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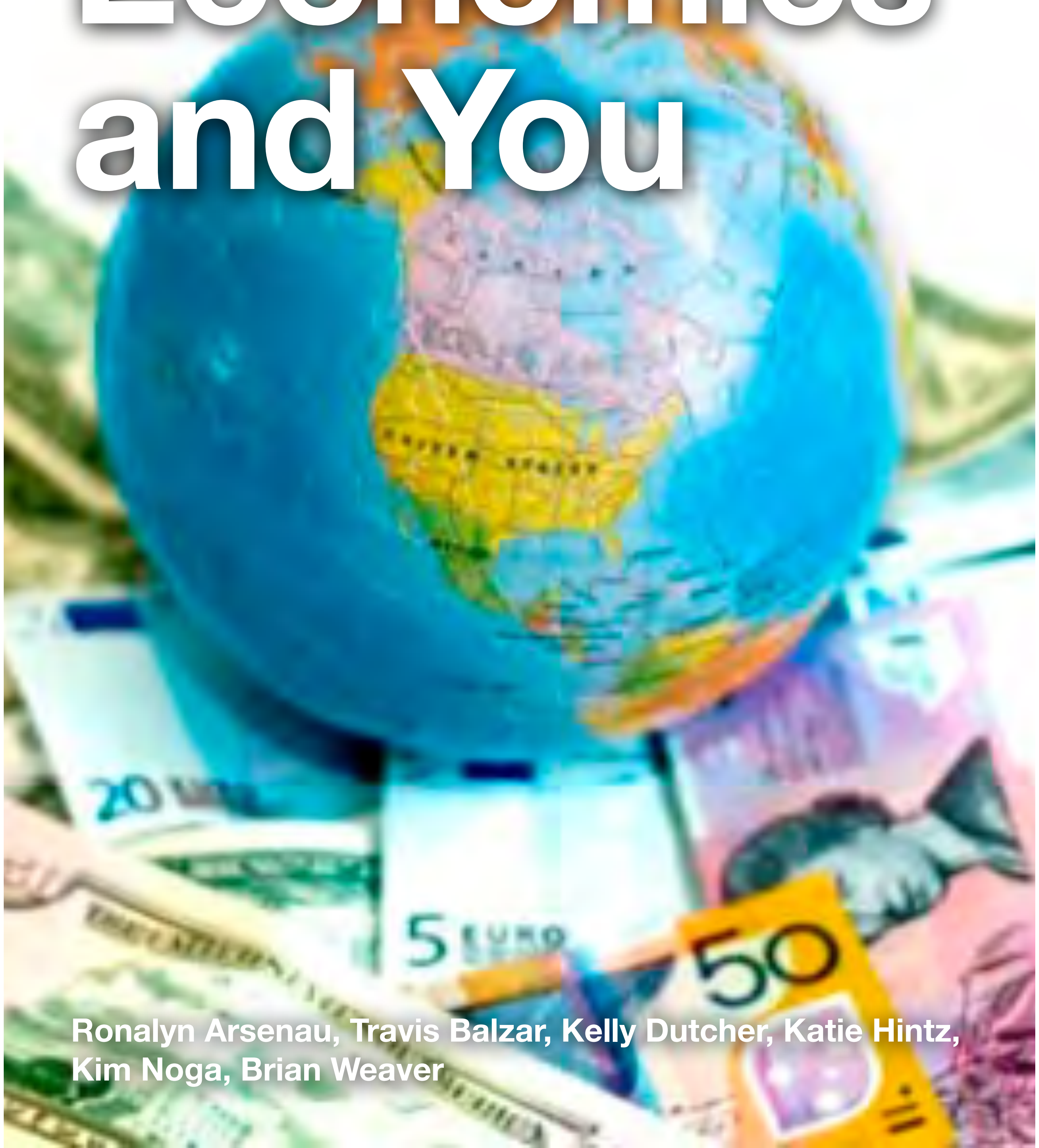
Economics and You



Ronalyn Arsenau, Travis Balzar, Kelly Dutcher, Katie Hintz, Kim Noga, Brian Weaver

Economics and You

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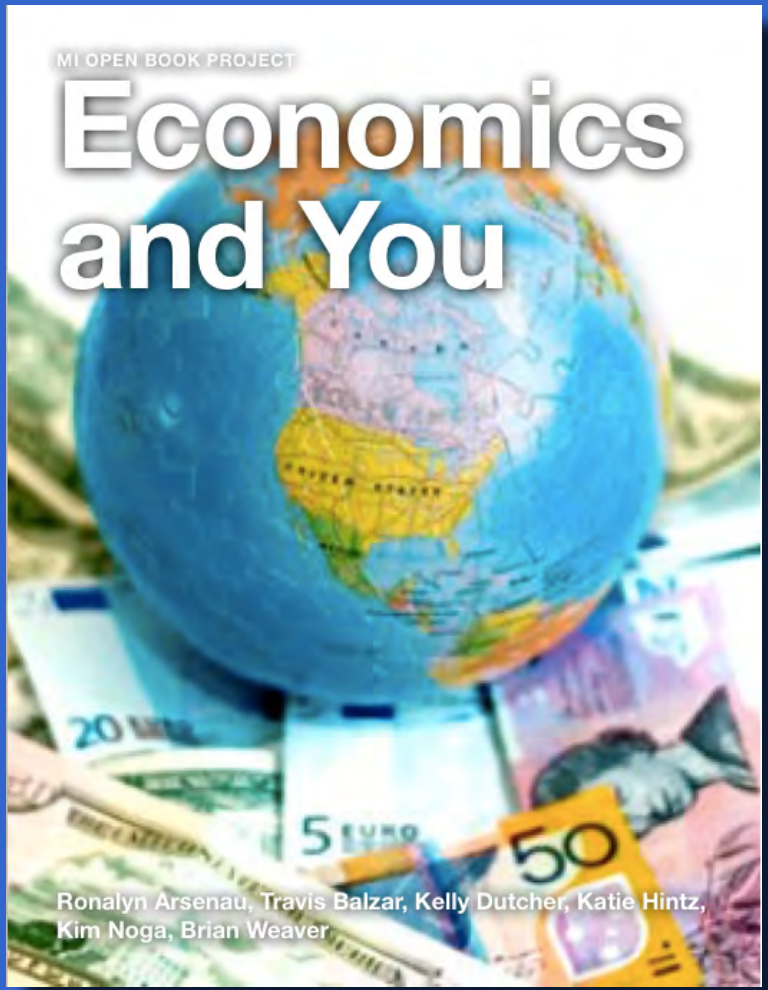

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Information on the latest version and updates are available on the project homepage: http://textbooks.wmisd.org/dashboard.html

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About the Authors - Economics and You

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Ronalyn Arseneau teaches Economics and Business at Westwood High School in Ishpeming. She is a member of the State Executive Board of the Michigan Business Education Association, serving as Vice-President for Membership. She and her husband, Barry, enjoy traveling to spend time with their three children and their grandson.

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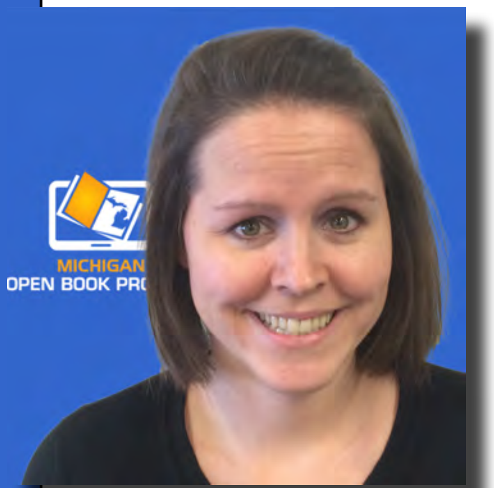
Travis L. Balzer is a Shepherd High School social studies teacher concentrating in Economics, Civics and History. Mr. Balzer (Mr. B) resides in Shepherd with his bride Haley, and daughters Makayla and Mia Jean. A Gladwin High School graduate. Parents Vicki and Teddy reside in Gladwin. Travis' sister, Kristal and two sons, Isaac and Adam reside in the Lansing area. Mr. Balzer earned an Economics and Management degree from Albion College and proceeded to obtain teaching certification from Saginaw Valley State University in Social Studies. In addition, obtaining a masters in Educational leadership from Grand Valley State University. Hunting, exercising including P90X, biking, running



Kelly Dutcher

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Kelly Dutcher teaches Economics, Civics, U.S. History, and College Readiness at Harbor Springs High School. Aside from teaching, she is also a Michigan Youth in Government advisor, and class of 2017 sponsor. Mrs. Dutcher is a graduate of Lake Superior State University where she received her BS in Social Studies and Secondary Education. She is currently working towards receiving her MA in American History and Government at Ashland University, and will spend a month this summer as a James Madison Memorial Fellow studying in Washington D.C. Kelly loves teaching at the high school level, and helping bring social studies to life for her students. She shares her life with her husband Jordan and three joyful girls: Daphne, 5; Audrey, 3; Meredith 2.

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Katie is completing her seventh year as a teacher at Gladwin High School, where she has taught every Social Studies course available, including: American Government, Sociology, Current Events, World History, Economics, Social Problems in the United States, and Law. A graduate of Saginaw Valley State University's Secondary Education Program, she majored in History, minored in Sociology and earned a Social Studies Endorsement. As Social Studies Department Chair, she was inspired to participate to the Open Book Project because of the disjointed resources that most economics teachers are forced to scrape together to create a captivating curriculum.

Currently, she is working on completing her Masters in Global History at with American Public University. Her final thesis on the Food Industry is due to be published September,

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Kim has a B.A. in History/ Social Studies and an M.A. in Curriculum and Teaching, both from Michigan State University. For the past 14 years she has been employed at Ionia High School where she teaches Economics, U.S. History, and Humanitarian Studies. Her hobbies include reading and traveling the world.

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Mr. Weaver has been teaching high school social studies for fourteen years. After one year at New Directions Alternative High School in the Big Rapids Public Schools he moved to Big Rapids High School where he has taught US History & Geography, American Government, World History & Geography, Economics, Geography, Psychology, and Modern Social Problems. Before becoming a high school teacher, Mr. Weaver worked in higher education as a development officer and administrator. As Director of Development for Ferris State University he oversaw fund raising activities for Kendall College of Art and Design and served as Director of the Kendall Foundation. In ten years of service at Northern Michigan University he served in a variety of development posts including Director of Development Research and Director of Annual Giving. Mr. Weaver caught the teaching bug during his service in the Peace Corps on the central Philippines island of Leyte where he taught in a two-room school house. His many interests include reading, woodworking, and home improvement

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Chapter 4

The Business Cycle and Economic Growth

QUESTIONS TO GUIDE INQUIRY

1. How do we measure the health of the economy?

2. What do economists do with the information from economic indicators?

3. Under what conditions are economic expansions or contractions problematic?

4. Why is one indicator (GDP; GNP; CPI etc.) better to measure the health of the economy?

Image source: Shutterstock/Rawpixel

Section 1

Gross Domestic Product and the Growth of the Economy

QUESTION FOR GUIDING INQUIRY:

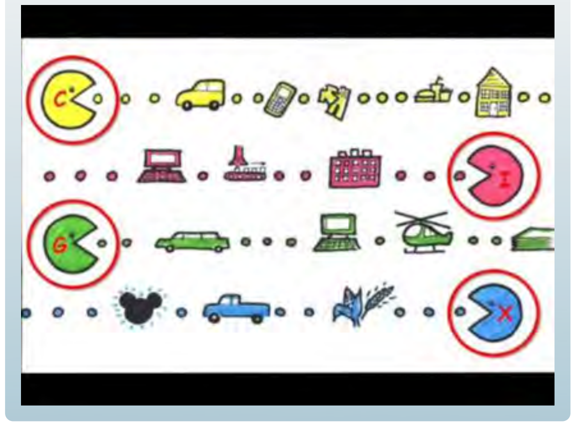
1. **How do we measure the health of the economy?**

Measuring the Economy

Over time, many tools have been developed by economists to monitor a nation's economic performance. And while many of these tools can seem too large in scale and too overwhelming to apply to your daily life, looking at some of the same indicators that economists do can actually help you as an individual make decisions on how to make the most of your income.

Gross Domestic Product

Interactive 4.1 GDP

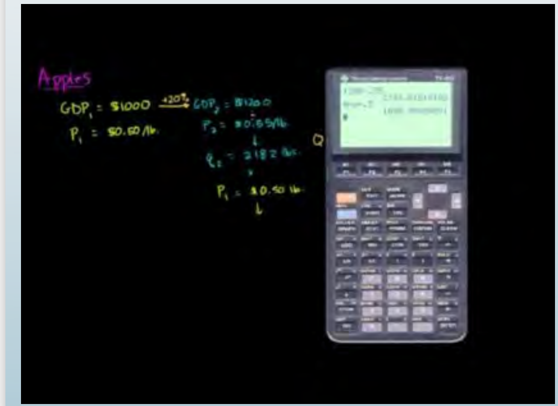


The most important measure used to determine the health of the economy is the **Gross Domestic Product** (GDP). **GDP** is the dollar value of all final goods and services produced within a country's borders in a given year. Memorizing the fact that GDP is the most important determinant of a healthy economy is one thing--understanding each of the phrases in the definition is quite another. Let's examine each part in a little more detail by watching this informative video. While viewing, be sure to record, in your own words, the four important parts of the definition of GDP: dollar or market value, final goods and services, borders, and given year.

Nominal vs. Real GDP

A nation's GDP measures the value of its output of goods and services in a particular period of time. Gross Domestic Product is expressed in dollar terms, which means that if the price of goods and services rise, a country's nominal GDP figure will increase. The problem with this is that an increase in the nominal (numerical) value of a country's output can increase when price levels rise, even if the actual level of output remains the same.

Interactive 4.2 Khan Academy, GDP



For this reason, it is important to adjust a nation's nominal GDP for any changes in the price level that occur between two periods of time. Once nominal GDP is adjusted for inflation or deflation, we arrive at real GDP, which is a much more accurate measurement of the actual level of output in a nation, adjusting for any changes in prices.

Although real GDP--GDP expressed in constant or unchanging prices, is a valuable tool, it does have its limitations. As you watch this video that discusses the limitations of GDP as an economic health indicator, list and think each factor. Do you agree with this list? Are there other factors that are not mentioned in this video that should be?

Interactive 4.3 Real vs Nominal GDP

Learn more about Real vs Nominal GDP at this website from EconEdLink

Now that you know quite a bit more about how GDP is determined and its limitations, you may be asking, "Why is this information significant? To answer that question, consider what the factors are that influence GDP and you'll soon see why the analysis of GDP is so important.

Interactive 4.4 Limitations on GDP

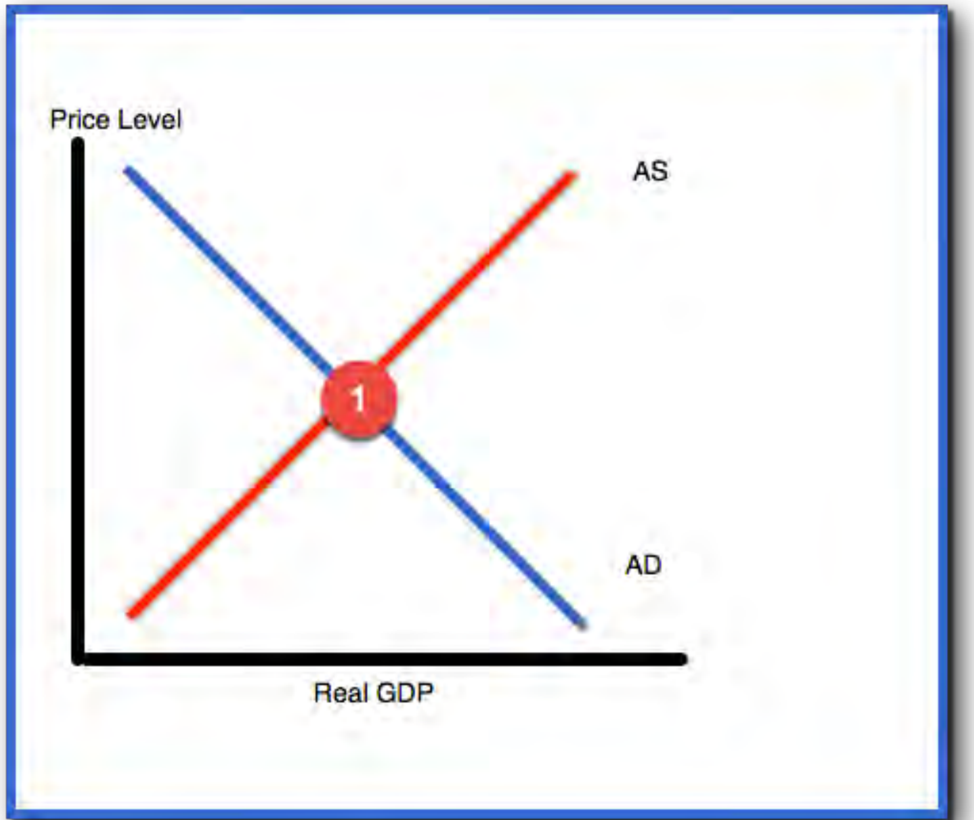
Per Capita GDP

Per Capita GDP is a measure of the total output of a country that takes the gross domestic product (GDP) and divides it by the number of people in the country. The per capita GDP is especially useful when comparing one country to another because it shows the relative performance of the countries. A rise in per capita GDP signals growth in the economy and tends to translate as an increase in productivity.

Interactive 4.5 World Bank per Capita Data

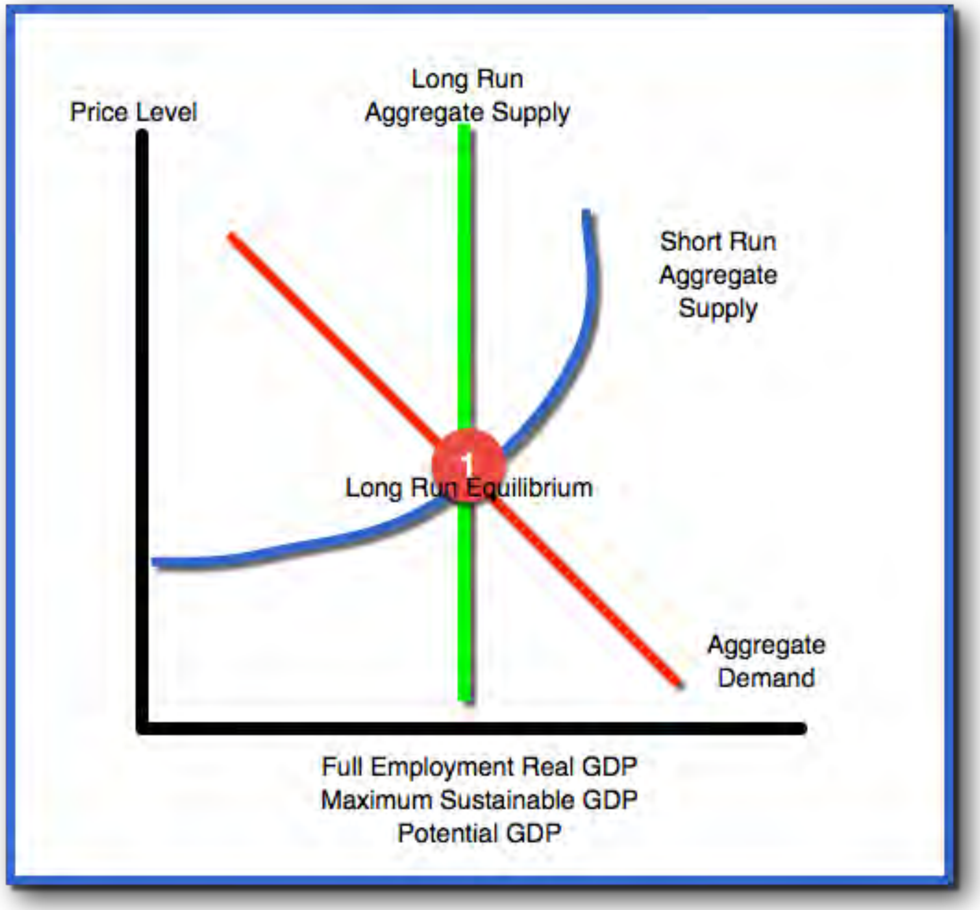
In previous chapters you familiarized yourself with the idea that market supply is the amount of a particular good or service in an individual market. Now, let's shift our thinking from a microeconomic approach to a macroeconomic approach. Picture a supply curve for an entire economy and not just one market. Aggregate Supply is the total amount of goods and services in the economy available at all possible price levels. Again, with impact, the effect is similar using a macroeconomic approach--if the price level of a product rises, firms have an incentive to increase their product output. And, if a price level falls, a company will reduce its output.

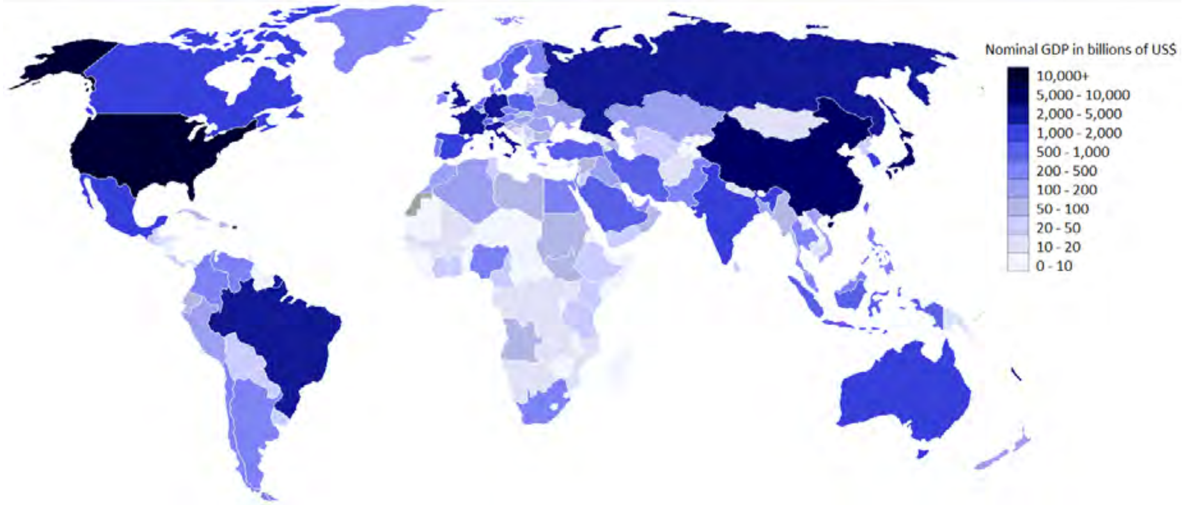
Aggregate Demand is the amount of goods and services in the economy that will be purchased at all possible price levels. Similar to what happens on the supply side, as price levels move up and down, businesses change the quantity of what they buy--in the opposite direction that aggregate supply changes. This is represented in the graph below.



Aggregate Supply (AS) /Aggregate Demand (AD) Equilibrium

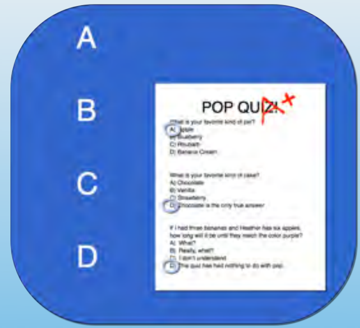
Again, in taking a macroeconomic approach when identifying equilibrium, the intersection of AS and AD is the real GDP equilibrium. This is illustrated in the chart below:





"Map of world countries by GDP (nominal) in US$" by Quite vivid blur - Own work. Licensed under CC BY-SA 3.0 via Wikimedia Commons - https://commons.wikimedia.org/wiki/File:Map_of_world_countries_by_GDP_(nominal)_in_US$.png#/media/File:Map_of_world_countries_by_GDP_(nominal)_in_US$.png

Interactive 4.6 Quiz



Test your knowledge on GDP with this quiz.

Section 2

The Business Cycle

QUESTION TO GUIDE INQUIRY

1. **How does the business cycle relate to economic health?**

The Importance of a Business Cycle

A business cycle is a period of macroeconomic expansion followed by a period of macroeconomic contraction. These are also known by economists as fluctuations in the market. These fluctuations occur around a long-term growth trend, and typically involve shifts over time between periods of relatively rapid economic growth (expansion or boom), and periods of relative stagnation or decline (contraction or recession). These fluctuations are often measured using the growth rate of real gross domestic product. Despite being termed cycles, most of these fluctuations in economic activity do not follow a mechanical or predictable periodic pattern. It is through the phases of a business cycle and the recognition of a specific phase, that economists try to predict how the economy will perform in the future.

See the graph on the next page for a visual representation of a business cycle.

The Four Phases of the Business Cycle

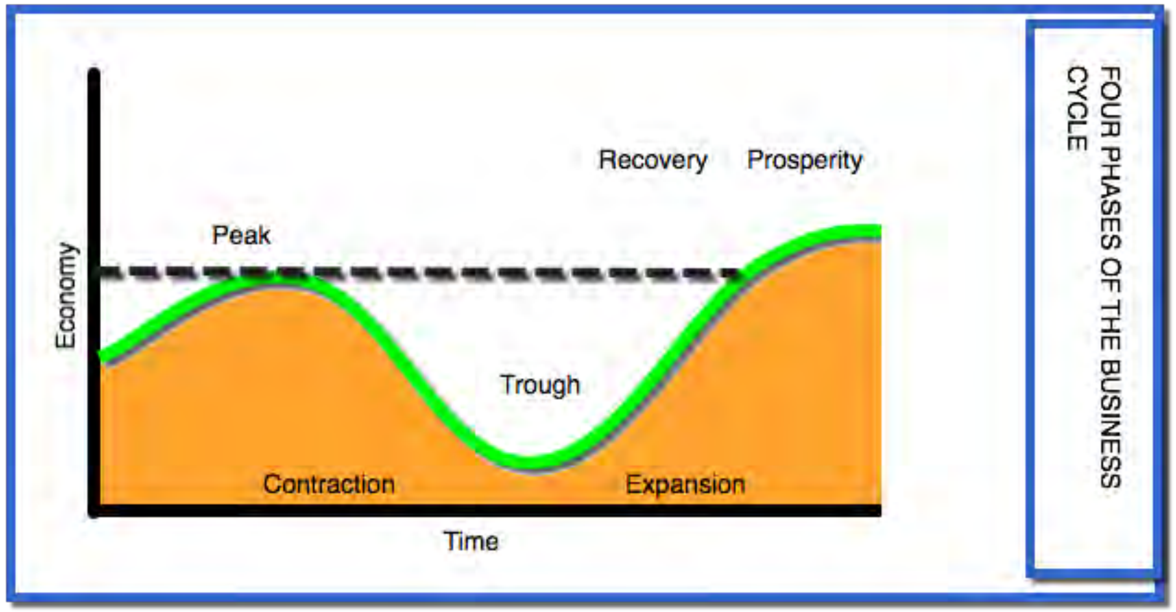
The business cycle (or economic cycle) refers to the short-term fluctuations of economic activity along its long term growth trend. There are four phases to the business cycle:

1. Expansion- Real GDP (production) growing and unemployment rate usually falls.

2. Peaks- Highest point of expansion. Economists can only measure once contraction begins.

3. Recession- Real GDP (production) decreases for 6 consecutive months; unemployment rate usually increases. An extended recession is called a depression.

4. Troughs- Lowest point of the recession. Economists can only measure once expansion begins.



What have periods of depression and recession throughout our nation's history taught us?

A recession is the contraction phase of the business cycle. It begins after the economy reaches a peak of activity and ends as the economy reaches its trough. The National Bureau of Economic Research (NBER) describes it this way:

A recession is a period of decline in total output, income, employment and trade, usually lasting six months to a year and marked by widespread contractions in many sectors of the economy.'

A common rule of thumb for recessions is two quarters of negative GDP growth.

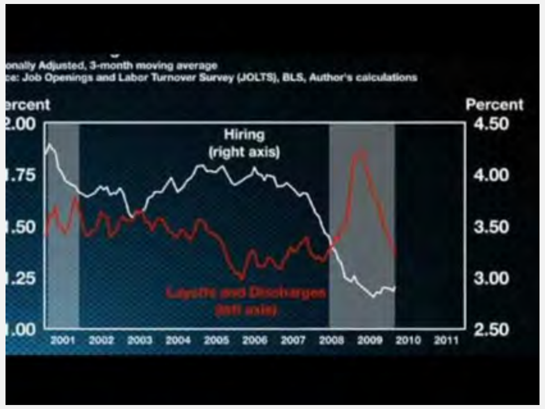
On the other hand, a depression is a prolonged period of economic recession marked by a significant decline in income and employment. Depressions are caused by the same factors that lead to a recession. Notice I used the words 'significant decline' and didn't give an amount of time. That's because the National Bureau of Economic Research decides when recessions occur, but there is no widely accepted definition of depressions. A common rule of thumb that some people use is a 10% decline in economic output as measured by the gross domestic product (GDP).

There hasn't been a decline large enough to call it a 'depression' since the Great Depression. However, the recession that began in 2007 has been called 'The Great Recession' because unemployment was high for a long time, and the recession lasted for 18 months.

Watch 2 videos linked here that will tell you more about the "Great Recession" that began in 2007.

Interactive 4.7 The Great Recession Part 1

Interactive 4.8 The Great Recession Part 2



When looking at the economic history of the U.S., historical downturns in the nation's economy indeed followed a cyclical pattern. It was through studying the cyclical business cycle pattern of The Great Depression that economists like John Maynard Keynes began to consider the idea that modern market economies could indeed, fall into long-lasting contractions AND that government intervention would be needed to pull a country out of such a dramatic economic downward spiral. It is through continued study of the government's role in economic productivity that business cycle analysis will remain an important part of future economic cyclical predictions.

One goal of governmental economic policy is to reduce the destructive aspects of the business cycle. The government would like to lengthen the period between economic cycle and to reduce the severity of the downturns (recessions and/or depressions). In order to determine what actions are best taken the government must have accurate measures of economic activities (GDP measures for example), but they would also like to be able to predict what the future holds economically speaking. While it is impossible to know specifically what might be coming, there are clues. These clues are called economic indicators.

Economic Indicators

Key statistics that indicate the direction of an economy are called Economic Indicators. They are of three main types: (1) Leading indicators (such as new orders for consumer durables) that attempt to predict the economy's future direction, (2) Coincident indicators (such as gross domestic product) that describe current economic activity, and (3) Lagging indicators (interest rates) that become apparent only after the occurrence of the activity.

Use the resources linked below to review examples of economic indicators. Then, select 2 or 3 examples that you think are most important and record your thoughts in place provided below.

Interactive 4.9 US Census - Economic Indicators

Interactive 4.10 National Economic Trends

In the next chapter you will read about how the government might seek to influence economic activity in a market-based economic system.

Section 3

Unemployment

QUESTIONS TO GUIDE INQUIRY

1. **What does the unemployment rate tell us about the economy's health?**
2. **What are appropriate governmental responses to the problems of unemployment and inflation?**
3. **What Rate of Unemployment is Desirable?**

If asked, many people would say that a 100% employment rate (or phrased differently, 0% unemployment) would be the “no-brainer” answer to the question of what rate of unemployment is desirable. Of course, it is not as straightforward as it might seem.

At any one time, millions of Americans may be out of work. For many of them, the experience is devastating. They struggle to pay bills and to put food on the table. In difficult economic periods the number of unemployed people rises. During economic upturns, the unemployment rate falls.

Measuring Unemployment

Unemployment occurs when people are without work and are actively seeking employment. In an economy, the labor force is the actual number of people available for work. Economists use the labor force participation rate to determine the unemployment rate. The U.S. Census Bureau takes a monthly survey of American households, which is known as the Current Population Survey, or CPS. The CPS is used by the Bureau of Labor Statistics to estimate the labor force status of each respondent. If a respondent is not deemed to be in the "labor force," he is not counted toward unemployment calculations. The unemployment rate is the percentage of surveyed individuals who are in the labor force but without a job.

According to the Bureau of Labor Statistics, an individual can only qualify as being unemployed after meeting three criteria:

1. Must be currently jobless

2. Must be actively seeking work

3. Must be available to take a job

Types of Unemployment

Economists describe three types of unemployment: frictional, structural and cyclical. Economists tend to concentrate their studies on the third type. You can read about the types of unemployment here….

Interactive 4.11 The Economist Explains - Three Types of Unemployment

You can see from the definitions of the types of unemployment, not all types of unemployment are equal. Nor are they equally bad or undesirable. In your own words, describe each of the three types of unemployment in the table below. Then, explain in extent to which each of the three types of unemployment are desirable or undesirable.

Activity - For each type of unemployment create a definition and indicate the extent of desirability.

Structural

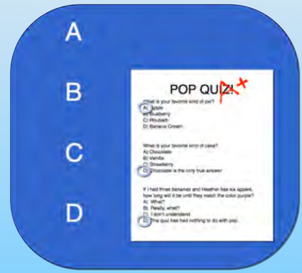
Frictional

Cyclical

Economists define full employment as occurring when cyclical employment does not exist. Structural and frictional unemployment, however, always exist. Traditionally, full employment is considered to be achieved when overall unemployment stands at between 4 and 6% of the labor force. Most economists argue that lower rates of unemployment result in a rise in inflation.

Interactive 4.12 Is Full Employment Finally Getting Closer?

Interactive 4.13 Check For Understanding Quiz



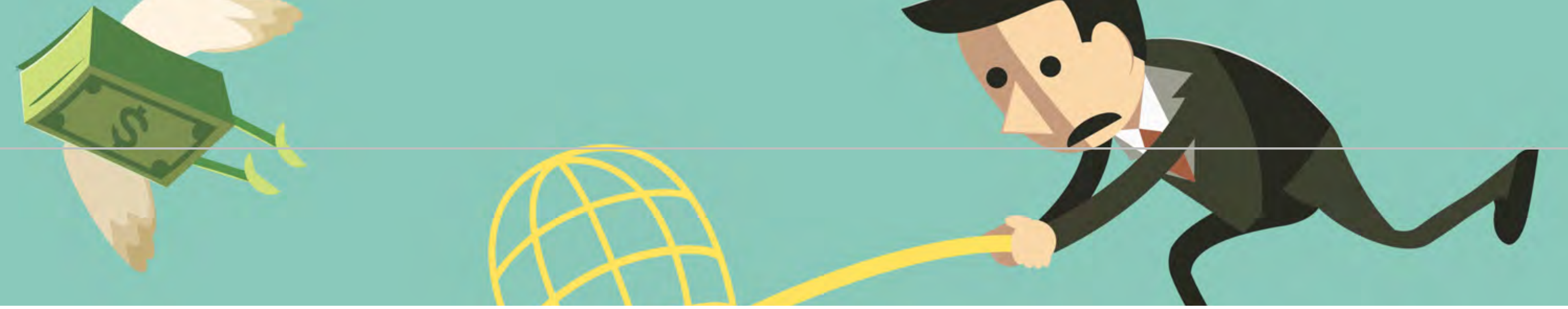
Test your knowledge of unemployment here.

The Economic Cost of High Unemployment

The social costs of unemployment are a result of the economic and psychological effects. The unemployed tend to feel anger, frustration, and despair. There is some evidence that an increase in unemployment tend to be associated with increases in crime, domestic violence, alcoholism, drug abuse, divorce, and other social Problems

Section 4

Inflation

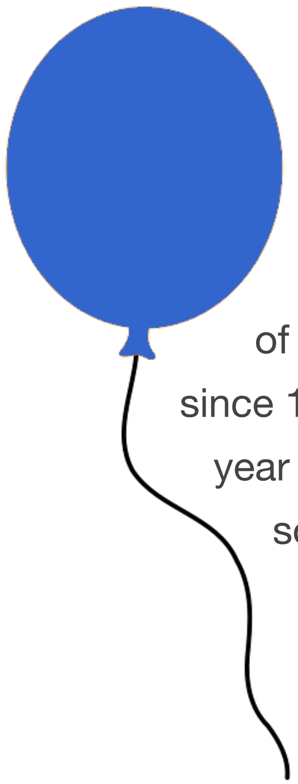


QUESTIONS TO GUIDE INQUIRY

1. **What does the inflation rate reveal about an Economy's Health?**
2. **What Rate of inflation is Desirable?**
3. **Who are the Winners and Losers from Inflation?**

Inflation is defined as a sustained increase in the general level of prices for goods and services. It is measured as an annual percentage increase. As inflation rises, every dollar you own buys a smaller percentage of a good or service.

The value of a dollar does not stay constant when there is inflation. The value of a dollar is observed in terms of purchasing power, which is the real, tangible goods that money can buy. When inflation goes up, there is a decline in the purchasing power of money. For example, if the inflation rate is 2% annually, then theoretically a $1 pack of gum will cost $1.02 in a year. After inflation, your dollar can't buy the same goods it could beforehand.



More money is better… right?

Inflation is like a balloon; a general gradual increase in prices and the fall of in the value of money. Inflation has averaged about 3% since 1926. At that rate, a shirt that costs $20 this year would cost almost $40 in twenty years or so.

Interactive 4.14 What Causes Inflation?

What are the causes of inflation?

Cost push- cost of factors of production are going up causing prices to rise;

Demand pull- consumers pull price up due to their demand;

Interactive 4.16 Cost Push Inflation

Interactive 4.17 Demand Pull Inflation

Interactive 4.15 Federal Reserve Auction Activity

The quantity theory of inflation states that too much money in circulation drives prices up.

Inflation rates throughout history

Interactive 4.18 Historic Inflation Rates

Use this website to answer the questions to the right.

Throughout history, what were the trends of inflation throughout the decades?

What events were factoring into these periods of inflation and/or deflation?

Given the rates of inflation throughout history, in what decade would you prefer to live in?

Who are the winners and losers of inflation?

1. Does inflation hurt borrowers or lenders more?

2. What effect does inflation have on “fixed” income individuals? For example, retirees on Social Security benefits?

How has inflation affected prices in…

What is the price of a product currently? Using the inflation calculator, what was the price of that product 40 years ago? 50 years ago? Knowing the effects of inflation, how can you prepare for the future to decrease the effects of inflation on your future financial decision making?

Interactive 4.19 Historic Inflation Rates

Interactive 4.22 CPI Throughout History

Consumer Price Index (CPI)

Although there are several price indexes, the best-known is the one that focuses on consumers. The Consumer Price Index (CPI) is a price index that is determined by measuring the price of a standard group of goods meant to represent the "market basket" of a typical urban consumer. CPI is a measure of inflation.

Interactive 4.20 Who does inflation Hurt the Most?

Who are the winners and losers in inflation?

Interactive 4.21 Quiz - Inflation

Test your knowledge of inflation here with this quiz.