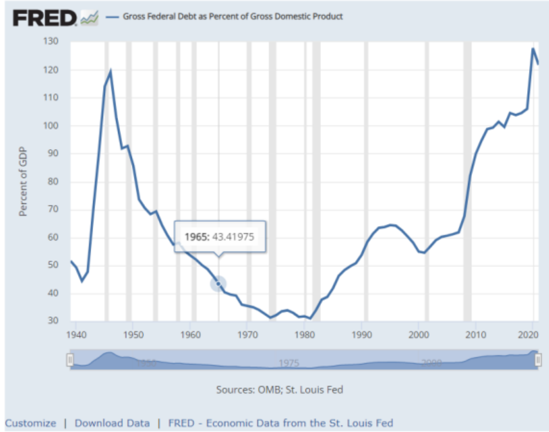


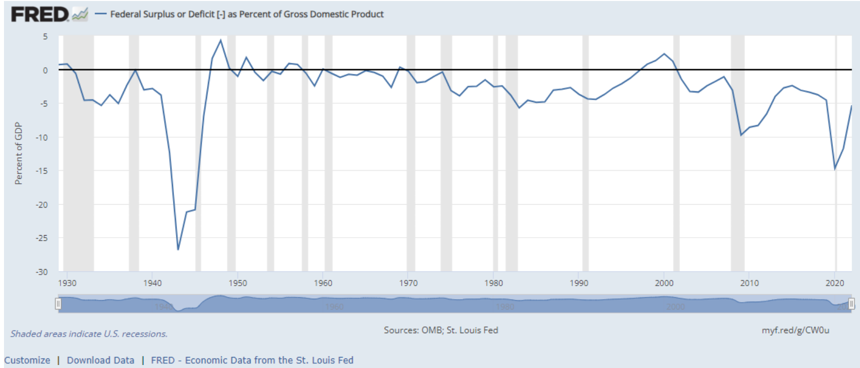




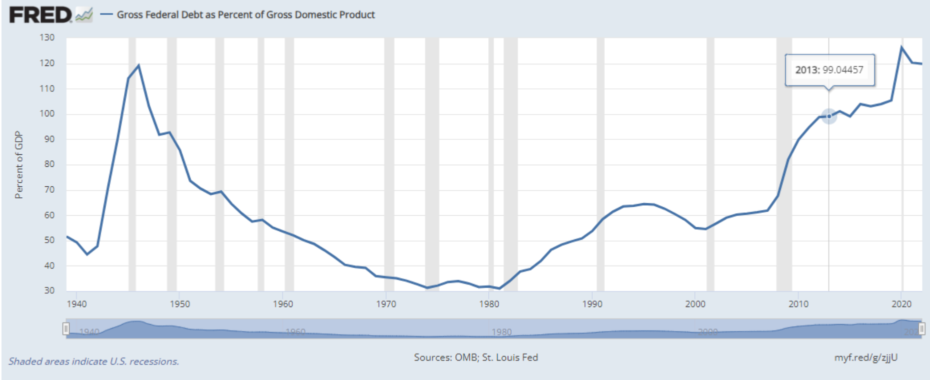
Week 10
November 09, 10







Click to view the FRED graph in a new tab. This graph shows the Gross Federal Debt as a Percentage of Gross Domestic Product from 1939 to the present.



Fiscal policy approaches range from passive to activist. In this section, you will use the AS-AD model to help you understand how governments use fiscal policies to fight against recession and inflation, and also to promote economic growth.

Fiscal policies include discretionary fiscal policy and automatic stabilizers. Discretionary fiscal policy occurs when the Federal government passes a new law to explicitly change tax rates or spending levels

Automatic stabilizers include unemployment insurance, food stamps, and the personal and corporate income tax.

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GLOSSARY

automatic stabilizers: tax and spending rules that have the effect of slowing down the rate of decrease in aggregate demand when the economy slows down and restraining aggregate demand when the economy speeds up, without any additional change in legislation

discretionary fiscal policy: the government passes a new law that explicitly changes overall tax rates or spending levels with the intent of influencing the level or overall economic activity

standardized (or full) employment budget: estimate of the budget deficit or surplus excluding the effects of fiscal policy, that is, as if GDP were at potential
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<td>Week 11
November 16, 17</td>
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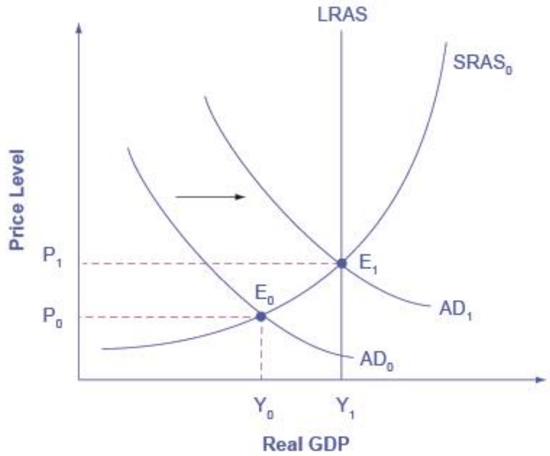
Expansionary and Contractionary Fiscal Policy
LEARNING OBJECTIVES
• Explain how expansionary fiscal policy can increase aggregate demand and boost the economy
• Explain how contractionary fiscal policy can decrease aggregate demand and depress the economy

Expansionary Fiscal Policy

Expansionary fiscal policy increases the level of aggregate demand, through either increases in government spending or reductions in taxes. Expansionary policy can do this by:
1. increasing consumption by raising disposable income through cuts in personal income taxes or payroll taxes;
2. increasing investments by raising after-tax profits through cuts in business taxes; and
3. increasing government purchases through increased spending by the federal government on final goods and services and raising federal grants to state and local governments to increase their expenditures on final goods and services



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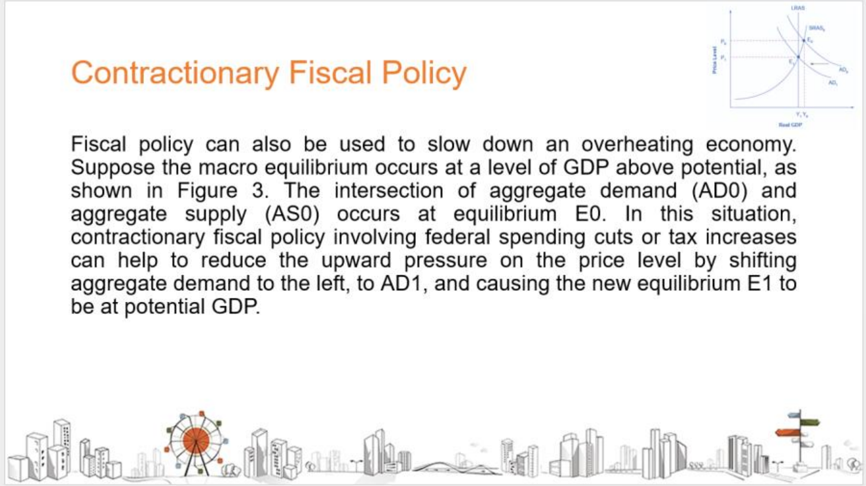

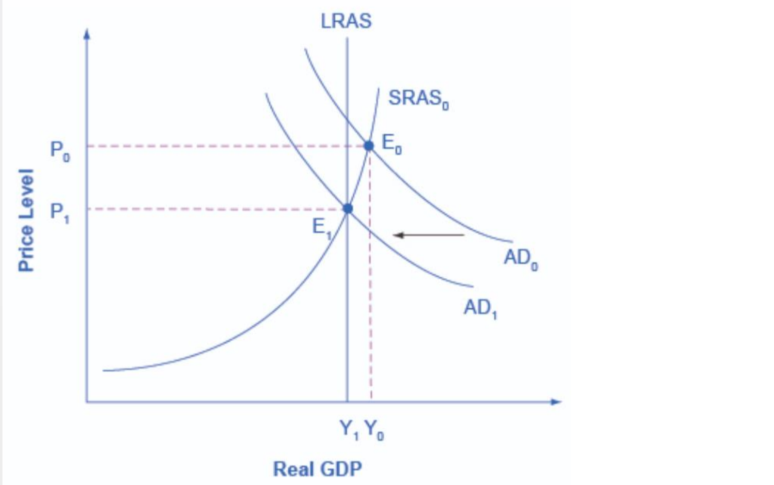

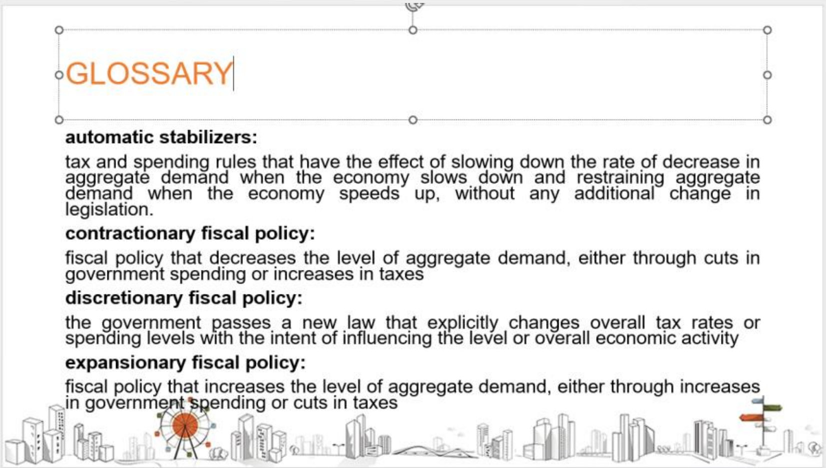

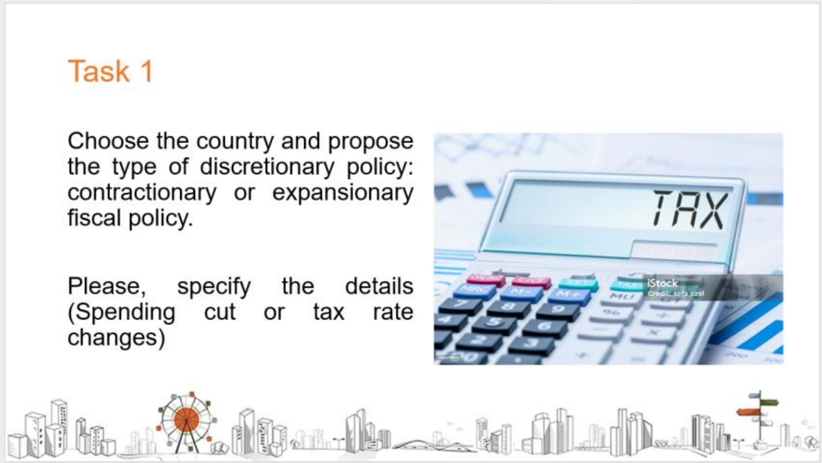

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<td>Week 12
November 23, 24</td>
<td>Introduction to Fiscal Policy Approaches
What you’ll learn to do: compare neoclassical and Keynesian approaches to Fiscal Policy
In this section, you’ll learn about how and why there are varying recommendations from economists regarding fiscal policy. As you know, neoclassical economists emphasize less government intervention with the assumption that the economy will return to full employment in the long run. Keynesian economists recommend more intervention, and in this section you’ll learn about some of the specific arguments for both sides.</td>
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1 of 1

Keynesians ✔ would advocate for increased government spending in times of recession while Neoclassicals ✔ would advocate against budget deficit as they trigger the crowding out effect and depress investment.

Check Answer

Correct - Keynesians advocate for greater government spending to boost aggregate demand when the economy is in a recession.

Correct. Neoclassicals avoid budget deficit and government borrowing as they believe it causes interest rates to rise and reduces private investment.

GLOSSARY

austerity programs: measures taken to reduce budget deficits during recessions by raising taxes and cutting government spending

crowding out: federal spending and borrowing causes interest rates to rise and business investment to fall; crowding out can also be caused by federal tax cuts

flat tax income tax: system where all pay the same tax rate

Laffer Curve: hill-shaped relationship between tax rates and tax revenues; if tax rates are high enough, lowering rates actually increases revenues

multiplier effect: idea that a change in spending causes a more than proportionate change in real GDP

Reaganomics: see Supply-Side Economics

Supply-side Economics: belief that economic activity is motivated by after tax returns to that activity, so that tax cuts on personal income increase labor supply, tax cuts on saving increase saving, and tax cuts on investment increase investment

Week 13
November 30
December 01

Fiscal Policy, Investment, and Crowding Out

LEARNING OBJECTIVES

- Explain crowding out and its effect on physical capital investment
- Explain how economic growth is tied to investments in physical capital, human capital, and technology

Neoclassical economists believe we should focus attention on the long run (e.g. economic growth) and that the short run will take care of itself. We know that economic growth, defined as the percentage change in real GDP over time, comes about through increases in the quantity and quality of labor, physical capital, and technology—all set in an economic environment where firms and individuals can react to the incentives provided by well-functioning markets and flexible prices. In this section, we will examine how fiscal policy can affect these variables.

Crowding Out Physical Capital Investment

When government conducts an expansionary fiscal policy (i.e. increases in government spending or decreases in tax rate) it may run afoul of the crowding out effect. Expansionary fiscal policy means an increase in the budget deficit. The government is spending more money than it has in income. Where does government obtain the necessary funds to cover it's increased deficit? The answer is borrowing.

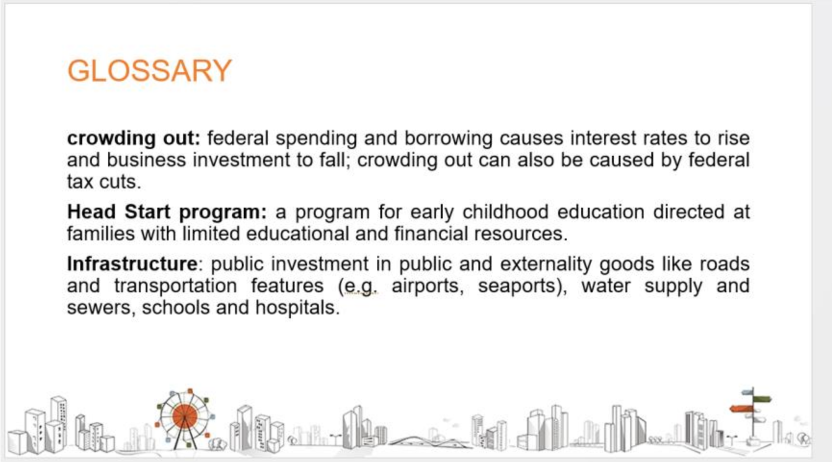
Effects of Crowding Out

How does crowding out affect the path of the economy? If the purpose of expansionary fiscal policy was to stimulate GDP and employment (i.e. a Keynesian stimulus for the short-term), the extent to which crowding out occurs will limit the stimulus. If say a $100 billion increase in government spending results in a $50 billion decrease in private investment spending, then the net increase to total expenditure is $50 billion instead of $100 billion. Crowding out reduces the effects of a fiscal stimulus.

Public Investment in Human Capital

How Fiscal Policy Can Improve Technology

Public Investment in Physical Capital



Week 14
December 7, 8

Foreign Currency Exchange Market

Changes in the Exchange Rate

- Factors that cause a currency to depreciate:
  - a rapid growth of income (relative to trading partners) that stimulates imports relative to exports
  - a higher rate of inflation than one's trading partners
  - a reduction in domestic real interest rates (relative to rates abroad)
  - a reduction in the attractiveness of the domestic investment environment that leads to an outflow of capital

Changes in the Exchange Rate

- Factors that cause a currency to appreciate:
  - a slower growth rate relative to one's trading partners
  - a lower inflation rate than one's trading partners
  - an increase in domestic real interest rates *(relative to rates abroad)*
  - an improvement in the attractiveness of the domestic investment environment that leads to an inflow of capital ()

Three Major Types of Exchange Rate Regimes

- There are three major types of exchange rate regimes:
  - flexible rates;
  - fixed-rate, unified currency; and,
  - pegged exchange rates.

We have listened to 13 presentations.

Task 2. Try to determine the year patterns for the currency exchange rate changes by comparing the data. Are there some months when the currency is getting stronger/weaker? Can you suggest the reasons for it?

Questions for Thought:

1. Can a nation fix its exchange rate to another currency such as the dollar and at the same time follow an independent monetary policy? Why or why not?

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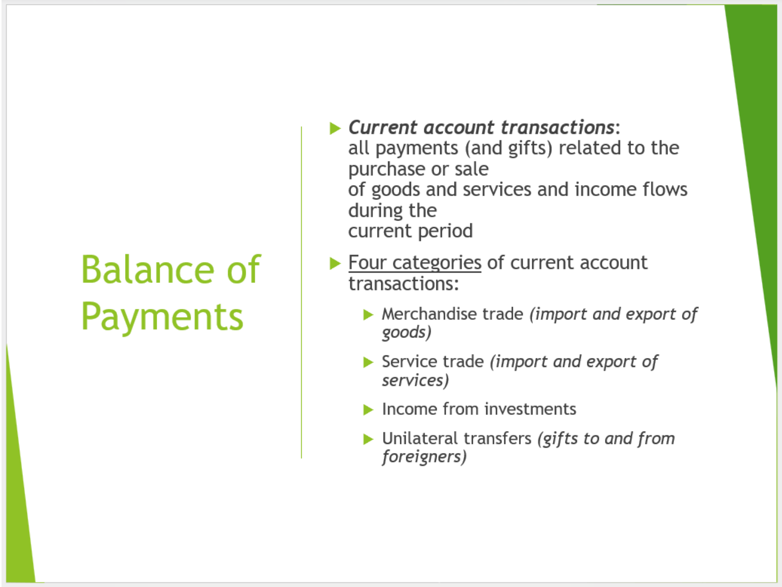

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Week 15
December 14, 15

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1. The role of the retailers in the Distribution Chain.
2. Franchise.
Evolution of Channels of Distribution
With the growth of specialization, particularly industrial specialization, and with improvements in methods of transportation and communication, channels of distribution have become longer and more complex.
Based on this relationship, we define a channel of distribution, also called a marketing channel, as sets of interdependent organizations involved in the process of making a product or service available for use or consumption, as well as providing a payment mechanism for the provider.

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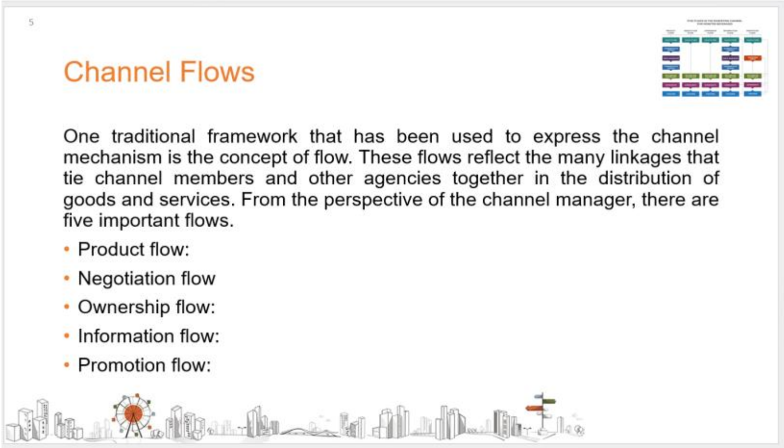
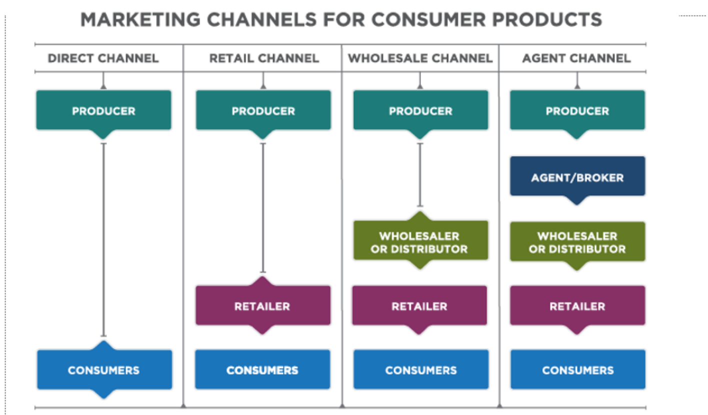
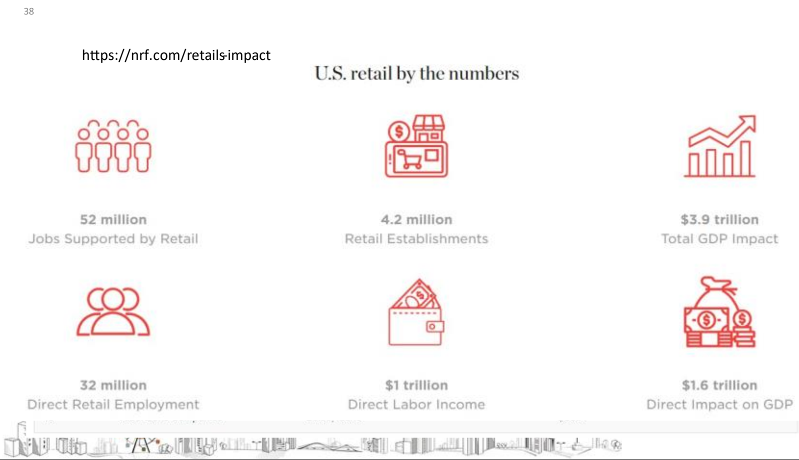
Channel Structures





The Role of Intermediaries

Task 1. Please choose the company and show its approach to Distribution channel building. Use the framework of the Distribution Channel from our lecture. Make a 3-5-minute speech on it by the end of the class. You may work in pairs.



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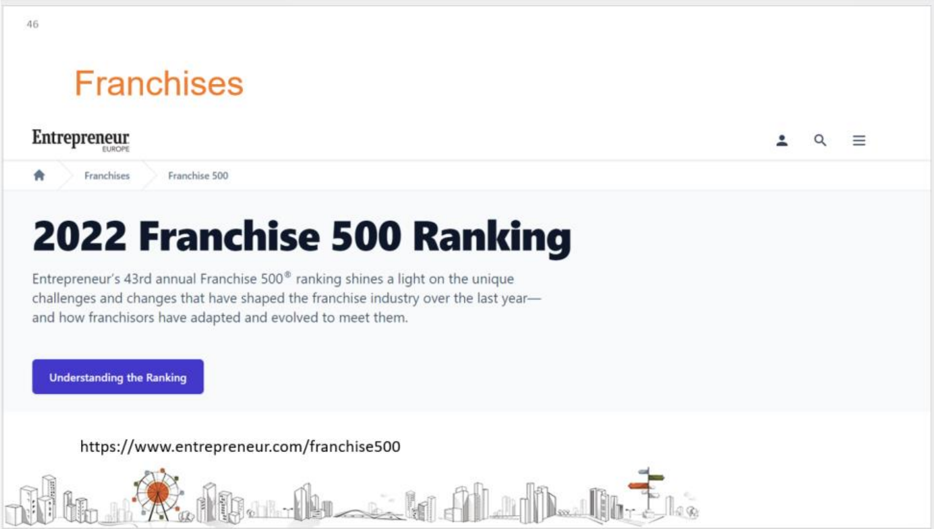

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<td>Week 16
December 21, 22</td>
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AI in Economic Policy


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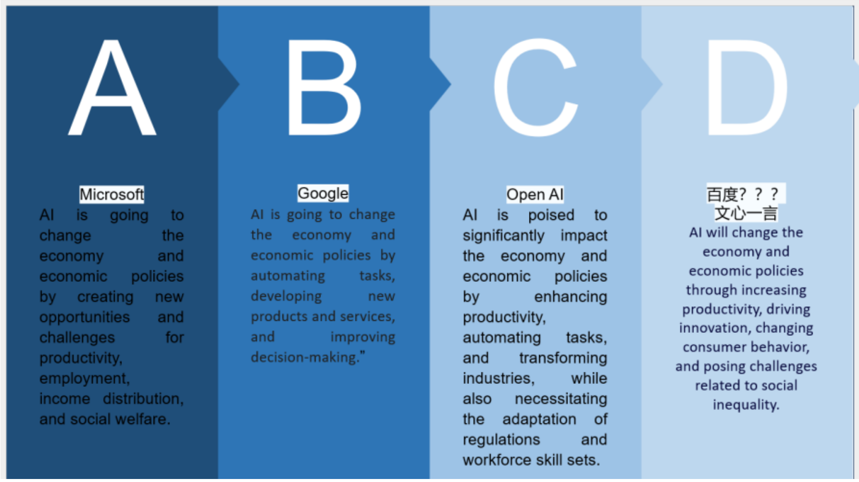
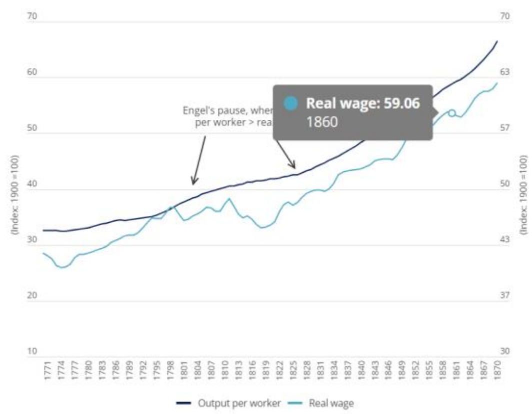


Chart 3. The Engels' pause saw real wages lag productivity growth during the First Industrial Revolution in England



Does higher productivity mean higher wages?

Productivity growth is a necessary rather than sufficient condition for higher real wages. It is possible to have long periods of productivity growth **without an increase in wages.**

This famously occurred during the early First Industrial Revolution, when, from 1800 to 1820, productivity increased as a result of steam power, railways, and the telegram, but real wages stagnated (Chart 3). This period is referred to as Engels' pause, where the gains from higher productivity accrued almost exclusively to the owners of capital.

Chart 4. There is little evidence of technological unemployment over the long term

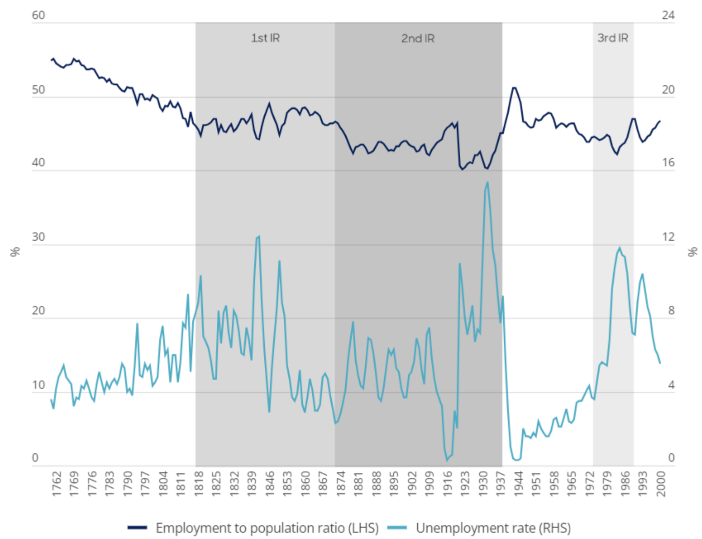
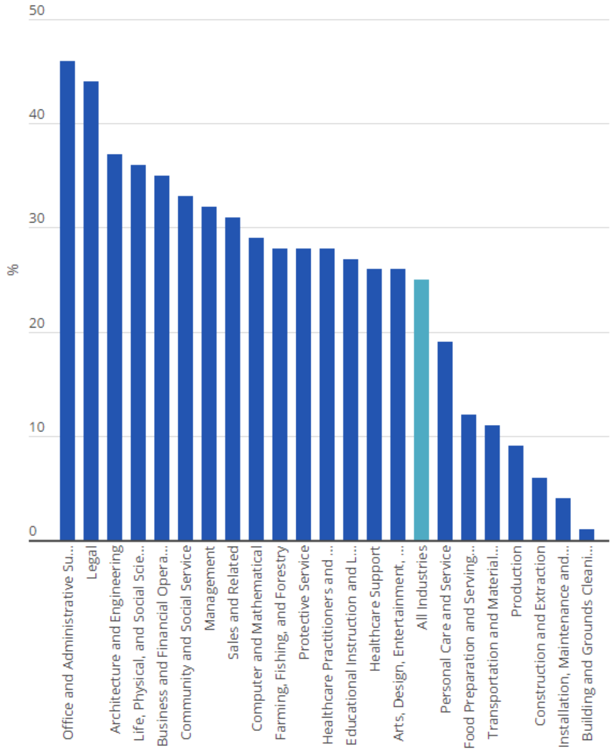
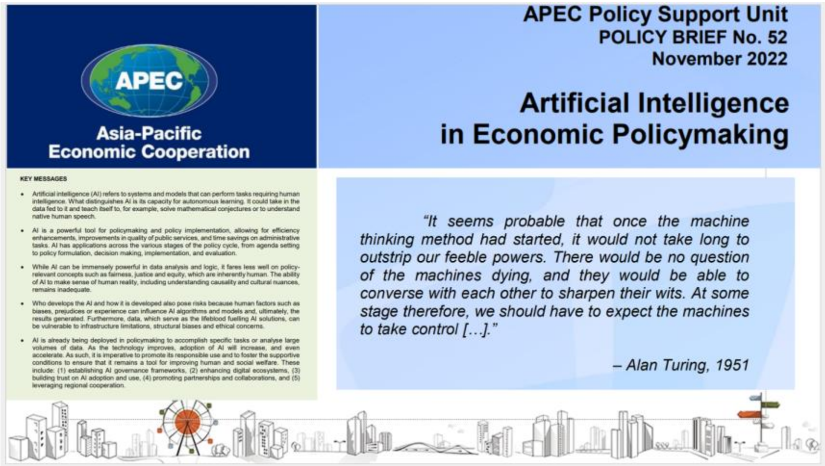


Chart 5. Estimate of the share of industry employment exposed to automation by AI





APEC

Asia-Pacific Economic Cooperation

APEC Policy Support Unit
POLICY BRIEF No. 52
November 2022

Artificial Intelligence in Economic Policymaking

KEY MESSAGES

- Artificial intelligence (AI) refers to systems and models that can perform tasks requiring human intelligence. What distinguishes AI is its capacity for autonomous learning. It could take in the data fed to it and teach itself to, for example, solve mathematical conjectures or to understand native human speech.
- AI is a powerful tool for policymaking and policy implementation, allowing for efficiency enhancements, improvements in quality of public services, and time savings on administrative tasks. AI has applications across the various stages of the policy cycle, from agenda setting to policy formulation, decision making, implementation, and evaluation.
- While AI can be immensely powerful in data analysis and logic, it fares less well on policy-relevant concepts such as fairness, justice and equity, which are inherently human. The ability of AI to make sense of human reality, including understanding causality and cultural nuances, remains inadequate.
- Who develops the AI and how it is developed also pose risks because human factors such as biases, prejudices or experience can influence AI algorithms and models and, ultimately, the results generated. Furthermore, data, which serve as the lifeblood fuelling AI solutions, can be vulnerable to infrastructure limitations, structural biases and ethical concerns.
- AI is already being deployed in policymaking to accomplish specific tasks or analyse large volumes of data. As the technology improves, adoption of AI will increase, and even accelerate. As such, it is imperative to promote its responsible use and to foster the supportive conditions to ensure that it remains a tool for improving human and social welfare. These include: (1) establishing AI governance frameworks, (2) enhancing digital ecosystems, (3) building trust on AI adoption and use, (4) promoting partnerships and collaborations, and (5) leveraging regional cooperation.

"It seems probable that once the machine thinking method had started, it would not take long to outstrip our feeble powers. There would be no question of the machines dying, and they would be able to converse with each other to sharpen their wits. At some stage therefore, we should have to expect the machines to take control […]."

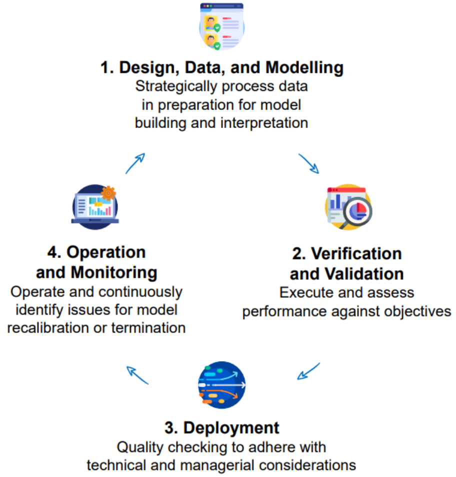
– Alan Turing, 1951

26

1. A Powerful Tool for Good

AI offers many benefits to policymaking and policy implementation through efficiency enhancements, public service quality improvements as well as time savings on administrative tasks.3 AI can be used as a tool to enable policymakers to formulate more effective policies, make better decisions, and improve communication and engagement with stakeholders.4 At each stage of the policy cycle, from agenda setting to policy formulation, decision making, implementation, and evaluation (Figure 1), AI could potentially assist policymakers in generating high-value inputs and creating more meaningful impacts for society.5

[1] A. Davies et al., "Advancing Mathematics by Guiding Human Intuition with AI," *Nature* 600 (2021): 70–74, https://doi.org/10.1038/s41586-021-04086-x;
[2] E. Guizzo, "IBM's Watson Jeopardy Computer Shuts Down Humans in Final Game > Silicon Prevails in Men vs. Machine Challenge," 17 February 2011, https://spectrum.ieee.org/ibm-watson-jeopardy-computer-shuts-down-humans
[3] Organisation for Economic Co-operation and Development (OECD), *Artificial Intelligence in Society* (Paris: OECD Publishing, 2019), https://doi.org/10.1787/eedfee77-en
[4] J. Berryhill et al., "Hello, World: Artificial Intelligence and Its Use in the Public Sector," working paper, OECD Publishing, Paris, 2019, https://doi.org/10.1787/726fd39d-en

	Figure 2: Factors influencing the adoption of artificial intelligence in policymaking  
Week 17 December 28, 29	**Review of the studied materials**
Week 18	**No classes**
Week 19 January 08	**Final Exam**